Accidents and response: sudden violent death in the early modern city, 1650–1750

Craig G. Spence

Royal Holloway College
University of London

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DECLARATION OF AUTHORSHIP

I Craig G. Spence hereby declare that this thesis and the work presented in it is entirely my own. Where I have consulted the work of others, this is always clearly stated.

SIGNED: ___*Craig Spence*___

DATE:_____31 SEPTEMBER 2013_____

ABSTRACT

Between 1654 and 1735 as many as 15,529 Londoners suffered sudden violent deaths. This figure includes 3,135 who were murdered or committed suicide, however the majority of the fatalities (12,394) resulted from unexplained violent deaths or accidents. Accidents were therefore a regular feature of urban life during the early modern period. This study reviews the occurrence and circumstances of accidental death as recorded in the weekly London *Bills of Mortality*, parish burial registers and other related documents. It is clear that the most frequently occurring form of accidental death during this period was drowning, followed closely by fatal falls and incidents involving animals and vehicles. A wide range of other violent agencies resulted in sudden death, though in lesser numbers, including stabbing and shooting, fires and explosions, scalding and suffocation. Such fatalities were considered by contemporaries as disorderly deaths and as such a variety of actions were taken to counteract the disturbing effect such events might have. The formal mechanism of the coroner's inquest, supported by London's 'searchers', was paramount in explaining the *how* of such deaths whilst religious and intellectual endeavours were occasionally directed at the *why*. There is some evidence to suggest a move across the period from purely providential explanations to a more didactic imposition of human agency to prevent such events through the increasing exercise of authority and regulation. Sudden violent deaths caused emotional, psychological and social trauma to both individuals and communities and a range of contemporary documents shed light on responses and attitudes to the accident as an event. Especially important are the early newspapers of the eighteenth century which repeatedly print stories of accidents and their outcomes. Through a careful reading of such documents the present study delineates the position of the accident within early modern metropolitan mentalities.

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LIST OF ABBREVIATIONS

BofM	London Weekly *Bills of Mortality*
BurAcct	Burial Account
BurTrans	Burial Transcript
ChWdAcct	Churchwardens' Account
CLRO	City of London Record Office
CSPD	*Calendar of State Papers Domestic*
Evelyn	*The diary of John Evelyn* (Beer)
Gent's Mag	*The Gentleman's Magazine*
GL	Guildhall Library
HS	Harleian Society
LMA	London Metropolitan Archives
TRHS	*Transactions of the Royal Historical Society*
TNA	The National Archives
OBP	Old Bailey Proceedings (www.oldbaileyonline.org)
ODNB	*Oxford Dictionary of National Biography* (www.oxforddnb.com)
P&P	*Past & Present*
Pepys	*The diary of Samuel Pepys* (Latham and Mathews)
Read's Weekly	*Read's Weekly Journal or British Gazetteer*
Smyth	*The obituary of Richard Smyth*
WAC	Westminster Archives Centre
Weekly Journal	*Weekly Journal or British Gazette*
WSV	*Wren Society Volumes*

Chapter 1 Introduction

Section 1.1 Introduction

MASTER AND KEEPER OF THE MAD FOLKS Pray sir, be moderate; such accidents will happen sometimes, take what care we can.
ALPHONSO Damn accidents![1]

This thesis explores the accident during the late seventeenth and early eighteenth centuries primarily in the context of early modern London.[2] The text reviews the recorded incidence of accidents — particularly fatal ones — their contemporary identification and administration and the range of social and medical responses. Consideration is given to the structures of regulation and governance that impacted upon, or responded to, accident occurrence and whether such measures altered during the period of study in line with the improvement of the urban environment as a project of early modernity. An attempt is also made to comprehend contemporary knowledge of the accident as a shared narrative event; thus revealing a popular, social or cultural mentality of the accident. In this context it is clear that the widespread mediation, sharing and exchange of such narratives resulted in the accident becoming a recurring motif in the characterisation of the early modern city.

Section 1.2 Research aims, questions and methodology

Historians of early modern sudden violent death have engaged extensively with murder and, to a lesser extent, suicide as the key manifestations of lethal violence during this period. In the case of the accident however there has been almost no serious study; this despite the fact that fatal accidents occurred in far greater numbers and affected a much wider spectrum of the populace than either murder or suicide. Given the lack of previous systematic studies of the accident one of the key aims of the current work is to provide a detailed characterisation of the early modern accident, consequently the thesis presents a unique quantitative critical survey of accidental deaths in London from the 1650s through to the 1730s. Such an approach is not only novel as an historical exercise but significantly provides a concrete foundation upon which wider-ranging social and cultural studies of the phenomenon can be based. In addition the thesis reviews a wide range of sources to provide insight into the contemporary response made to accident events and victims. It is a broader aim of the study

[1] Vanbrugh, J., *The Pilgrim, a comedy in five acts: written originally by Mr Fletcher*, (London, 1724), p.56. This is considered the earliest written evidence for the saying 'accidents will happen'.

[2] In the context of this thesis an 'accident' is defined as a sudden, and normally unforeseen, event which results in personal injury or death, in other words a form of *sudden violent death*.

to assemble from such sources an initial *thick description* of the accident as it existed in both contemporary experience and understanding.[3]

Many aspects of metropolitan life at the beginning of the eighteenth century can be traced through the great outpouring of popular print culture associated with the period. Within the pages of pamphlets and newsprint the accident is encountered on a regular basis, almost always presented in the form of narrative. An additional research aim of the thesis is therefore to review the occurrence and nature of accident event narratives within contemporary print culture and to consider these alongside the inclusion of such events in personal journals and diaries. Taken together with official records and regulatory developments a more general aim was to review the way in which understanding of and attitudes to the accident may have changed across the period of the study.

The broad yet interconnected scope of these research aims gave rise to the following research objectives:

- To survey the current approaches taken by historians to the accident, particularly for the early modern period, through a critical literature review.
- To review how and why early modern accidental deaths were identified and administered, especially in the context of London.
- To conduct a quantitative analysis of the evidence for the occurrence and character of fatal accident events in metropolitan London 1654–1735.
- To undertake a critical review of the evidence for popular mentalities of the accident in early modern metropolitan society through a wide-ranging study of:
    - social and medical responses to accident victims,
    - the recognition and regulation of risks and hazards and how such actions may have changed over time,
    - the formulation and circulation of constructed accident event narratives.

In order to fulfil the above objectives, and keeping in mind the scarcity of previous studies in this area, it was necessary to devise a methodology that would allow the critical review of a wide-range of qualitative evidence structured around a robust empirical framework for the occurrence and character of the early modern accident. It became clear that while the historical study of the accident lacked methodologies of analysis a comparable area of study has been thoroughly explored for the early modern period and indeed an entire sub-discipline conceived as a result; that of crime. By reflecting on the methodological development of the history of crime a suitable methodological model for a history of accidents was conceived.

[3] Geertz, C., *The interpretations of cultures: selected essays*, (New York, 1973), pp.3–11.

The historiography of crime has developed significantly since its early formulation as an account of institutional structures or as an aspect of anecdotally-based social description (such manifestations of analysis also mirror the pre-existing approaches often taken in historical studies that make reference to accidents).[4] A major change in the way early modern crime was approached came with the development of studies during the 1970s and 1980s which drew upon the extensive archival records of the period to provide well-focused, often statistically-based, work.[5] Although such empirical studies varied in the depth of their critical scope — mainly as a result of definitional issues associated with the nature of *prosecuted* crime — later studies, which explored the social context and cultural meaning of crime and justice within early modern society, were built upon those empirical foundations.[6]

With nothing similar available for the study of the accident it was necessary to construct an empirical knowledge of the early modern accident as a prerequisite to further social or cultural analysis. While early modern London provides an excellent theatre for such a project it suffers from a lack of coroners' inquest material; the primary source most obvious to draw upon for such an analysis. The capital does however possess a comparable, if actually more comprehensive, source of information in the *Bills of Mortality*; it is this source that has been used to establish the empirical framework for the accident in early modern London.

Having established the necessity of constructing such a framework the historiography of crime again indicated a plausible methodology for a deeper analysis of the accident. Historians of crime, both simultaneously and latterly, challenged the primacy of earlier quantitative studies in an attempt to provide a more critically nuanced reading of a wider range of sources in addition to those of an empirical character.[7] In particular they explored contemporary mentalities through a close reading of various crime-related sources. Such a process of thick description lay at the heart of a number of key early modern studies amongst which the work of Gaskill stands out as a strong model for a methodology that might be adapted to support a study of the accident.[8] In particular Gaskill's tripartite division of

[4] For such 'anecdotal' references to both crime and accidents see Mitchell, R.J., and Leys, M.D.R, *A history of London life*, (London, 1963); and to a lesser extent George, M.D., *London life in the eighteenth century*, (London, 1966).

[5] For monograph examples see: Macfarlane, A., *Witchcraft in Tudor and Stuart England: a regional and comparative study*, (London, 1970); Samaha, J., *Law and order in historical perspective: the case of Elizabethan Essex*, (New York, 1974); Sharpe, J.A., *Crime in seventeenth century England: a county study*, (Cambridge, 1983); Beattie, J.M., *Crime and the courts in England, 1660–1800*, (Oxford, 1986).

[6] For an example of a work that attempts to bridge these two approaches see Shoemaker, R.B., *Prosecution and punishment: petty crime and the law in London and rural Middlesex, c.1660–1725*, (Cambridge, 1991).

[7] Key works in this regard include: Hay, D. *et al*., *Albion's fatal tree: crime and society in eighteenth century England*, (London, 1975); Thompson, E.P., *Whigs and hunters: the origin of the Black Act*, (London, 1975); Brewer, J. and Styles, J. (eds), *An ungovernable people: the English and their law in the seventeenth and eighteenth centuries*, (London, 1980).

[8] Gaskill, M., *Crime and mentalities in early modern England*, (Cambridge, 2000).

archival sources has been adopted to provide a structuring frame for the diverse range of material that references accidents.

By organising his sources into 'three levels of representation, each constructing a different sort of reality' Gaskill was able to assign conceptual meaning to their contents and reveal their significance. The three categories, or levels, include normative sources such as — in this thesis — orders, statutes and regulations; sources which indicate the 'way things were supposed to be'. Gaskill's second level comprised impressionistic sources and here there is a shared focus upon popular print and personal writing, allowing an insight into the way 'things seemed to contemporaries'. Finally the administrative group of records might be taken to suggest 'the way things really were', and with regard to the study of accidents include the *Bills of Mortality*, burial registers, hospital records and Old Bailey Sessions papers.[9] Together a reading of such sources can advance a thin description of the accident as an incidental event through to a thick description of the accident as a social and cultural construct and thereby reveal both contemporary meaning and suggest wider cultural values.

The thesis is presented in six chapters commencing with this chapter — the introduction — which outlines the aims, objectives and methodology of the current work. The chapter also discusses existing historical literature related to accidents in order to set out the field of study. Finally a detailed review of the principal sources and methods is provided. The administrative structures and personnel of early modern London who had day-to-day responsibility for reporting accidental death is considered in chapter two. This chapter aims to clarify how such events were identified and to elaborate their transition from socially experienced event to mediated record. Furthermore the text provides an indication of the origins of the data that structures chapter three. That chapter forms a major component of the thesis in which the data from the *Bills of Mortality* are characterised, categorised and enumerated. Here the empirical framework for metropolitan accidental death is constructed and explored through the lenses of seasonality, geography and longer-term trends. Having established the how, when and where of London's fatal accidents the next section of the thesis engages with matters of response and understanding. Chapters four and five provide a qualitative foil to chapter three's prevalent empiricism. The first of these reviews the range of social and medical responses that were available to accident victims. Consideration is given to parochial and institutional response and regulation, consequently the demands that accidents placed upon early modern urban society are assessed. The *accident event narrative* is examined in chapter five to elaborate the meaning and role of accident recording in diaries and journals and the wider re/telling and reporting of accidents through both oral and print culture. The conclusion in chapter six draws these multifaceted strands together by reflecting,

[9] Gaskill, *Crime and mentalities*, p.21.

in three parts, on the experiential character of accident events in the metropolis, the identification and 'counting' of early modern accident victims, and finally a critical review of ways in which the accident event might help in the construction of early modern 'mentalities of the unexpected'.

That accidents occasion moments of social crisis is undoubtedly true, as a result it is clear that the accident event merits the attention of historians. The way in which past societies, and individuals, configured both knowledge of and response to critical events provides a window through which deeper cultural meanings can be viewed. It is therefore possible to use the accident event, as with other forms of sudden violent death, as a channel through which wider early modern mentalities might be understood. Contrary to the view of Bill Luckin that 'the *moment* of the accident … will never become fully visible' this thesis makes clear that a well-structured and wide-ranging archival-based study can indeed reveal much of significance in relation to such *moments*.[10]

Section 1.3 Accidents and the historian

As an aspect of historical study the accident has been poorly served. If encountered at all it is more likely to be presented as either weakly contextualised comparative statistics or various hues of narrative colour. The number of research monographs that address the accident as a core subject can easily be counted on one hand, however a wider range of works have considered the accident as part of more general historical studies.

Among those to have considered the incidence of violent death as a historically quantifiable phenomenon P.E.H. Hair stands out as a highly methodical early observer. Hair's 1971 article 'Death from violence in Britain' formulated a description of changing patterns of accidental death statistics clearly founded on Whiggish principles of technological advancement. The paper set out a narrative for the gradual elimination of hazards and violence from everyday life between the thirteenth and twentieth centuries. Though weak in terms of critical analysis Hair's article set out the potential value of studying the history of the accident even if it did not say so explicitly.[11] In the same year this article was published another early contributor to the study of the accident began to make a mark in the literature. The *Chronicle from Aldgate* by Forbes included a notable chapter which recounted 'deaths by accident and violence' in Jacobean London. Transcripts from the burial register entries that Forbes relied upon constitute the bulk of the text with very little additional discussion.

[10] Luckin, 'Accidents, disasters and cities', *Urban History*, 20 (1993), p.190.

[11] Hair, P.E.H., 'Deaths from violence in Britain: a tentative secular survey', *Population Studies*, 25.1 (1971), pp.5–24.

The author did however provide some wider and more useful observations on the practices of coroners.[12]

Forbes published several further works which touched on accidental death; mainly from a medical historical perspective, they were generally descriptive with little to no critical discussion.[13] As late as 1979 he contributed a chapter to Webster's *Health, medicine and mortality* volume, of which the best the editor could muster in the introduction was that Forbes' text provided 'a colourful impression of the hazards to life facing a large urban community'.[14] The summary use of *Bills of Mortality* data does however stand out as an early recognition of the potential utility of that source for a wider study of the accident phenomenon.[15]

That Forbes was still pursuing this relatively simple descriptive approach eight years after his first published work on the topic stands in stark contrast to the approach set out in another study also published in 1971, that of Keith Thomas's *Religion and the decline of magic*. This volume contained one of the most significant contributions to our understanding of the ways the people of early modern England made sense of the accidents and misfortunes they experienced. In chapter four of his seminal work Thomas reviewed the nature of providential beliefs especially with regard to misfortune and sacrilege. In a wide ranging discussion of post-reformation theological interpretation he gave the doctrine of providence a central place in the early modern rationalisation of both natural and human events.[16] As Thomas made clear divine providence was a highly elastic concept, it could just as readily be used to explain good as well as bad 'luck'. Through the mechanisms of predestination benefits or misfortunes could be explained in terms of God's punishment or God's concern and testing. This made the doctrine particularly efficacious in explaining community-wide disasters. As a result providentially enhanced broadsheet descriptions of plagues, storms, floods and earthquakes both in England and abroad were published in high volume during the period and, as Thomas suggests, point to a widespread popular belief in providential explanation throughout the seventeenth century. Thomas notably indicated that even at the end of that century when the great minds of mechanical philosophy — scientists such as Sir

[12] Forbes, T.R., *Chronicle from Aldgate: life and death in Shakespeare's London*, (New Haven, 1971), pp.136–173.

[13] See for example, Forbes, T.R., 'Sextons' day books for 1685–1687 and 1694–1703 from the parish of St Martin in the Fields, London', *Yale Journal of Biology and Medicine*, 46 (1973), pp.142–150.

[14] Webster, C. (ed), *Health, medicine and mortality in sixteenth century London*, (Cambridge, 1979), p.6.

[15] Forbes, T.R., 'By what disease or casualty: the changing face of death in London' in Webster, *Health, medicine and mortality*, pp.117–139.

[16] Thomas, K., *Religion and the decline of magic: studies in popular beliefs in sixteenth and seventeenth-century England*, (London, 1973), pp.90–132.

Isaac Newton, Sir Robert Boyle, and Sir Edmund Halley — endeavoured to describe natural laws they did not propose to explain 'why' events occurred but more modestly 'how'.[17]

Many events assigned providential explanations were nonetheless explicable not as natural occurrences but more palpably as 'accidents'. Individual casualties might be rationalized in terms of pre-destinational interpretation — divine punishment or testing — however larger scale events engendered not only providentialist but also more rational responses.[18] In this regard Thomas explored the Blackfriars disaster of 1623, in which nearly a hundred Catholics were killed or injured following the collapse of the floor of their meeting room. While Protestants saw the event as indisputable evidence of divine intervention Catholics worked hard to establish simple structural failure as the cause.[19] At the conclusion of his chapter on providence Thomas defined the collecting, embellishing, publication and dissemination of providences during the early modern period as having had a simple didactic purpose, that is 'to reinforce some existing moral code'.[20] In other words the providential nature of early modern accident events should be understood as both context and observer contingent.

Thomas did not stop there however, within the conclusion of his work he returned to the concept of providence and attempted to locate the decline of providential belief somewhere in the early eighteenth century. Thomas concluded that the ascendency of mechanical philosophy created a need to explain such events in mechanical terms and, once so explained, such events no longer required providential rationalization. The early eighteenth century was identified as the period in which non-elite support for such ideas became consolidated as a result of the dissemination of scientific philosophies through popular publishing. Such publishing not only encompassed 'manuals and encyclopaedias' but also the pages of newspapers and magazines which conveyed more sophisticated metropolitan ideas at the expense of superstitious provincial beliefs. And it was within the urban centres that most active steps were taken to reduce exposure to misfortune. While all might benefit from advances in fire-fighting technology, for example, it was the middling sort who drew special comfort from the security offered by advances in deposit banking, buildings and, later, life insurance. The significance of this being a mental shift toward faith in technological or fiscal solutions to the *threat* of misfortune rather than superstitious or religious interpretations constructed in the wake of misfortune. Thomas considered that such a world view can be observed within the pages of John Arbuthnot's deceptively mundane 1692 translation of

[17] Thomas, *Religion and the decline of magic*, pp.96–97, 107–108, 126.

[18] For a significant discussion of the way in which individual accidents were used in support of a doctrine of providential intervention see Seaver, P.S., *Wallington's world: a Puritan artisan in seventeenth-century London*, (Stanford, 1985), especially chapter 3.

[19] Thomas, *Religion and the decline of magic*, p.122. See also, Walsham, A., '*The fatall vesper*: Providentialism and anti-popery in late Jacobean London', *Past & Present*, 144 (1994), pp.36–87.

[20] Thomas, *Religion and the decline of magic*, p.121.

Huygen's treatise on gaming odds; a work that initiated a broader and more gradual acceptance that random events were governed by rules of probability.[21]

While *Religion and the decline of magic* was widely, and rightly, acknowledged as a classic work in the development of modern historical method it had surprisingly little impact on historians with regard to directing study toward the phenomenon of the accident. A few historians did continued to take an interest in the early modern accident — especially in the context of providence — during the 1980s, with Paul Seaver's *Wallington's world* the most notable work of that decade. In the context of historical studies of the modern period however a number of authors made some significant contributions to the field. Roger Lane's little known yet significant volume *Violent death in the city*, first published in 1979, bridged the earlier descriptive approach with the more critical analysis found in later works. Lane employed evidence of suicide, accidents and murder to review the impact of nineteenth century urbanisation on American society.[22] Importantly he set out the value of studying accidents in particular as a more dependable guide to patterns of violent death, noting that accidents provide better indications of wider social trends and changes than either suicide or murder. Nonetheless in the critical bibliography of the second edition of this work published in 1999 he noted tellingly that 'the accident remains the neglected stepchild among violent deaths'.[23]

Further work outside of the early modern period drew upon accident events to provide tangential evidence for everyday life, on this occasion in medieval England. Barbara Hanawalt has employed the descriptive detail of fourteenth and fifteenth century coroner's records to illustrate the social conditions of both rural and urban life. She does not however directly discuss the nature of the accident in the medieval world and so, despite the great wealth of information that she admirably salvages from the historical record, falls short of contextualising the relationship between accident event, victim and community. A broader criticism of such an approach is that it uses the accident event to provide an insight into *everyday* life yet accidents, especially in a medieval rural setting, were undoubtedly rare and if fatal highly unusual events.[24] As Peter Burke has noted the use of such 'sources raise awkward problems, [as] historians of popular culture … try to reconstruct ordinary, everyday assumptions on the basis of the records of … extraordinary events'.[25]

One area during the 1980s where a wider history of the accident project appeared to be developing was in relation to the history of occupational health, but with an almost exclusive

[21] Thomas, *Religion and the decline of magic*, pp.770–785.

[22] Lane, R., *Violent death in the city: suicide, accident and murder in nineteenth-century Philadelphia*, (Harvard, 1979).

[23] Lane, *Violent death in the city*, 2nd edn., (Columbus, 1999), p.189.

[24] Hanawalt, B.A., *The ties that bound: peasant families in medieval England,* (New York, 1986); Hanawalt, B.A., *Growing up in medieval London*, (New York, 1993).

[25] Burke, P. (ed.), *New perspectives on historical writing*, 2nd edn., (Cambridge, 2001), p.11.

focus on the nineteenth century. A more structured methodological approach to occupational health and injury was called for by Paul Weindling in his introduction to the published proceedings of the 1983 conference titled 'The history of occupational medicine', yet relatively little work followed.[26] That collection did however contain an important article by Karl Figlio who attempted to answer the apparently straightforward question 'What is an accident?' In so doing he approached the subject from a socio-legalistic stance, discussing contracts, negligence and master/servant relationships. Much of Figlio's focus was upon the nineteenth century and issues of compensation, however his important observation, that during that period the notion of the accident became incorporated within the legal recognition of industrial diseases, points to the complexities involved in understanding accident events within earlier historical settings largely devoid of such legal process.[27] Defining the term 'accident' was once again addressed in 1996 by Loimer and Guarnieri whose article 'Accidents and acts of God' reviewed the concept from the fourteenth through to the twentieth centuries. In a short but well informed discussion they set out the contextual use of the term both historically and in contemporary 'political' debate.[28]

Typical of the more theoretical approaches developing around that time Bill Luckin's important 'Accidents, disasters and cities' article suggested a possible framework for the historical study of the accident particularly in the urban context. Luckin conceived that accidents might be divided into four categories; natural, social, biographical and symbolic. With reference to the application of this model to the current study the first of these is only weakly relevant with its focus upon 'natural' calamities. The concept of a 'social' category of accident holds more weight in the urban context where developments in social, cultural and economic systems had varying yet often direct effects on the incidence and character of accident events; in detail however Luckin's discussion was somewhat skewed toward the nineteenth and twentieth centuries and the impact of modern technological change. The category of 'biography' — a direct process of 'interrogation, analysis and spatial and chronological disaggregation' of individual accident events and their victims — was clearly set out by Luckin, nonetheless he observed that 'few historians have yet engaged with these problems'.[29] Of all four categories the symbolic appears the most well developed with regard to the early modern period; particular so in the case of Keith Thomas but also more recently by Alexandra Walsham — with a focus on the retributive nature of providential

[26] Weindling, P., 'Linking self help and medical science: the social history of occupational health', in Weindling, P. (ed.), *The social history of occupational health*, (London, 1985), pp. 2–31.

[27] Figlio, K., 'What is an accident?', in Weindling, *History of occupational health*, pp.180–206. On workmen's compensation also see Bartrip, P.W.J. and Burman, S.B., *The Wounded Soldiers of Industry. Industrial Compensation Policy, 1833-1897* (Oxford, 1983) and Bartrip, P.W.J., *Workmen's Compensation in Twentieth Century Britain* (Aldershot, 1987).

[28] Loimer, H., and Guarnieri, M., 'Accidents and acts of God: a history of terms', *American Journal of Public Health*, 86.1 (1996), pp.101–107.

[29] Luckin, 'Accidents, disasters and cities', p.181.

interpretation — and Michael Witmore — who attempts to place the concept of the 'accident' in the intellectual and cultural/literary world of the late sixteenth and early seventeenth centuries.[30]

Luckin, together with Roger Cooter, developed some aspects of the 'Accidents, cities and disasters' article more fully within the introduction to the published collection of papers promisingly titled, *Accidents in History*.[31] Although given over largely to reflections on accidents in modern occupational health contexts the volume contains a notable if short article by Roy Porter on the response to accidents in the eighteenth century. Porter found much to support generally the position of Keith Thomas with regard to mental shifts from providential explanation to probability. Porter's text naturally enough focused on medical, and in particular surgical, response to accident victims but he also noted the frequent occurrence of accident narratives in the popular press and fictional literature of the day. Porter concluded his article by observing that,

> Originally accidents were subsumed within Providence. In the age of Enlightenment, secularization and self-help spurred first-aid. But the eighteenth century closed, I suggest, with accident cases falling out of lay hands, and into the clutches of a modernizing medical profession with its modernizing institutions.[32]

A pattern of development that the current work has also tracked but which appears to start at a somewhat earlier date, particularly in the case of London, than that proposed by Porter.

Over the last forty years a range of scholars have approached the historical study of the accident in several ways. One clear observation of that body of work is that it tends to take two often divergent methodological paths. Either historians have engaged in attempts to define and review the accident itself and its social, and sometimes cultural, impact or they have taken a more antiquarian perspective, cataloguing and comparing often incomparable data and almost always failing to contextualise their observations.[33] That such methodological separation is unnecessary is perhaps self-evident yet such approaches have repeatedly framed attempts to understand the phenomenon. More recently some early modern

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[30] Thomas, *Religion and the decline of magic*; Walsham, A., *Providence in early modern England*, (Oxford, 1999), especially chapters 2 and 3; Witmore, M., *Culture of accidents: unexplained knowledges in early modern England*, (Stanford, 2001).

[31] Cooter, R., and Luckin, B. (eds), *Accidents in history: injuries, fatalities and social relations*, (Amsterdam, 1997).

[32] Porter, R., 'Accidents in the eighteenth century', in Cooter and Luckin, *Accidents in history*, p.99.

[33] While the 'antiquarian' style of authors such as Hair and Forbes has already been noted such a limited methodological approach continues to be repeated for example by Harvey in 1992 (Harvey, A.D., 'Traffic accidents in London in the later 19th century', *Transactions of the London and Middlesex Archaeological Society*, 43 (1992), pp.201–207) and Towner and Towner in 2000 (Towner, E. and Towner, J., 'Developing the history of unintentional injury: the use of coroners' records in early modern England', *Injury Prevention*, 6 (2000), pp.102–105). Towner and Towner as recently as 2008 published an article that essentially replicated their earlier piece (Towner, E. and Towner, J., 'The hazards of daily life: an historical perspective on adult unintentional injuries', *Journal of Epidemiology & Community Health*, 62:11 (2008), pp.952–956).

— mainly eighteenth century — studies of sudden unexpected events have explored broader methodologies and moved toward an engagement with concepts of mentality. For example a collection of papers edited by Alessa Johns sought to engage critically with issues of social and cultural response to natural disaster, while another volume edited by Penny Roberts explored the nature of fear within popular early modern European thought. Nevertheless it remains clear that despite the foregoing range of published work the early modern accident as both an *event* and as *narrative* have yet to be effectively treated in a specific manner.[34] As noted above the current study sets out to address this and to review the early modern accident from two complimentary perspectives: first through the characterisation of the accident *event* and second by exploring the nature of the accident *narrative*. Utilising this methodology the following text provides a model for understanding the accident in the contextual setting of the early modern city.

Section 1.4 Methods and sources

The initial challenge for a study of the early modern accident is one of sources. Most accidents are minor transitory affairs which left little or no trace in the historical record; fatal accidents despite being relatively rare events left a much more visible mark. Consequently the present study necessarily resorts to fatality reporting to provide substantive quantifiable data. Unfortunately what would seem to be the most obvious documentary source to call upon, coroners' inquests, do not survive for London during the late seventeenth and early eighteenth centuries.[35] London does, however, possess a particular serial source from which useful information regarding violent sudden death can be drawn; the *Bills of Mortality*. Indeed the incessant nature of the *Bills* counter one basic criticism levelled at studies focused wholly upon coroners' inquests; that such inquests appear to have been convened predominantly in cases of suspicious or unusual deaths, hence many 'routine' fatal accidents failed to reach such fora.

The *Bills of Mortality* were compiled by the Parish Clerks Company on a weekly basis from individual parish returns from across London; the collated returns were then printed and distributed widely.[36] In addition to the digest of mortality resulting from illness and infectious disease the *Bills* supplied weekly notifications of violent deaths within the geographical limits of the metropolis. Such reports supply systematic information by almost invariably conforming to the textual arrangement illustrated in the following examples; 'Killed by the

[34] Johns, A. (ed.), *Dreadful visitations: confronting natural catastrophe in the age of Enlightenment*, (New York, 1999); Naphy, G.N., and Roberts, P. (eds), *Fear in early modern society*, (Manchester, 1997).

[35] Gibson, J., and Rogers, C., *Coroners' records in England and Wales*, (Birmingham, 1989), pp.29–32, 39–40.

[36] See below, section 2.2, for the production process of the *Bills of Mortality*.

bite of a dog at St Stephen Coleman', or if more than one incident, 'Drowned 2, one at Martins Orgars and one at Andrew Wardrobe'.[37]

London's *Bills of Mortality* were produced over an extended period of time from the late sixteenth century to the nineteenth, however for present purposes, data was gathered for a period equivalent to 75.54 years from an almost continuous run commencing in December 1654 through to December 1735. Weekly *Bills* published prior to 1654 survive only sporadically, however this is not a wholly modern problem as Eleanor Coates printer to the Parish Clerks' Company made clear in her justification for reprinting in book form the important weekly *Bills* of the plague year of 1665:

> In the year 1625 the stroke of the Lords hand was heavy upon this City and suburbs, which year was ever since called The Great Plague: Now though thou hast seen probably several printed reports, given by the Parish Clerks in that year; yet I am not able to recover all the particular Weekly Bills thereof; the sight of them hath been much desired these times; but it is beyond my power, as yet, to answer mens expectations. That posterity may not any more be at such a loss, I resolved to communicate unto the Nation, these subsequent leaves.[38]

Aside from intermittent failure of survival there is only one occasion during this period when the *Bills* were definitely not printed. The Great Fire of 1666 resulted in the destruction of the Parish Clerks' Hall; although the clerks were able to remove their possessions from the Hall the printing press was sacrificed. As a result it appears that no *Bills* were produced for the four weeks 28 August to 18 September.

Following the Great Fire intermission the *Bills* continued to be published through to the mid-nineteenth century however from the 1730s they begin to show signs of administrative failure. At this time a number of late returns by parish clerks were noted at the base of the printed sheets in the following manner; 'N.B. The persons being reported from St [x] and St [y] were too late to be put into last weeks Bill, therefore they are inserted here.' With such laxity becoming increasingly frequent towards the latter part of 1735 it was decided to cease the collection of data from this source at the end of that calendar year in the knowledge that if late returns were increasing it was also likely that failures to make any return at all occurred. Furthermore the incorporation of such late returns within the analysis would adversely effect observations on seasonality.

A further challenge lay in the accuracy of the information supplied by parish clerks. Thomas Birch appears to have been the first to publish, in his 1759 work on the yearly Bills of Mortality, concerns that some clerks were failing in their duties. In particular he noted that in larger parishes there was a tendency for clerks to accumulate information on burials over several weeks and then make a single cumulative submission.[39] This behaviour was investigated by William Ogle who compared the number of burials reported in the *Bills* with

[37] *BofM*, 8 July 1684; 4 September 1660.
[38] Parish Clerks' Company, *London's dreadful visitation* (London, 1665), preface.
[39] Birch, T., *A Collection of the yearly bills of mortality, from 1657 to 1758*, (London, 1759), p.6.

the comparable burials in the parochial registers across five City parishes in the later seventeenth century and six City parishes in the mid-eighteenth century. In both cases he found disparities in numbers but never amounting to more than one percent of all burials. While Ogle concluded that annual aggregation would diminish errors associated with demographic analysis the impact on specific deaths and burials might be more significant.[40] It is however reasonable to expect that the noteworthy nature of sudden violent deaths means their omission from parish clerks' reports was less likely to have occurred.

A further criticism levelled at the *Bills of Mortality* relates to limitations in their cultural scope. In particular the role of the parish clerk was limited formally to interments within the parochial Anglican burial grounds. It was assumed therefore that non-Anglican congregations and communities were entirely excluded from the reports.[41] Yet with regard to information on sudden violent deaths it seems likely that such cases were routinely recorded. And there is some hard evidence that non-Anglican sudden deaths *were* incorporated within the reports, for example the weekly *Bill* for 11 March 1701 notes the death of a child after falling from a wall in the parish of St Andrew Holborn, but also records the child's committal at 'The Quakers Burial Ground'. Christie appears to support this, noting that although Quakers refused searchers permission to view bodies they were thought to have made personal returns to the relevant parish clerk.[42] In fact sudden violent death could on occasion positively ensure inclusion within the *Bills*; in the case of many bodies retrieved from the River Thames and streets of London not only were the victims identities unknown but their religious persuasion also, by default they recieved Anglican burial rites thus finding their way into the *Bills*.

Other factors might however work against the inclusion of sudden violent deaths within the historical sources. The most obvious being simple omission in the case of a parish clerk who failed to note such events, yet it is clear that in the majority of cases reports were submitted to the Parish Clerks' Company even if additional comment was absent from the related burial register.[43] A further complication and one that was likely to result in some degree of under-reporting were accidents that resulted in a delayed death. Aside from deaths

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[40] Ogle, W., 'An inquiry into the trustworthiness of the old Bills of Mortality', *Journal of the Royal Statistical Society*, 55.3 (1892), pp.443–446.

[41] This was not however always true; the clerk(s) of St Mary Woolnoth for example recorded the deaths of Quakers (18 September 1703; 7 January 1707) and a Jew (25 June 1721) within the parish burial register although they were buried at the Quakers Burial Ground and the Jewish cemetery at Mile End respectively; Brook, J.M.S., and Hallen, A.W.C, *The transcript of the registers of the united parishes of St Mary Woolnoth and St Mary Woolchurch Haw in the City of London …* (London, 1886).

[42] Christie, J., *Some account of Parish Clerks, more especially of the ancient fraternity … now known as the Worshipful Company of Parish Clerks*, (London, 1893), p.141.

[43] No single parish within the area of the Bills failed to record a sudden violent death during the period of study. Among those parishes that avoided the post-Great Fire amalgamations St George Botolph Lane reported only two casualties while St Micheal le Querne and St Mildered Bread Street each reported five; all other parishes reported higher numbers of casualties.

caused by drowning — which is by definition virtually instantaneous — deaths that occurred several days or more likely weeks after an accident event might fail to be noted as having an accidental origin.[44] To give just one example from the early modern metropolis; at dusk on 1 February 1692 a coach passing through Smithfield collided with Ann Heweston breaking her leg. Ann did not die instantly but 'languished' some twenty-two days before the injury took her life. This was clearly a fatality that had its origins in an accident event and would, if immediate, have been described as such but in this case however no such report was made in the *Bills* in either February or March of that year.[45]

A limited number of fatalities that contemporaries identified as 'casualties' have been excluded from the current study. Aside from a few miscellaneous sudden death events described as 'frighted', or simply dying 'suddenly' or 'unfortunately', three notable agencies have been excluded. Alcoholic poisoning was cited as dying by 'excessive drinking', such deaths were however overtly culturally determined and the social characterisation of the individuals concerned, let alone the long-term morbidity associated with such fatalities, prohibits the use of this category within the current study. Another excluded category concerned those who starved to death, or as the *Bills* tended to state 'died for want', although such reports provide some geographical information the inclusion of such deaths appears to be rather haphazard and not sufficiently *sudden* for the purposes of the current study. Finally a decision was made not to include deaths that resulted from 'overlaying' as the circumstances surrounding such fatalities present significant interpretational problems; the tendency to use the single word 'overlaid' with no further descriptive or location information also inhibits deeper analysis. Two further categories *are* included in the study given their significant numbers although they are only discussed briefly; 'found dead' and 'killed'.

The published weekly *Bills* provide a variety of quantifiable information on sudden violent death amenable for collection, ordering and interrogation for the period in question. For analytical purposes the collected data were stored within a database structure that reflected the textual format of the original source.[46] Sudden violent deaths were classified into four major groups; suicides, murders, accidents, and those which could not be explicitly defined, although which often appeared to have been 'accidental'. Further categorisation rested upon the cited cause or agency of death; twenty-three significant categories were established. Where it was cited, or could be inferred, gender was recorded as was the broad age group of the victim (infant, child, youth or adult). The likelihood of any given fatal

[44] This remains an issue in the contemporary reporting of cause of death among patients admitted to hospitals following accidents; see British Medical Association, *The BMA guide to living with risk* (London, 1990), p.111. Also see, Beattie, *Crime and the courts*, pp.109–10, on the reluctance during the seventeenth century of both grand and trial juries to find either a case to answer or a guilty homicide verdict when a death occurred several weeks or months after an assault had taken place.

[45] OBP, 18 April 1694, Matthew Pryor (ref. t16940418-22).

[46] See Appendix I for database structure.

incident having an occupational association was also noted. Finally the parish in which the fatality was reported was recorded, as was the parish of burial if cited as differing from that of death.

Overall the database contains 15,529 records, of which 12,394 relate to sudden violent deaths not explicitly stated as murders (868) or suicides (2,267). The remaining 358 records refer to missing *Bills* (229), damaged and hence illegible *Bills* (3), or those which recorded zero 'casualties' (126). The digitised data allowed a number of analyses to be conducted in addition to simple quantification and the setting-out of long term trends. One key approach was an analysis of geographic patterning by comparing the incidence of selected categories of cause of death with population figures for nine areas of the metropolis as established by the 'Metropolitan London in the 1690s' project (see Fig.1.1).[47] This measure compared the reported occurrence of fatalities with that which might be 'expected' given each area's population share. A further analysis was of seasonality achieved by grouping all deaths of a certain category by their calendar month of report.

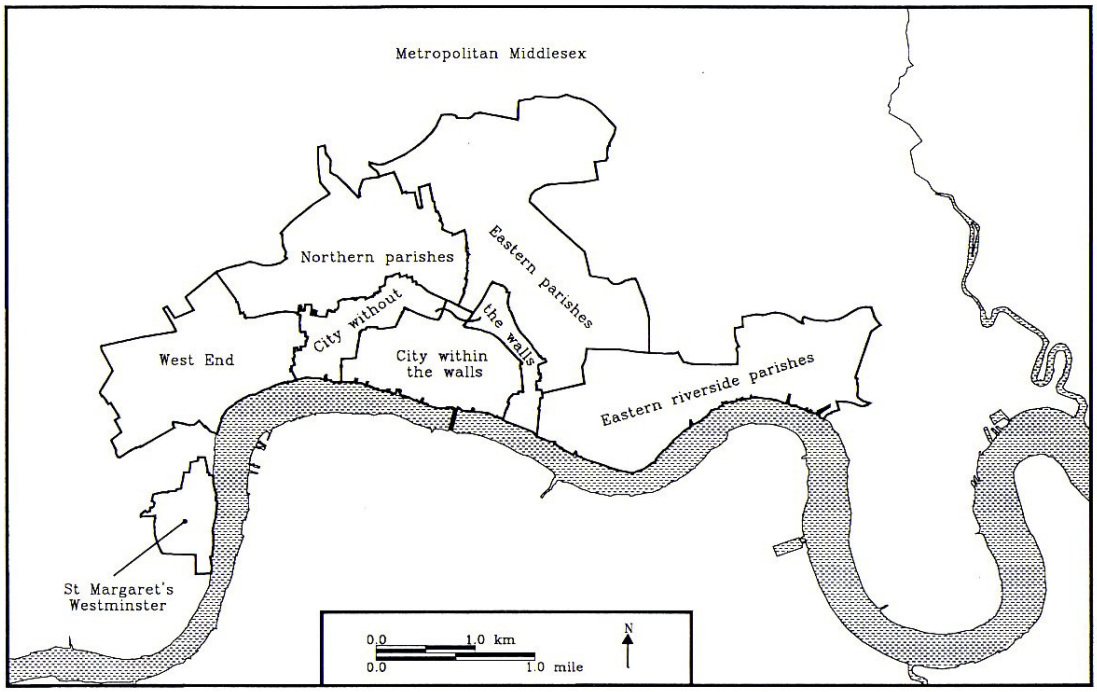

FIG. 1.1 Boundaries of metropolitan areas used for geographical analysis

Source: Spence, *London in the 1690s,* p.19 (Fig.1.7)

Whenever possible the occurrence of a 'casualty' in the *Bills* was cross-referenced to other readily available sources in order to provide additional information. In particular parish burial registers, diaries, newspapers and the Old Bailey Sessions papers were referred to. A substantial sample of burial registers from 122 parishes within the metropolitan area were

[47] Spence, C. *London in the 1690s: a social atlas*, (London, 2000), for geographical areas see p.19; for population figures see pp.63–66 & column 6 of Table 4.1.

systematically surveyed for the period 1650 to 1750 in order to gather information on accident fatalities that may, or may not, have been included in the *Bills of Mortality* returns.[48] These same sources together with churchwardens' accounts, ballads, pamphlets and material from livery companies and public undertakings were used to underpin a critical analysis of the social and medical response to accident events and to establish a contemporary cultural knowledge of accidents as set out in chapters four and five.

[48] See Bibliography for a full listing of parish sources surveyed.

Chapter 2 The administration of sudden violent death

Section 2.1 Local and national interest in sudden violent death

Death, and burial, was of central interest to early modern society and, as it developed, the early modern state. From a theological perspective the focus upon death — especially in the wake of first the reformation denial of purgatory and later the development of predestination as an article of puritan faith — led many to inquire after the manner of a good and wholesome death.[1] The development of state bureaucracy between the sixteenth and eighteenth centuries similarly drew the attention of administrators and others to the frequency, occurrence and character of death among the population at large.[2] In particular tracking the incidence and progress of plague epidemics occupied the thoughts and actions of many.[3] At the end of the seventeenth century, with plague waning as a present concern, attention instead turned to issues of demography and the suitability of the population for the maintenance of commercial and military endeavour, in other words to the realm of 'political arithmetic'.

Whatever the formal or cultural interest in death, in its causes and magnitude, specific administrative actions during the early modern period routinely failed to address, and hence to record, the finer narrative detail associated with the majority of individual deaths; given that elements of such 'narratives' were likely to be based upon rumour, ignorance or supposition this is perhaps understandable. The predominant administrative attention was focused upon the act of 'burial' hence the vast majority of register entries fail to elaborate beyond a simple statement of identity and date of interment. Deaths that were sudden and violent or otherwise traumatic, those that resulted from murder, suicide, or accident, were however of perennial social and cultural interest to those communities within which they occurred and within which the after-shocks would be felt. Consequently a considerable measure of official and communal effort was exercised to elaborate the circumstances of such fatalities. It is easy to comprehend how such efforts might act to ensure a continuance of orderly life in the face of

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[1] There is an extensive canon of contemporary literature, particularly in the form of sermons and advice books, focused upon the moment of death and preparation for it, some of the more notable and popular works published during the period of the study include: Hayward J., *The horrors and terrors of the hour of death* (London, 1690); Hayward, J., *Hell's everlasting flames avoided* (London, 1696); Janeway, J., *A token for children: being an exact account of the conversion, holy and exemplary lives, and joyful deaths, of several young children* (London, 1671 & 1673); Taylor, J., *The rule and exercises of holy dying* (London, 1655); and Sherlock, W., *A practical discourse concerning death* (London, 1689). Also see, Houlbrooke, R., *Death, religion, and the family in England, 1480-1750* (Oxford, 2000), pp.57–80, and Cressy, D., *Birth, marriage and death: ritual, religion and the life-cycle in Tudor and Stuart England* (Oxford, 1997), pp.379–382, 389–393. For a discussion of pamphlet literature related to the moment of death see, Sharpe, J.A., '"Last dying speeches": religion, ideology and public execution in seventeenth-century England', *P&P*, 107 (1985), pp.144–167.

[2] See, Hoppit, J., 'Political Arithmetic in Eighteenth-Century England' *EcHR*, 49.3 (1996), pp.516–540.

[3] See, Slack, P., *The impact of plague in Tudor and Stuart England* (Oxford, 1990), pp.239–244.

what was construed as a disorderly death. In addition a broader communal engagement in this process helped to restore and maintain social norms; from an anthropological perspective abnormal deaths required both transparent explanation and, where appropriate, purificatory 'punishment'.[4]

Amongst the official responses to sudden violent death the long-standing role of the coroner was paramount. Coroners investigated violent or 'unnatural' deaths and convened inquest juries in order to bestow a verdict as to the cause of death and where appropriate indict those considered responsible. Local parochial officials, such as constables, beadles or headboroughs, often assisted coroners in tasks of discovery and investigation. A more routine response to death — sudden or otherwise — in early modern London included the significant role played by the searchers, who by viewing the corpse established a probable cause of death for all fatalities, and the parish clerks who subsequently came to report such information through both parochial registers and the printed *Bills of Mortality*; as Munkhoff states 'thus moving us from the realm of narrative and rumour to that of fact and accuracy'.[5]

There were also a small number of other official bodies and individuals who might take an interest in those who died in sudden or violent circumstances. If a violent death was considered to have been a result of homicidal, violent or in certain circumstances negligent actions then the Justices of the Peace or Magistrates sitting in the quarter sessions or assizes would assume responsibility from the coroner for any further action. But even in the case of a death defined more clearly as 'accidental' certain other legal and institutional bodies could become involved. For example the Privy Council on occasion are found expressing concern about accidental deaths, but usually when there were collective multiple-fatalities related to major fires, floods or tragedies at sea. The Court of Admiralty also took an interest in drownings, and other naval-related deaths, especially in the lower reaches of the River Thames.

The following text reviews briefly the role and functions of each of the previously mentioned individuals or institutions. While sudden violent death events were comparatively rare occurrences during the early modern period it is clear that those individuals and bodies charged with managing such death did so, for the most part, in a broadly structured and methodical way.

[4] Douglas, M., *Risk & blame: essays in cultural theory*, (London, 1992), pp.4–7.

[5] Munkhoff, R., 'Searchers of the dead: authority, marginality, and the interpretation of plague in England, 1574–1665', *Gender & History*, 11.1 (1999), p.13.

Section 2.2 Parochial administration: the searchers, parish clerks and the Bills of Mortality

The daily administration of death in early modern London fell to the various personnel of the parish, or sometimes ward. Principal amongst these were the searchers and the parish clerks. The role of the searchers was to provide a formal reporting service for the authorities with regard to probable cause of death by taking a 'view' or making a 'search' of the dead body; the origins of the office lay in efforts to ensure early detection of plague epidemics from the late sixteenth century onwards.[6] By the early seventeenth century searchers were being appointed routinely within the parishes of the City of London and its immediate suburbs. The churchwardens of each parish were obliged, by the Mayor and aldermen through the medium of the *Plague Orders* of 1592, to appoint two 'sober ancient women … to be viewers of the dead'.[7] Whilst this was in response to a specific plague epidemic the practice was continued in subsequent non-plague years and certainly from 1603 onwards in order to provide more general information on the character of mortality within the City.[8] That the system was generally successful can be seen in its extension to the suburbs of metropolitan Middlesex in 1659. In February of that year at the Middlesex Sessions held in St Johns Street the following order was made:

> That the churchwardens of the several parishes of this county, that are comprehended within the said Bills of Mortality, shall forthwith make choice of a competent number of discreet persons within their said respective parishes to view and search the bodies of all such persons who shall depart this life from time to time, and to return their names and numbers with diseases they die of (so far as it may appear unto them) weekly to the parish clerk [...]

The churchwardens were required to return the names of the chosen searchers to the Middlesex Justices of the Peace in order that an oath could be 'administered unto them for the due execution of the said offices'. The order continued:

> And that, upon return made by the said searchers of what they find upon such searches to be the causes of the death of all persons dying in their said parishes respectively to the said parish-clerk of the said parish, the said parish clerks certify the diseases as well as the number of the persons dying in their said parish from time to time, as it hath been and now is used within the said City of London [...]

It appears the order was passed in direct response to a petition made by the Company of Parish Clerks in an attempt to consolidate the collection of information required for the *Bills of Mortality*. The Parish Clerks were particularly concerned about the failure by individual

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[6] Forbes, T.R., 'The searchers', *Bulletin of the New York Academy of Medicine*, 50.9 (1974), pp.1031–1032.

[7] *Orders to be used in the tyme of the Infeccon of the Plague within the Cittie and Liberties of London* (1592) quoted in Munkhoff, 'Searchers of the dead', p.1.

[8] Munkhoff, 'Searchers of the dead', pp.3–4.

parish clerks of the Middlesex parishes to record cause of death and clearly saw the appointment of searchers as providing a solution to the problem.[9]

By the later seventeenth century searchers appear to be operating in every parish within the area known as the 'Bills of Mortality'. They worked in pairs but were appointed individually whenever a vacancy arose, the key qualification was to be an honest and 'ancient' woman of the parish. By default the role fell to widows who were invariably parish pensioners; indeed one of the penalties set out by the plague orders of 1630 and onwards was, 'That every woman or other appointed to any service for the infected and refusinge or fayling to doe that service, shall not have any Pension owt of the hospitall or Parish'.[10] Such a threat would have little impact unless such women were already in receipt of pensions.

That these women would have had some, at least popular, medical knowledge is almost certain; a great deal hung on their correct assessment of cause of death with regard to plague. It is likely they were often elderly parish nurses who had experience of handling the dead as they were 'laid-out' prior to burial.[11] The implication that this was a particular 'skill' owned by certain women is suggested in the words of Sarah Lane, a midwife, who when cross-examined in an Old Bailey murder trial about the condition of the victim replied 'tho' I thought she was dead, I was not willing to trust to my own judgement, because I have no great skill in the dead'.[12] Although age was a significant characteristic of searchers the role did not formally require the status of widowhood; in St Dunstan in the West in 1679 the churchwardens were actively petitioned by 'Mary wife of Thomas Denicke […] that she should be one of the searchers for this parish in the place of Widd Greene lately deceased'.[13]

Searchers were also expected to conform to the religious norms of parochial life and office holding of the later seventeenth century. A clear demonstration of this occurred in the parish of St Margaret's Westminster in 1690. When the parish searcher Widow Cooper died in September of that year the vestry appointed Ann Alwyn as her replacement and 'placed her in the room belonging to the searchers in Tuttlefields'. Ann however hesitated to confirm her Anglican faith to the satisfaction of the vestry, consequently in early November they

> Ordered that the new searcher Ann Alwyn have time given her [un]til the first Sunday of the next month to receive the Sacrament and conform to the Church of England or otherwise that another be admitted in her room.

[9] Jeaffreson, J.C., (ed.), *Middlesex County Records: Middlesex Sessions Rolls*, (London, 1888), p.277.

[10] Munkhoff, 'Searchers of the dead', p.1.

[11] For a discussion of the medical skills and roles of parish nurses see Boulton, J., 'Welfare systems and the parish nurse in early modern London, 1650–1725', *Family & Community History*, 10.2 (2007), pp.127–151.

[12] OBP, 14 January 1732, Robert Hallam (ref. t17320114-9).

[13] GL, Ms.3016.2.

Clearly Ann was unable to compromise her non-conformist beliefs and on 21 December 1690 the vestry was forced to report they had 'Ordered that the Widow Langstone be admitted into the place of searcher in the room of Widow Alwyn'.[14] It might be construed that the vestrymen were acting in the best interests of the parish in attempting to appoint the more skilful or reliable searcher despite the likely knowledge of Ann Alwyn's non-conformity; hence they adopted a pragmatic approach to the appointment by encouraging Ann as the preferred candidate to engage in an act of 'occasional conformity'.

In practice when a death occurred the searchers were called to attend by family, neighbours or workmates, or in more formal circumstances by the parish constable. This was demonstrated by a witness at another Old Bailey murder trial in 1735 who stated 'I went and told my Neighbours, who sent for the Searchers'.[15] Having undertaken their view or search of the dead, looking for outward signs of cause of death, they would report their findings to the parish clerk. Given the typically short timescale between death and burial during the early modern period it is clear that the searchers would have been expected to attend in the immediate aftermath of death. Yet such repeated and close association with the moment of death resulted in searchers becoming 'tainted' with some of the cultural baggage of death itself; as Munkhoff, although focusing on plague contagion, makes admirably clear.[16]

Having delivered up their information to the parish clerk the searchers were able to claim their fees from the churchwardens. It seems such fees were paid in addition to any regular parish pension as an example from St Dunstan in the West suggests; having been appointed as searcher on 24 May 1687 Alice Woodward, otherwise the parish nurse, petitioned for and received at the next vestry meeting 'a pention of 6d a week and bread to commence next Sunday'.[17] Traditionally a searcher could expect 4d for each view undertaken, although there were variations in the rate especially during periods of epidemics.[18] A factor complicating our understanding of such payments relates to the number of searchers who might attend a death. Where there were clearly two searchers it is not unusual to find the churchwardens' accounts noting a joint payment as was the case in the parish of All Hallows London Wall in May 1693, 'Paid the searchers … 8d'.[19] A further issue may have related to the particularly obvious nature of a finding — a factor highly relevant to the reporting of accident fatalities — for example in St Brides parish in 1699 the two searchers shared 6d. for their view of the parish pensioner Widow Sanbrook. The lower rate probably reflecting the fact the

[14] Vestry minutes (10 September, 5 November, 21 December 1690); Smith, J.E., *A Catalogue of Westminster Records … in the custody of the vestry of St. Margaret & St. John,* (London,1900), p.193.
[15] OBP, 15th October 1735, Margaret Hambleton *et al* (t17351015-5).
[16] Munkoff, 'Searchers of the dead', pp.14–16.
[17] GL Ms.3016.2.
[18] Forbes, 'The searchers', p.1034.
[19] GL, Ms. 5090/3; also McMurray, *The records of two City parishes*, (London, 1925), p.365; St Anne Aldersgate Churchwarden Accounts: 1722/3.

churchwardens had previously spent £1 5s 4d in caring for Widow Sanbrook after she was run down by a coach; thus the underlying 'cause' of her death was in a sense self-evident.[20]

In some cases searchers were retained on the basis of an annual fee with no individual payments seeming to be made. At St Botolph Billingsgate in 1662 the two parish searchers shared a payment 'for one year [of] £2 10s'; at a rate of 4d per view this payment would have covered seventy-five joint viewings.[21] Given the total burials in the parish during 1662 was just twenty-four it is reasonable to assume that the greater part of this payment related to parish pensions.[22] Annual payments continued to be made within this parish through to the 1690s by which time each searcher was receiving a fee/pension of £1 6s 8d.[23]

The veracity of searchers' skills could on occasion be tested in the theatre of the law court. In 1695 the evidence of a searcher was given equal status to that of an apothecary when they concurred that a victim of an apparently murderous assault had actually died of 'a spotted feaver'.[24] On another occasion Jane Twentyman, searcher for St Martin in the Fields, demonstrated through her evidence that although she was proficient in clinical observation and had some useful knowledge of forensic pathology she was still willing to defer to the assumed greater knowledge of a surgeon. When asked to describe the findings from her view of the teenage victim in a murder trial she stated,

> she was bruised much under the right Ear, where the Skin was raised and several Bruises about the Neck and Shoulders, but the rest of her Body was clear, and her Hands and Fingers were white and open. Her Mother [the accused] said she died of Convulsion Fits, but I think she must have been strangled. For in Convulsion Fits, the Nails and Fingers will be black thus far, and the Bowels will presently turn green — I advised them to send for a Surgeon who had more Skill than I.

Jane need not have doubted her abilities as Mr Wilkie the surgeon testified that the victim had indeed been strangled.[25]

Despite such occasional glimpses of professionalism amongst the searchers the system endured repeated criticism from the later seventeenth century through to more recent times. John Graunt was one of the earliest commentators to allot some elements of failure within the mortality reporting systems of the capital to the searchers, although he did not perceive it as a serious weakness. Indeed Graunt makes it clear that 'in very many cases, such as drowning, scalding, bleeding, vomiting, making away with themselves, lunatics, sores, small pox, etc. their [the searchers] own senses are sufficient' to provide an accurate report.[26] This observation is clearly of relevance to the reliability of reports of death that came about as a

[20] GL, Ms.6552/2.
[21] GL, Ms.942/1, (f.227).
[22] 'A general bill for this present year, ending the 16th day of December 1662' reproduced in Birch, *A collection of the yearly bills*.
[23] GL, Ms.942/1, (f.232; f.236).
[24] OBP, 28 August 1695, Joseph Reeves *et al* (ref. t16950828-16).
[25] OBP, 15 October 1735, Margaret and Rebecca Hambleton (ref. t17351015-5).
[26] Graunt, J., *Natural and political observations on the Bills of Mortality*, (London, 1662), p.13.

result of violent trauma. In the view of later commentators, such as Birch, 'the low capacity of the person usually chosen into this office has been made an objection to the truth and justice of the bills' yet even he had to agree that 'with regard to natural deaths, there seems no other capacity necessary in the searchers than that of relating what they hear'.[27]

There is nonetheless some evidence of searchers falling short of the expected standards yet it is telling that such evidence tends to focus on issues of disorderliness rather than the misattribution of pathology. The vestrymen of St Dunstan in the West were forced to take action in 1691 when they discovered that,

> Elizabeth Penny one of the Searchers, and a pentioner to the parish, was often drunk and frequently used to curse and swear and had lately beaten Widow Colley one other of the pentioners. It was ordered that she should be immediately turned out from being any longer a searcher, and likewise put out of one of the two rooms belonging to the parish which she now has. And upon the next complaint and proof of her committing the like offence she should be sent to Bridewell to receive correction. And lastly Alice Woodward [a parish nurse] was chosen to be one of the searchers in her stead to continue during the pleasure of the vestry.[28]

That the parish authorities took swift and decisive measures in this case goes someway to support John Bell's published defence of the searchers which rested not on a direct endorsement of their abilities but on the potential reputational damage for those who had selected them should they fail in their duties. As he explained 'Sure I am they [the searchers] are chosen by some of the eminentest men of the Parish to which they stand related; and if any of their Choosers should speak against their abilities, they would much disparage their own judgements'.[29]

It is nonetheless clear that examples of misbehaviour such as this and the stereotyping of searchers as 'old poor women' with the cultural prejudices that such an appellation carried, such as corruption, unreliability, and even malevolence, have resonated with historians throughout the following centuries.[30] Forbes, for example, supported his contention that 'generally the searchers failed in their duties' by conflating culturally engendered criticism of searchers expressed in the seventeenth-century, specially during plague crises, with those levelled at the beginning of the nineteenth century, a period during which almost all forms of parochial officialdom were being found lacking.[31] Yet with a more careful and considered reading of the evidence an alternative picture of the searchers begins to emerge. These 'old women' were generally selected for their good character, experience and skills, their behaviour and actions were supervised by figures of authority within both parish and ward,

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[27] Birch, *A collection of the yearly bills*, p.7.

[28] GL, Ms.3016.2 (4 June 1691).

[29] Bell, J., 'Some objections against the *Bills of Mortality* answered', in *London's Remembrancer* …, (London, 1665).

[30] Munkhoff, 'Searchers of the dead', pp.2–3, 20; also see Ogle, 'An inquiry into the trustworthiness of the old bills of mortality', for an example of another later historian uncritically reasserting the earlier criticisms levelled at the character of the searchers.

[31] Forbes, 'The searchers', pp.1033–1036.

and they regularly interacted with others charged with examining the dead such as surgeons and coroners. But more than this the searchers became key actors in the way sudden death was defined, identified and enumerated across the metropolis. By observing the bodies of accident victims, articulating the cause of their demise and reporting such words to the parish clerks for inclusion within the *Bills of Mortality* they quite literally dictated contemporary knowledge of sudden violent death. As Munkhoff puts it,

> … this insistence on incompetence masks a much deeper suspicion and evades the threat of the searcher's power to interpret what she sees. Fear of the searcher, it would seem to me, resides precisely in her discursive command, in her ability to report someone as infected [with plague] and, in that report, fundamentally shape material reality. [32]

The searchers, having completed the view, relayed their information to the parish clerk who would complete the next step in the parochial administration of sudden violent death. It is clear however that Parish clerks also obtained information from other sources. This is made evident by rule IV of the Company of Parish Clerks which stated, 'And where any casualty shall happen in any of their respective parishes, that they return the same in words, exactly as it shall happen to be set down in the Coroner's warrant'.[33] Numerous examples of parish clerks receiving coroner's warrants are documented within London's burial registers, to reproduce just one example the register of St Brides notes the burial on '15 October 1718, [of] Sarah Milner, from St George the Martyr, Killed by a accidental fall down stairs as reported by Coroners Warrant'.[34]

In the context of demographic data collection the principal role of parish clerks was to document the major life events of individual parishioners for the various purposes of church and state. In the case of London however the parish clerks undertook not just a local, specifically parochial, record keeping function but also transmitted the reports of vital events in their respective parishes to their Company Hall thus enabling the compilation of information on the pattern of births and deaths for the metropolis as a whole. This information once collated was circulated through the printed medium of the weekly *Bills of Mortality*.

Registers of christenings, marriages and burials were begun formally in England in 1536 under the instruction of Thomas Cromwell. Comprehensive records of burials within the City of London began at this time if not earlier.[35] While there is good evidence for occasional City-wide data gathering during the first half of the sixteenth century the earliest systematically compiled series of Annual Bills of Mortality appear to have been published during the 1590s. The Bill for 1594, for example, related the total number of burials for the City and included a rudimentary level of analysis by indicating the number of plague victims from amongst the

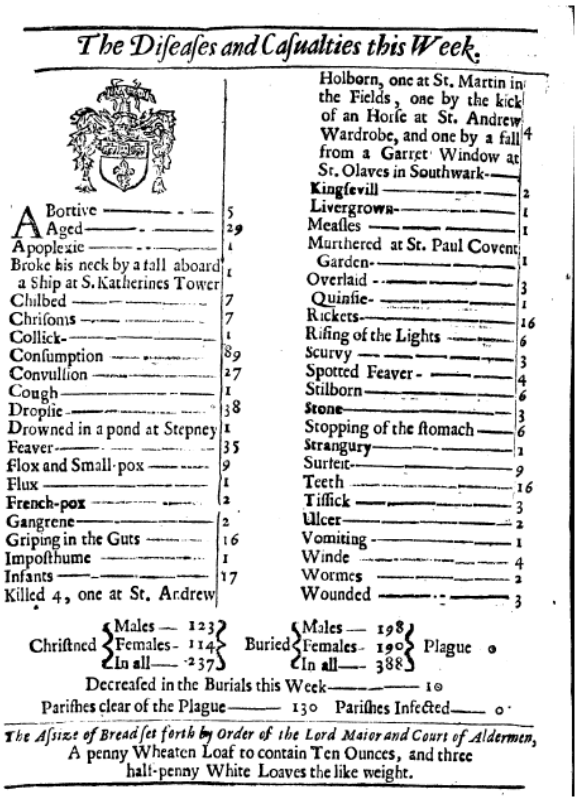
[32] Munkhoff, 'Searchers of the dead', p.21.

[33] Adams, R.H, *The parish clerks of London*, (London, 1971), p.54 & plate ix ('Orders and Rules of the Company' 1695).

[34] GL, Ms. 6550.

[35] Adams, *The parish clerks*, p.48.

total. Indeed the primary purpose in collecting such data was to chart the incidence of plague deaths and so track the progress of epidemics. The role of the Company of Parish Clerks in the preparation of the *Bills* was confirmed by their charter granted in 1610 by James I.[36]



The Diſeaſes and Caſualties this Week.

Abortive	5	Holborn, one at St. Martin in the Fields, one by the kick of an Horſe at St. Andrew Wardrobe, and one by a fall from a Garret Window at St. Olaves in Southwark	4
Aged	29	Kingſevill	2
Apoplexie	1	Livergrown	1
Broke his neck by a fall aboard a Ship at S. Katherines Tower	1	Meaſles	1
Chilbed	7	Murthered at St. Paul Covent Garden	1
Chriſoms	7	Overlaid	3
Collick	1	Quinſie	1
Conſumption	89	Rickets	16
Convulſion	27	Riſing of the Lights	6
Cough	1	Scurvy	3
Droplie	38	Spotted Feaver	4
Drowned in a pond at Stepney	1	Stilborn	6
Feaver	35	Stone	3
flox and Small-pox	9	Stopping of the ſtomach	6
Flux	1	Strangury	1
French-pox	2	Surfeit	9
Gangrene	2	Teeth	16
Griping in the Guts	16	Tiſſick	3
Impoſthume	1	Ulcer	2
Infants	17	Vomiting	1
Killed 4, one at St. Andrew		Winde	4
		Wormes	2
		Wounded	3

Chriſtned { Males — 123, Females — 114, In all — 237 } Buried { Males — 198, Females — 190, In all — 388 } Plague 0

Decreaſed in the Burials this Week — 19

Pariſhes clear of the Plague — 130 Pariſhes Infected — 0

The Aſsize of Bread ſet forth by Order of the Lord Maior and Court of Aldermen,
A penny Wheaten Loaf to contain Ten Ounces, and three halfpenny White Loaves the like weight.

FIG. 2.1 Weekly *Bill of Mortality* for the week commencing 25 April 1665, verso showing post-1660 (pre-1700) layout for 'Diseases and Casualties' from all parishes within the metropolitan area (compare with the pre-1660 layout shown in Fig. 2.2 which only recorded descriptive information for the City of London and nine outer parishes).

Source: Parish Clerks' Company, *London's dreadful visitation* (1665).

The earliest evidence for weekly *Bills of Mortality* comes in 1603.[37] From 1625 the totals for individual parishes were included for the first time while the earliest attempt to provide information specifically indicating cause of death occurred in 1629 when totals for 'The Diseases and Casualties this Weeke' for the City parishes were printed on the reverse of each *Bill*.[38] It was in 1660, however, that a reworking of the design of the weekly *Bills* led to 'Diseases and Casualties' for all the included metropolitan parishes to be published in detail

[36] TNA, 9 James I, Part 13, No.3.6.66/1910, cited in Adams, *The parish clerks,* p.41; Ditchfield, P.H., *The parish clerk*, (London, 1907), p.109.

[37] Robertson, J.C., 'Reckoning with London interpreting the *Bills of Mortality* before John Graunt', *Urban History*, 23.3, (1996), p.326.

[38] Adams, *The parish clerks*, p.54; House of Commons, *Eighth annual report of the Registrar-General of Births, Deaths, and Marriages, in England* (London, 1847/8), p.146; Robertson, 'Reckoning with London', pp.330–332.

(see Fig. 2.1.).[39] A further redesign took place in December 1700 when casualties were listed separately from diseases.

The account printed in the weekly *Bills* was the culmination of a series of actions that began with individual clerks forwarding a report of all the burials, and baptisms, within their parish for the week in question to the Parish Clerks' Company Hall.[40] Each clerk was required to deliver their return to the Hall by the Tuesday night after the week being enumerated. The next day the Company Clerk would gather the reports from a collection box situated on the Hall stairs and undertake what must have been the laborious task of collating the information for the entire metropolitan area.[41] A manuscript tabulation for the week commencing 12 September 1665 provides some evidence for the outcome of this process. The sheet was completed by inserting information into a printed pro forma with blank areas for the date, number of burials in each parish, and total number of Christenings. The lower half of the sheet included a large blank space where the various diseases and casualties were listed. On completion the tabulation would be passed on for type-setting and printing.[42]

The Company obtained a licence for their first printing press in 1625, the principal purpose of which was the production of bills of mortality; prior to this date the various bills had been produced by up to five different printers at any one time. By 1627 the press had been installed in a room referred to as the 'press chamber' within the Company Hall.[43] That presses were mistrusted politically is indicated by the provision of three locks to the door of the chamber with the key to each held by a separate officer of the Company. A precaution that suggests the rulers of Company were well aware of the seditious impact that the circulation of false bills might have on the life and economy of the City. Type for the 'weekly bills set in quarto' was purchased along with a quantity of other printing paraphernalia in 1638 and it is from this date that weekly *Bills* are thought to have been regularly compiled (an example of an early quarto size *Bill* is shown in Fig 2.2). The press and other equipment was destroyed in the Great Fire of 1666 but was soon replaced when a new press and type were purchased for £10 by Andrew Clarke, printer, on 5 October 1669. Evidence of the substantial volume of bills being produced is indicated by the need to provide new type in 1688 this time supplied by Benjamin Mott, the Company Printer.[44]

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[39] Adams, *The parish clerks*, p.52; House of Commons**,** *Eighth annual report*, p.148.

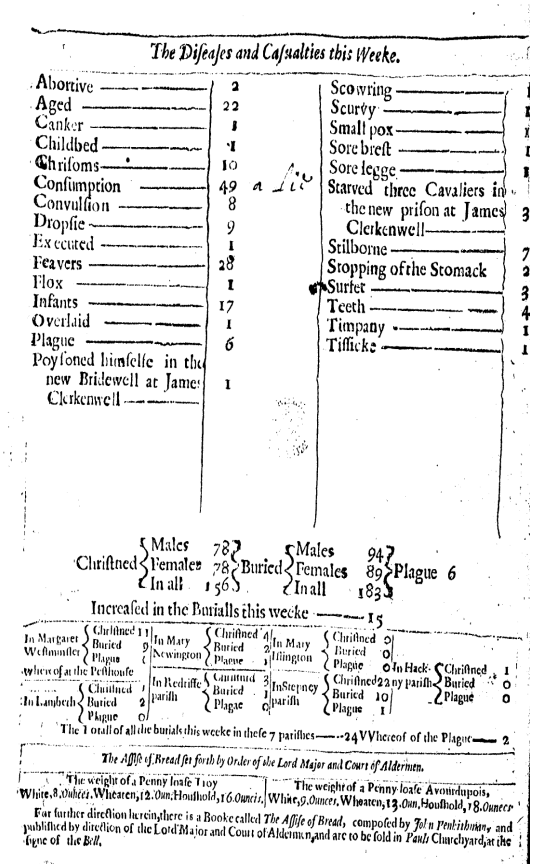
[40] The Company Hall prior to the Great Fire in 1666 was in Broad Lane, Vintry. In 1671 a new Hall was opened in Wood Street, Cripplegate. In the period between the Company occupied a series of five different taverns within the City; Ditchfield, *The parish clerk*, pp.107–110.

[41] Christie, *Some account*, p.139.

[42] Adams, *The parish clerks*, Plate IV*,* p.57. Also see Robertson, 'Reckoning with London', p.331, for a further example of such a manuscript sheet.

[43] Greenberg, S., 'Plague, the printing press, and public health in seventeenth-century London', *The Huntington Library Quarterly*, 67.4 (2004), p.525.

[44] Ebblewhite, E.A, *The Parish Clerks Company*, (London, 1932), p.80.



The Diſeaſes and Caſualties this Weeke.

Abortive	2	Scowring	1
Aged	22	Scurvy	1
Canker	1	Small pox	1
Childbed	1	Sore breſt	1
Chriſoms	10	Sore legge	1
Conſumption	49	Starved three Cavaliers in the new priſon at James Clerkenwell	3
Convulſion	8	Stilborne	7
Dropſie	9	Stopping of the Stomack	2
Executed	1	Surfet	3
Feavers	28	Teeth	4
Flox	1	Timpany	1
Infants	17	Tiſſicke	1
Overlaid	1		
Plague	6		
Poyſoned himſelfe in the new Bridewell at James Clerkenwell	1		

Chriſtned { Males 78, Females 78, In all 156 } Buried { Males 94, Females 89, In all 183 } Plague 6

Increaſed in the Burialls this weeke —— 15

In Margaret Weſtminſter	Chriſtned 11, Buried 9, Plague	In Mary Newington	Chriſtned 1, Buried 2, Plague 1	In Mary Iſlington	Chriſtned 0, Buried 0, Plague 0	In Hack. parish	Chriſtned 1, Buried 0, Plague 0
In Lambeth	Chriſtned, Buried 2, Plague 0	In Redriffe Parish	Chriſtned 3, Buried 1, Plague 0	In Stepney parish	Chriſtned 22, Buried 10, Plague 1	any parish	

Whereof at the Peſthouſe

The Total of all the burials this weeke in theſe 7 parishes —— 24 Whereof of the Plague —— 2

The Aſſiſe of Bread ſet forth by Order of the Lord Major and Court of Aldermen.

The weight of a Penny loafe Troy	The weight of a Penny loafe Avoirdupois,
White, 8. Ounces. Wheaten, 12. Oun. Houſhold, 16. Ounces.	White, 9. Ounces. Wheaten, 13. Oun. Houſhold, 18. Ounces.

For further direction herein, there is a Booke called *The Aſſiſe of Bread*, compoſed by *John Penkethman*, and publiſhed by direction of the Lord Major and Court of Aldermen, and are to be ſold in *Pauls* Churchyard, at the ſigne of the *Bell*.

FIG. 2.2 *Bill of Mortality* for the week of 12 December 1644, verso. Showing the pre-1660 design with information for fatalities within the City of London and nine outer parishes

Source: British Library (Thomason / E.258[3])

Pro forma reports, with the manuscript insertion of tallies of deaths by parish, were delivered rapidly to the Lord Mayor, the King and the Archbishop of Canterbury certainly by early Thursday morning if not before. The printed copies followed soon after and by ten o'clock were delivered to parish clerks who were able to sell individual sheets within their parish, at a penny a piece, with 'mercury women' and other dealers of print debarred from handling them by order of the Company. [45] It was also possible for individuals or institutions to subscribe to the weekly *Bills* for four shillings per annum.[46] Evidence for such subscription is rare but the Treasurer's Book of St Thomas's Hospital notes a payment in July 1682 'for half a years weekly bills of Mortality 1s', repeated in December 1682 'for half a years bills of Mortality and a small book ... 1s 6d'[47] It appears in this case the cost was being shared with a third party or the subscription was discounted at the lower rate of two shillings per annum.

[45] For an example of a manuscript report see Parish Clerks' Company, *To the Right Honourable Sir Thomas Rawlinson, knight, Lord Mayor of the City of London: The report of all the christnings and burials within the City of London …*, 1706 (covers the period 8–15 October); Christie, *Some account*, p.139.

[46] Graunt, *Observations*, p.10 (1662); Adams, *The parish clerks*, p.58.

[47] LMA, H.1/ST/D1/10.

Thus it was that a system initiated to deliver the elite with intelligence of epidemiological threat evolved, through the combined actions of the searchers and parish clerks, to provide a codified knowledge of sudden violent death events. Furthermore the transmission of such knowledge achieved an extensive geographical reach through the widespread consumption of the printed *Bills of Mortality*. The content of the *Bills* consequently helped to frame a popular characterisation of sudden violent death, and in particular accidents, as a recurring and inherently metropolitan phenomenon.

Section 2.3 Legal structures: Coroners, inquests and judicial response

The office of coroner was formally established in England towards the end of the twelfth century; by the later fifteenth century the office had assumed the form prevailing during the period of the current study. Coroners were crown officials whose role was to investigate any sudden or suspicious death most usually by convening a jury and holding an inquest.[48] Inquest juries were comprised of local inhabitants who were entrusted to return a formal verdict as to both cause of death and the culpability of any third party. Homicides were routinely investigated with those suspected of committing any crime of murder or manslaughter indicted to appear at the next assizes. Accidental deaths were not however subjected to investigation by coroners with the same consistency.

Henry VII had attempted to regularise the activities of coroners in 1487 by instituting fees of 13s 4d for each inquest held into homicides, the money to be obtained from the murderer's estate or the township within which the murder had occurred.[49] The result was however that coroners focused their attention on the more lucrative homicides at the expense of other sudden deaths. To remedy the situation an Act was passed during the first year of Henry VIII's reign requiring coroners to freely investigate deaths by 'misadventure', under a penalty of 40s if they should demand a fee.[50] This seems to have had mixed results as an extract from the 1730 burial register for St John Hackney demonstrates:[51]

12 June	Cors. Wart.	Rose Coard, wife, cut her throat, lunatic
16 June		Thomas Davis, Builder
18 June		Thomas Williamson house painter killed by a fall from a scaffold at Mr De Boyvills House
20 June		John Prichard inft
20 June	Cors. Wart.	A man, found drowned in a pond at Balms

[48] Hunnisett R.F., *The medieval coroner*, (Cambridge, 1961), pp.1–8.

[49] Henslowe-Wellington, R., *The king's coroner: being a complete collection of the Statutes relating to the office, together with a short history of the same*, (London, 1905), pp.66–69 (3 Hen VII c.2).

[50] Henslowe-Wellington, *The king's coroner*, pp.69–70 (1 Hen VIII c.7).

[51] GL, Ms. 480; *BofM* 9 June 1730 [Rose Coard]; *BofM* 16 June 1730 [Thomas Williamson and unknown man].

Clearly inquests were convened into the suicide of Rose Coard and the unknown drowned man as the coroner issued warrants for their burial but not for Thomas Williamson and so we must assume no inquest took place. It would seem, on this specific occasion, that Williamson's death despite its sudden and violent nature was not considered as 'misadventure' probably as a result of its apparently simple cause and occupational character. It was not until 1751 that an 'Act for Giving Proper Reward to Coroners' introduced a basic fee of 20s for inquests into all those who died by misadventure or in prison and 9d per mile travelling expenses; the fee for homicides remained at 13s 4d as previously enacted in 1487.[52]

Nonetheless in the case of the cities of London and Westminster and for the county of Middlesex it is evident that coroners often investigated a range of sudden violent deaths beyond homicides and suicides; yet how decisions were made, and by whom, concerning when to involve a coroner and on the part of the coroner when to convene an inquest remain shadowy at best. Hair speculates that during the eighteenth century 'less dramatic accidental deaths, particularly those involving the very old, the very sick or the very young, were likely to be passed off as natural deaths, if only to save the trouble of an inquest'. Although he concedes 'extra-domestic deaths must have been more difficult to conceal, and once a violent death was publicly known it seems unlikely that it would fail to be reported to a coroner.'[53] It is most likely that in the densely inhabited metropolis few sudden violent deaths went unremarked and the omission of an inquest was more likely to have been based on a decision made by the coroner rather than deliberate laxity on the part of others. The investigative powers of the combined efforts of London's constables and searchers may also have provided a viable alternative communal 'inquisition' for a number of less dramatic deaths.

The normal and legally established steps following a violent death conformed to a pattern well established by the fourteenth century. Those who initially discovered or witnessed a sudden death were termed 'first finders' and had a special responsibility in summoning local officers, such as constables or beadles and in the case of London the searchers; they also became key witnesses in any ensuing inquest. The constable or other officer would send for the coroner and in the meantime was charged with maintaining a guard over the body until it could be subjected to the 'view' of the inquest jury.[54] When David Stone was killed by falling from a warehouse at Botolph Wharf in the summer of 1717 the parish was obliged to pay 7s for his body to be 'watched' before the inquest jury could be assembled.[55] The delay between death or discovery and burial was rarely more than three days, however this could be extended on those occasions when a coroner was unavailable.

[52] Henslowe-Wellington, *The king's coroner*, pp.92–95; 25 George II c.29.

[53] Hair, P.E.H., 'Accidental death and suicide in Shropshire, 1780-1809', *Transactions of the Shropshire Archaeological Society*, 59.1 (1972), pp.72–73.

[54] Hunnisett, *Medieval coroner*, pp.10–11.

[55] GL, Ms. 942/2 (27 May and 17 June 1717).

The coroner, having satisfied himself that the death was within his jurisdiction, would give authority to the constable or beadle to summon a jury. In the case of London such inquest juries usually comprised at least twelve men taken from a group of twenty-four substantial male householders drawn from the ward in which the event occurred and from the three adjacent wards.[56] It is likely that such jurors were men already active in civic life and probably also experienced in jury service within other legal arenas.[57] The inquest jury performed a vital communal function in not only hearing the evidence of witnesses and reaching a verdict but also by disseminating knowledge of the circumstances of individual deaths.[58] That jurors were summoned from three adjoining wards directly assisted in widening the area through which such information was dispersed, and undoubtedly was a significant counter to the spread of malicious gossip; gossip which might prove damaging to community cohesion. In this way coroners' inquests can be seen as providing a mechanism by which social norms were re-established in the face of disorderly death.

The need to apportion blame for such disorderly deaths was satisfied by two complimentary mechanisms; indictment and deodand. Where an individual could be held responsible for causing the death, that is they engaged in an action that resulted in a fatality, they would be indicted for either murder or manslaughter. Suicides were found by coroners as *felo de se*, in effect self-murder, which was punished through burial rituals which desecrated the body. This most usually entailed burial in a highway at night and without Christian rites, it could also include the corpse being staked into the grave. Further steps were taken to confiscate the goods, chattels and estate of the deceased so depriving their heirs in the same manner that a suicide was perceived to have deprived the monarch of a subject.[59] Such measures can also be interpreted as a purificatory process that once again helped re-store social order in the face of the most disorderly of deaths.

Manslaughter was defined as the killing of another 'without malice', in other words the death was unintentional. The coroner's, and indeed jury's, attention in such cases would be focused on the circumstances of the death. If this occurred as the result of casual violence, of a non-felony nature, then the surviving individual(s) would be held responsible and indicted for voluntary manslaughter. If it was as the result of inaction or undertaking some activity

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[56] Hunnisett, *Medieval coroner*, pp.13–16; Home, G., *Old London Bridge*, (London, 1931), pp.74–75.

[57] Beattie, J.M., 'London Juries in the 1690s', in Cockburn, J.S. and Green, T.A., *Twelve good men and true: the criminal trial jury in England, 1200–1800*, (Princeton, 1988), pp.227–237, 248–250.

[58] An appendix to Hawes, R., *The poore-mans plaster-box furnished with diverse excellent remedies for sudden mischances*, (London, 1634), notably provided 'Directions to the plain, and honest man, whereby he may know, and truly judge, how a person being found dead, truly came to his end, very fitting [for those] called to be jurers upon life and death', pp.38–41.

[59] Macdonald, M., and Murphy, T.R., *Sleepless souls: suicide in early modern England*, (Oxford, 1990), pp.15, 26–28; Gittings, C., *Death, burial and the individual in early modern England*, (London, 1984), pp.72–74.

without taking appropriate measures, such as ensuring the safety of passersby or shouting insufficient warnings, then the indictment would be for involuntary manslaughter. Those indicted would be passed to the justices of the peace sitting in session for formal trial.

In cases of involuntary manslaughter, or in certain circumstances misadventure, the object or animal that constituted the agency of death — the deodand — would be identified and appraised, or valued, by the jury. Such objects, or more usually their value, would be appropriated for the Crown. The early medieval origins of this practice transferred the deodand to the church as a means of expiating associated 'sin' but by the end of the twelfth century this practice had become simply a means of generating royal revenue.[60] The coroner would enrol the deodand and in the case of London the parish or ward where the death occurred would be answerable for its value through sureties if the deodand itself was not confiscated or the owner failed to provide the surety themselves. The taking of sureties had the added benefit of allowing an individual indicted for involuntary manslaughter to continue their livelihood prior to trial; for example a surety taken on a coach-wheel, rather than taking the wheel or vehicle itself, allowed the coach-owner to continue operating.

Establishing deodand was a complicated process but as Hunnisett states the law relating to it was clear in its simplicity: *omnia quae movent to mortem, deodanda sunt*. That the object that 'moved to [cause] the death' was the responsible deodand and should be valued as such. In practice this meant that a cart horse might be deodand but not necessarily the cart or its load, or a falling barrel from a warehouse would be but not the entire contents of the warehouse; although there is evidence that this formula was not always adhered to.[61] Hence it was vital that juries delineated the exact circumstances of any accidental death both to establish the form of manslaughter that might have occurred and the specific deodand related to the precise moment of death.[62] It was also the case that a deodand was not traditionally imposed in cases where those killed were under fourteen years of age although this aspect of the law was applied with some variation.[63] This may in part explain the apparently greater number of vehicle operators appearing in court charged with the manslaughter or murder of children; without access to deodand as a means of retribution for perceived negligence — albeit culturally constructed and not legally defined 'negligence' — inquest juries may have been minded to promote such prosecutions as an alternative response.[64]

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[60] Hunnisett, *medieval coroner*, p.32.

[61] Sutton, T., 'The deodand and responsibility for death', *Journal of Legal History*, 18.3 (1997), pp.44–45, 48–52.

[62] Hunnisett, *medieval coroner*, pp.32–33; Hawkins, W., *A treatise of the pleas of the Crown: or a system of the principal matters relating to that subject, digested under their proper heads. ...*, (London, 1716), pp.65–67.

[63] Care, H., *English liberties, or, the free-born subject's inheritance containing, ... III. The coroner and constable's duty …* , 2nd ed. (London, 1700), p.201; Hawkins, *pleas of the Crown*, p.66.

[64] See below n.69; also see McMahon, V., *Murder in Shakespeare's England*, (London, 2004), for a discussion of financial recompense being paid following accidents, pp.11–12.

Despite the apparent social value of inquests they were not cheap affairs and the financial burden of sudden violent death fell heavily upon some parishes. Not only were there coroner's fees to consider but additional payments to a range of individuals such as parish officers and pensioners, jurors, surgeons and tavern keepers, and the cost of the associated burial. Indeed in the case of the coroners of the City of London 'extraordinary' fees were customarily charged on all inquests undertaken during the period of this study. *The Coroner's Guide* published in 1756 set out the following fees:[65]

	£	s.	d.
Warrant for summoning a Jury	0	2	6
The Inquisition	0	6	8
Coroner's Fee	0	13	4
Warrant or Certificate to bury the Body	0	2	6
	1	5	0

Churchwardens' accounts provide clear evidence for these and other related costs. In April 1730 Thomas Lee was killed while working in a riverside crane at Billingsgate, the parish records report:[66]

> Paid the Coroner's charges sitting on the body of
> Thomas Lee slaine in Bottolph Wharfe cranes £2 18s 4d
> Paid at the Hen & Chickens charges expended by Coroners Inquest ... 8s 3d
> Paid the Beadle summoning a jury & swearing 5 witnesses ... 8s 4d
> Paid Brampton attending and bleeding Thomas Lee ... 1s
> Paid Mr Littlefield & bearers & for burying Thomas Lee ... 8s 4d

Thus the cost to the parish of Thomas Lee's death was a total of £4 4s 3d. Like other riverside parishes St Botolph suffered the recurring financial burden of the frequent drownings that took place in the River Thames. Indeed it appears that the trouble and cost to the parish of such incidents could on occasion lead to less than honest practices. On 27 November 1731 the churchwardens' account for St Botolph notes the payment of one shilling for the rather dubious activity of 'moving a drowned man', there are no other payments noted that can be associated with this particular corpse and no drowning recorded for the parish in the relevant *Bills of Mortality*. However the *Bill* for the week commencing the 23 November 1731 intriguingly notes an individual 'drowned in the River of Thames and buried at St Mary at Hill'; St Botolph's immediate downstream neighbour.

St Botolph's neighbouring upstream parish, St Magnus Martyr, also had issues related to the administration of victims of drowning. During the late summer of 1691 the churchwardens' accounts note, in what seems an unusually peevish tone, 'Paid the Coroner, Jury and charges on burying a poor man that was drowned in the Thames and by Mr Combes

[65] Worrall, J., *The coroner's guide: or, the office and duty of a coroner: containing variety of precedents, and proper instructions for executing the said office* (London, 1756), p.26.
[66] GL, Ms.942/2 (16 April 1730); *BofM* 14 April 1730.

the Water Bailiff ordered to be tied to a pile in our parish ... £2 10s 8d'.[67] The same source provides good evidence for St Magnus having a similar issue to the costs of the numerous drownings that St Botolph experienced but in this case related to the expenses that arose from the numerous traffic-related deaths and hospitalisations that occurred to unknown strangers as they crossed London Bridge. The parish even incurred costs when a *known* inhabitant of another parish died in such circumstances. In the summer of 1724 the churchwardens were obliged to spend one shilling and sixpence on 'Expenses with the churchwardens of Woodford about taking away their pentioner Jane Taverner killed [by a cart] on the Bridge'.[68]

Not all unintentional sudden violent deaths were dealt with at a purely local level. As noted above the justices of the peace sitting in session had a direct interest in those presented to them charged with either manslaughter, or occasionally murder. Given the numbers involved it is clear however that most 'accidental' deaths investigated by coroners' inquests did not progress this far and of those that did a significant proportion were dismissed prior to trial. For those that made it to the sessions proper the cases seemed to turn on the degree of culpability that the accused owned for the incident as evidenced by their behaviour both before and after the event. This in turn influenced punishment should there be a guilty verdict.

There are a small but significant body of such cases in the Old Bailey Sessions Papers, half of which concern vehicle-related fatalities.[69] Two examples will provide evidence of both legal process and outcome: In 1676 an un-named 'young man' was charged with murder following the death of an old man in St James' Park. The text of the proceedings recounts:

> Two fellows being running together in the evening the poor ancient man unlukily happen'd to be in their way, and one of them tumbled him down and bruised him, of which bruise the next day he died; but the Evidence testifying that it was done meerly by accident, without any grudge or quarrel precedent, and that the Prisoner as soon as he perceived he had done an injury, went immediately and call'd a Chair to carry him home, &c.

The jury concluded that 'There was no reason for finding the Indictment, so that he was discharged' and found not guilty.[70] It is clear that the steps taken by the young man to care for his victim influenced the juries deliberations and reassured them that an alternative charge of manslaughter should not be preferred.

In the second example a coachman was brought before the court in 1684 charged with manslaughter following the death of a child:

> John Cowley, a Coach-man, of the Parish of St Giles Cripplegate, London, Indicted for driving his Coach, drawn with two Horses, over the Head of Edith Isham, a Child of three Years old.

[67] GL, Ms.1179/1 (1 September 1691).
[68] GL, Ms.1179/1 (22 June 1724); *BofM* 16 June 1724.
[69] Between 1676 and 1754 fifty-seven cases from the OBP were identified as relating to 'accidental' fatalities not involving acts of deliberate violence. Twenty-eight (49%) were vehicle related (of which eighteen involved child fatalities) while eleven involved shootings, six collisions with horses and four stabbings. See appendix IV for further information.
[70] OBP, 13 December 1676, unknown man (ref. t16761213-2).

> The Evidence was very strong against him, That two Children playing together in Chiswel-street, upon the turning of the Corner, being upon his full Trot, he beat down both the Children; Edith Isham was run over and slain, the other was under the Body of the Coach, and escaped:

The next observation undoubtedly undermined Cowley's defence that the incident was accidental and instead gives the impression of a hit-and-run response by a guilty party:

> after which, he drove away as fast as he could; and tho often called unto to stop the said Coach, he would not hearken till he came to Shoreditch, where he was forc'd to alight; and was thereupon secured. What he offered in his Defence was, That he did not see the said Children, the Gentlemen that were in the Coach at that Instant calling upon him to drive on and he stooping to hear what they said, happened to commit this unfortunate Accident: The reason why he did not stay when called was, That he did not hear the Party calling him. Upon the whole, the Jury found him guilty of Manslaughter.

The guilty verdict would have resulted in Cowley being burnt on the thumb with the letter 'M' indicating his conviction for manslaughter.[71]

There was one further legal entity that had interest in sudden violent death within the metropolis; the High Court of Admiralty. Cases heard by the Court of Admiralty ranged widely across maritime related matters. Of significance in the present context are those related to collisions, many of which took place amongst the crowded shipping on the Thames, and also sudden violent deaths that occurred on the river. The court was very active during the first half of the seventeenth century with regard to collision related disputes however there was a decline in such litigation after the 1660s as compensation cases began to be heard more frequently in the common law courts.[72] Two complementary explanations have been put forward for this decline; first that the court became less attractive to plaintifs as it developed a simple system for settlement based on joint liability or *rusticum judicium* in response to cases that were often highly complex and strongly disputed. And second that the use of 'prohibitions' — that is challenges to the jurisdictional authority of the court — increased significantly at the same time.[73]

The jurisdiction of the High Court of Admiralty was a recurring focus for legal debate throughout the seventeenth century and before. By the period of the current study its jurisdiction within London was restricted to the river downstream of London Bridge and identified with events occurring within the waterway itself and not on its banks.[74] A significant aspect of the exercise of this jurisdiction is found in the role of the Admiralty coroner. This coroner, normally the judge's marshal, was empowered to view bodies and convene inquests on those who died at sea (which in this context encompassed the Thames as

[71] OBP, 3 September 1684, John Cowley, (t.16840903-19); *BofM* 22 July 1684(?).

[72] Steckley, G.F., 'Collisions, prohibitions and the Admiralty Court in seventeenth-century London', *Law and History Review*, 21.1 (2003), pp.41–49.

[73] Steckley, 'Collisions', pp.54–58, 64–67.

[74] Exton, J., *The maritime dicaeologie; or sea jurisdiction of England … to which is added, a case determined in the Court of King's Bench concerning the jurisdiction of the Admiralty coroner and the county coroner*, 2nd ed. (London, 1755), pp.63–276.

noted above). In a ruling by the Court of King's Bench in 1738 however this jurisdiction was identified as being 'concurrent' with those of land-based coroners.[75] In other words the coroner who initiated an investigation had the right to see it through to conclusion without interference. Nonetheless one of the judges was able to show that a wide range of sudden violent deaths on the downstream reaches of the River Thames were routinely investigated by the Admiralty coroner:

> Sir Edmund Isham also produced the following instances of inquisitions, before the admiralty-coroner, taken out of a large bundle of them in the admiralty, viz. one of a maid servant, who fell into the Thames as she was washing her mop, and was drowned: Another, of a man who was drowned in coming from Wapping-wall: Another, of a man who was stabbed upon shore, and was found in the Thames: And lastly, another who fell from the shore into the same river.[76]

It is therefore likely that a number of the coroner's warrants noted in the burial registers of riverside parishes, particularly those related to drowning, were issued by the Admiralty coroner. The Admiralty also had patent rights to seize property as deodand a process confirmed when the right was challenged unsuccessfully in 1658. The Dutch vessel St Jacob had been declared a deodand after an inquest jury concluded that it had 'run over a small boat in the Thames, drowning one of its passengers, and the ship … for having caused the death, was by right forfeit to the Admiral.'[77]

Those who succumbed to sudden violent deaths in the early modern period presented their surviving families, neighbours, colleagues and rulers with an often disturbing and almost always disorderly situation. In response English society addressed such issues in a well practiced and structured way which reasserted a sense of order to the benefit of the wider community. The long established activities of coroners, and their juries, helped to provide a framework for social stability in the face of sudden personal disorder. London, enduring a complex and amplified pattern of sudden violent death, developed a system of local and civic response — especially through the searchers and parish clerks — which supplemented the established response mechanisms of customary practice and legal process. As a result the disorderliness of sudden violent death in the metropolis was confronted, controlled and countered by family, neighbours and colleagues working in concert with their rulers to restore the communal ideal of orderly urban life. Yet by the same process the system itself encouraged a metropolitan knowledge of sudden violent death, especially accidents, through public judicial fora and the popular consumption of the *Bills of Mortality* which then began to characterise urban life as inherently disorderly in this very regard.

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[75] Andrews, G., *Reports of cases argued and adjudged in the Court of King's Bench, in the eleventh and twelfth years of the reign of ... King George the Second,* (London, 1754), pp.231–235; Exton, *Maritime dicaeologie*, pp.i–vi.

[76] Andrews, *Reports of cases*, pp.232–233: Exton, *Maritime dicaeologie*, pp.iii.

[77] Steckley, 'Collisions', p.50.

Chapter 3 Sudden violent death: when, where and how

Section 3.1 Sudden violent death: a quantitative approach

As noted earlier while a number of historians have enumerated mortality arising from sudden violent death they have most often done so with little regard to context. As a result any critical study of the occurrence, character and reception of accidental death in the early modern period first demands the construction of a comprehensive empirical background. Against such a background critical judgements can be made as to the significance of certain categories of sudden death and more specifically individual accident events and responses to them. By drawing on a range of available sources, but most especially the *Bills of Mortality*, a number of analyses can be undertaken which should aid attempts to understand contemporary views of 'the way things really were'.[1]

TABLE 3.1
Sudden violent death in metropolitan London, 1654–1735

Category of death	Number	Percent
Accident	10,154	65.4
'Found dead'	1,423	9.2
'Killed'	817	5.2
Sub-total	12,394	79.8
Suicide	2,267	14.6
Murder	868	5.6
Total	15,529	100.0

Source: Weekly *Bills of mortality.*

Achieving an effective quantitative analysis of non-fatal accidents and related morbidity during the early modern period presents significant problems, to such an extent that it is unlikely to prove a fruitful line of enquiry; the historical study of non-fatal accidents remains therefore firmly within the qualitative sphere.[2] The reporting of fatal accidents however was a mainstay of the administrative systems associated with early modern death and burial. The following text draws principally upon the serial data provided by the *Bills of Mortality* supported by associated evidence from parochial burial registers, the Old Bailey Sessions Papers and contemporary newspapers. The information has been structured according to the major categories of cause and agency of death. Four such categories of sudden violent death were noted: murders, suicides, accidental deaths and undefined sudden violent deaths

[1] Gaskill, *Crime and mentalities*, p.21.
[2] See Cooter, R., 'The moment of the accident: culture, militarism and modernity in late-Victorian Britain', in Cooter & Luckin, *Accidents in History*, pp.107–114.

('found' and 'killed'), see table 3.1. While the primary focus of this chapter is on accidents it will be of value to briefly review the associated data for murders and suicides.

Murder

Victims of murder were frequently reported in the *Bills*, though the impression is that they were cited less enthusiastically within burial registers. It is also important to consider that a *reported* victim of murder may not have been actually 'murdered'; that is the characterization of a death as homicide could only be legally confirmed or denied following the trial of the alleged perpetrator and the verdict bestowed upon them.[3] Thus the use of the simple term 'murdered' within the *Bills* should be read as an immediate, and in many cases popular, identification of the cause of death, with legal confirmation following at a later date. Consequently the data provide an interesting insight into contemporary interpretations of 'murder' that reflect social contingencies and were usually made prior to the formal deliberations of public, often elite, authority.[4]

In all 868 murders were explicitly noted by the *Bills of Mortality* between 1654–1735, it is undoubtedly the case that a further number were either ambiguously recorded (see for example the discussion of 'killed' and 'found dead' below) or were successfully concealed (particularly amongst those recorded as 'drowned'). The *Bills* also invariably fail to mention the parish of death or burial when reporting murder thus restricting the range of analyses that might be undertaken. Whatever the limitations of the data they are a useful alternative to studies of murder rates based exclusively on judicial records, particularly prosecutions and especially so in the case of London given the paucity of inquest records.

The long-term trend for reported murders within the metropolis is particularly interesting (Fig. 3.1). It is clear that initially there was a steady increase in the reported homicide rate peaking in the early 1690s followed by a rapid decline until, by the end of the first decade of the eighteenth century, murders were being reported at a steadier rate of around seven per year. Explaining this rise and decline is not straightforward although Beattie noted a similar, if slightly earlier, peak and decline in homicide prosecutions and verdicts in Surrey at this period. Beattie was inclined to understand this particular change as resulting predominantly from changes in levels of indictment and jury practice; however the data from the *Bills* are suggestive of an actual decline in murderous violence rather than simply a change in legal practice.[5] That there was a decline in violent behaviour across the

[3] Beattie, *Crime and the courts*, pp.79–81.
[4] Gaskill, *Crime and mentalities*, pp.23–4, 205–6; Sharpe, J.A, *Crime in early modern England, 1550–1750*, (London, 1999), pp. 59–69.
[5] Beattie, *Crime and the courts*, pp.107–12, 136–9.

course of the eighteenth century is broadly acknowledged, yet the evidence from the *Bills* suggests a more sudden and dramatic decline at the very beginning of that century.[6]

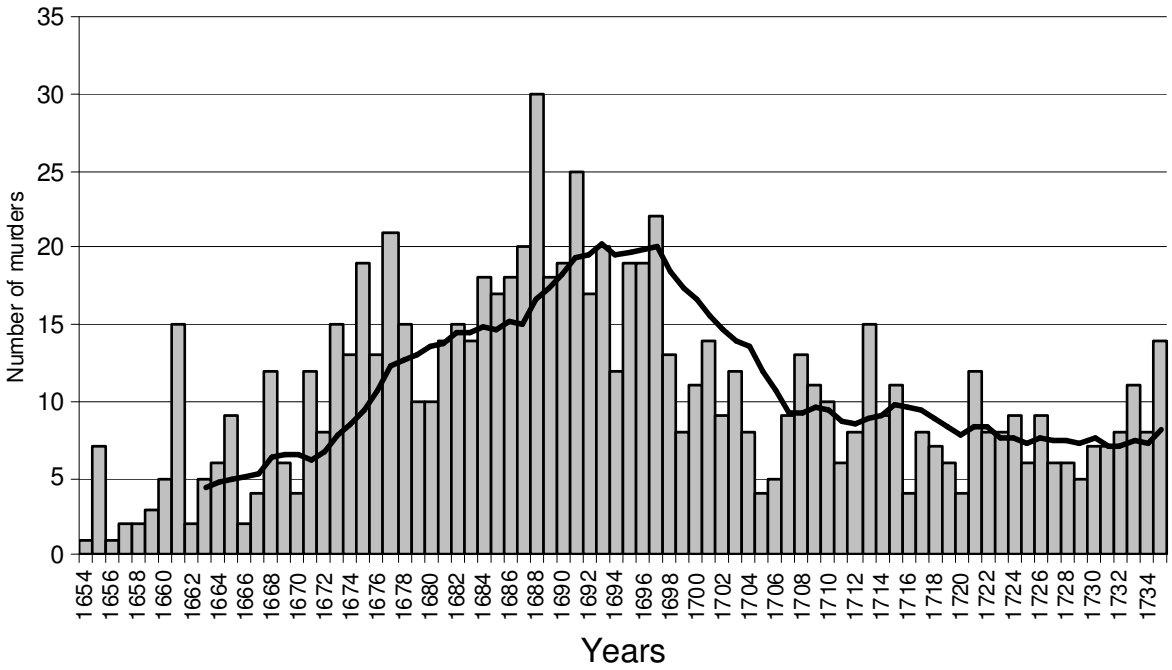

FIG. 3.1 Number of reported murders per year and ten-year moving average in metropolitan London, 1654–1735

Source: Weekly *Bills of Mortality*

As a further analytical control a comparison with the numbers the *Bills* report as 'killed' indicates the decline in murder reporting was not simply an effect of changing nomenclature.[7] Set against this apparent decline the overall rate of 'casualty' reporting in the *Bills* steadily increased over the period from a mean of 134 'casualties' per annum in the 1660s to 261 in the 1720s; a reflection at least in part of population growth. Beattie adjusted his indictment-derived homicide-rate to allow for the level of population change in the two counties of his study, Surrey and Sussex. He suggests a rate of just over six murders per 100,000 people for the two counties during the 1660s and 1670s, falling to less than four per 100,000 by the early 1700s.[8] By comparison metropolitan London in the 1660s had a reported 'murder' rate of some 13 per 100,000; a rate little changed by the 1720s at just 12 per 100,000, despite a significant rise in population.[9] Whether or not the figures indicate a true decline in the occurrence of murder one thing is clear, Londoners were twice as likely to be murdered as others who dwelt in south-east England.

[6] Hair, 'Deaths from violence', pp.17–19; Gurr, T.R., 'Historical trends in violent crimes: a critical review of the evidence', *Crime and Justice*, 3 (1981), pp.304–10; Stone, L., 'Interpersonal violence in English society 1300–1980', *P&P*, 101 (1983), pp.22–33.

[7] See below, section 3.5.

[8] Beattie, *Crime and the courts*, p.107.

[9] *BofM* 1654–1735.

Suicide

The information supplied by the *Bills* for suicide provides a wider scope for analysis, though of course issues of concealment and non-detection mean that many suicides — especially those who drowned — went unreported as such. Nevertheless the 2,267 suicide reports that found their way into the *Bills* routinely note the parish of death and also the method by which life was taken. The particular formula of words used to report suicide provides an additional attribute not generally found elsewhere in the *Bills*. By employing the terms 'killed himself' or 'killed herself' gendered information is indicated for the majority of reported suicides.

MacDonald and Murphy have comprehensively studied suicide in early modern England; using information from the *Bills of Mortality* they report a steady increase in reported suicides in London from the 1660s through to the 1730s, then a slight decline (which may in part reflect the increasing unreliability of the *Bills* after that date).[10] MacDonald and Murphy relied upon the yearly summary *Bills* for part of the period of their study (1660–1714) and so were unable to access quantitative measures of the preferred methods of suicide, information only available from the weekly *Bills*. It is also clear that by comparing the present data derived from the weekly *Bills* with that collected by MacDonald and Murphy from the annual *Bills*, in particular for the period 1680–1710, that the annual *Bills* appear to underestimate suicide in the metropolis by around a quarter. The weekly *Bills* record an average of twenty-five to thirty suicides per year between 1680 and 1710 while MacDonald and Murphy's figures suggest a lower starting level of around twelve rising to thirty only at the very end of the period (Fig. 3.2). The current figures suggest that the increase in the rate of suicide was perhaps not as dramatic as their figures show for the early eighteenth century.

Key problems when analysing methods of suicide are non-detection, concealment and more specifically drowning as a cause of death. An unobserved drowning, especially in a body of water as large as the Thames, could be rarely differentiated on discovery as either accidental or suicidal.[11] Thus it is impossible to allocate anything other than a broad figure for reported suicidal drowning during the period of study; except to say that it was no more than 4,109, the total of stated suicidal drowning plus all other undefined drowning. The true

[10] Macdonald and Murphy, *Sleepless souls*, pp.243–7. MacDonald and Murphy based their figures on annual *Bills of Mortality* between 1660 and 1714, and weekly *BofM* between 1715 and 1799.

[11] Although one contemporary observer felt that the majority of those 'found drowned' were most likely concealed suicides: Watts, *A defense against the temptation to self murder* (London, 1726), quoted in MacDonald and Murphy, *Sleepless souls*, p.245. The 'equivocal' nature of drowning as a means of suicide remains an issue to the present day: see Maxwell-Anderson, J., *Discovering suicide: studies in the social organization of sudden death*, (London, 1978), pp.124–25; Sainsbury, P. and Jenkins, J.S., 'The accuracy of officially reported suicide statistics for purposes of epidemiological research', *Journal of Epidemiology and Community Health*, 36 (1982), 43–44.

figure will have certainly been appreciably less than this.[12] Among those methods of self-killing that were more easily deduced hanging was reported most frequently (1,314). Other means of inducing death included; cutting of the throat (284), jumping from buildings (149), drowning (108), poisoning (139), and shooting (133); the least favoured method of suicide appeared to have been burning which was cited only twice.

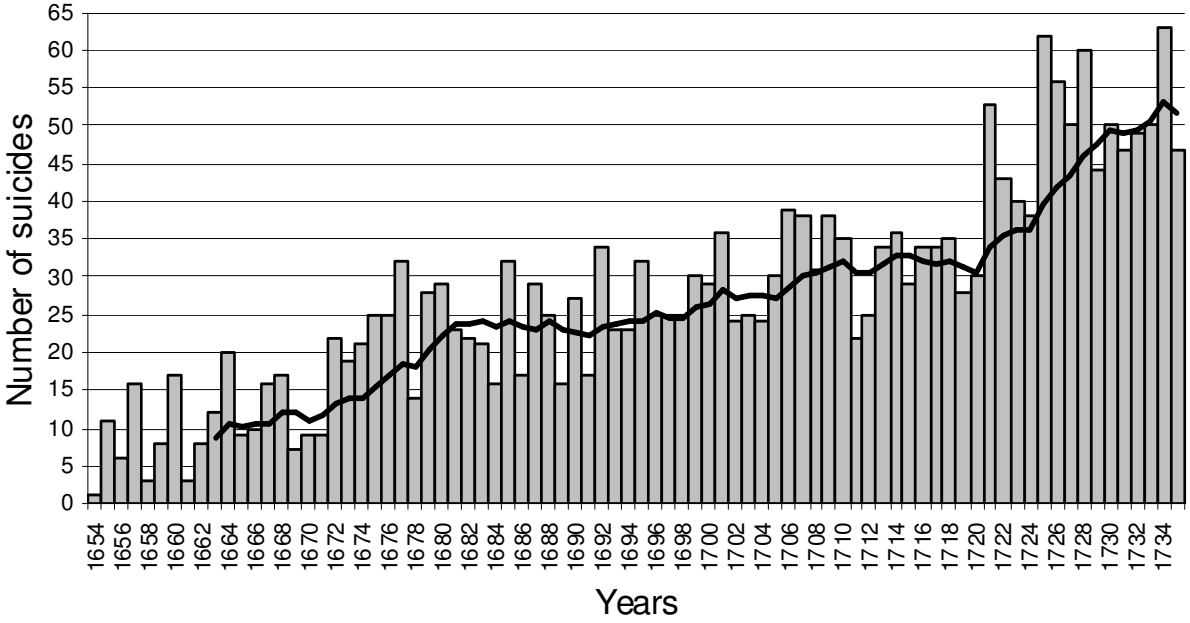

FIG. 3.2 Number of reported suicides per year and ten-year moving average in metropolitan London, 1654–1735

Source: Weekly *Bills of Mortality*

Analysis of suicides by gender showed women most frequently chose hanging (319), although many, possibly most, drowned. The ingestion of poison was a predominantly female method of suicide, with ninety-five women representing 68 percent of all self-poisonings (although without modern methods of investigation it is certain that a proportion of self-poisoning went undetected). Conversely it is notable that only four women chose to shoot themselves, a mere 3 percent of all suicidal shootings. It is possible that urban women experienced a lack of access to firearms and the skills needed to use them, though anxieties related to violent disfigurement may also help to explain these gendered patterns.[13]

More broadly the overall gender ratio for suicide demonstrates an interesting metropolitan peculiarity. During the period of the study London experienced 1.6 male

[12] Comparing these figures with modern statistics (from inquest verdicts in 1969) a more reasonable estimation of suicidal drowning might be around 1,500, which also equates better to the number who hanged themselves during 1654–1735; Maxwell-Atkinson, *Discovering suicide*, pp.102. See below, Section 3.2, for further discussion on drowning.

[13] These general proportions mirror those among modern suicides in England, especially with regard to women favouring hanging and self-poisoning over more violent methods. Department of Health, *National Suicide Prevention Strategy for England* (London, 2002), p.8.

suicides for each female death (male 1,078; female 671; unknown gender 518).[14] This is a particularly low ratio as MacDonald and Murphy indicate a general figure for England of 5.2:1.[15] When it came to suicide London would seem to have tended toward far greater gender equality than other parts of the realm. Such a notable level of equality may well tell us something of the social independence of women in the metropolis at this time, although it is more likely to indicate that London was a particularly lonely, oppressive and emotionally testing place for vulnerable women, factors possibly exacerbated by the increased levels of economic independence such women endured.

Accidents

The term 'accidentally' must be considered with subjective caution, while use of the term by parish clerks can be taken to indicate accidental circumstances its absence need not imply that an otherwise undifferentiated sudden violent death was *not* related to an accident. In many cases an agency easily identified as accident-related is cited but the term 'accidentally' is not used; such as 'killed by a cart' or 'killed by a fall'. In truth the presence or absence of the word 'accidentally' was more likely a result of variations in the methods and styles of recording of individual parish clerks than a reflection of any empirical certainty. Nonetheless those reports in the *Bills* that indicate such deaths provide a range of information, most significantly the cause or agency of death. Table 3.2 provides a breakdown of the twelve major categories of cause of death, ranging from the great number who drowned to a tail of miscellaneous causes of death such as those killed by poisoning or in explosions. During the period of the study a total of 12,394 accidental deaths were reported.

The most frequently reported cause of death was drowning which accounted for 5,260 causalities (42.4 per cent of all accidental deaths), falling also proved a significant risk being the agency of death in 1,469 fatal accidents (11.8 percent). Those reports that used the term 'found dead' were included within the study as the primary agency of death was often accident-related — a number of reports provided additional descriptive detail confirming such a view. The *Bills* that use this term, although problematic, also provide information on location of death allowing geographical analysis. The term 'killed' also tends toward ambiguity but has been included within the study for similar reasons. As the term 'murdered' could always be applied, and seems to have been employed consistently for homicides, it is likely that the term 'killed' refers to accidental deaths of unknown or unreported agency, or at least unintentional (and so by implication accidental) death as a result of deliberate

[14] The male-female ratio remains notably low at 2.4:1 even if all those suicides of unknown gender are assigned hypothetically as male. A note of caution must offered however given the unknown total of suicidal drownings and that in the socio-economic, occupational and cultural context of London drowned women were more likely to be defined as suicides than drowned men.

[15] MacDonald and Murphy, *Sleepless souls*, pp.247–48.

violence.[16] Other relatively discrete causes of death that were of significance include being struck by falling objects, being killed in vehicular accidents and being fatally injured by animals. Other agencies of accidental death were reported in lesser numbers although the application of qualitative aggregations helped provide manageable data sets. For example the category 'asphyxiated' included deaths reported variously as; 'stiffled', 'choaked', 'suffocated', 'hanged', 'smothered', and 'strangled'.

TABLE 3.2
Causes of accidental death in metropolitan London, 1654–1735

Cause of death	Number	Percentage
Drowning	5,260	42.4
Falls	1,469	11.8
'Found dead'	1,423	11.5
'Killed'	817	6.6
Struck by objects	714	5.8
Vehicles	669	5.4
Animals	406	3.3
Burning	383	3.1
Wounding and stabbing	299	2.4
Asphyxiation	221	1.8
Scalding	154	1.2
Other	579	4.7
Total	12,394	100.0

Source: Weekly *Bills of mortality.*

Across the period of the study the number of reported accidental and other undefined sudden violent deaths showed a steady increase, although there was a slight hiatus in growth between the early 1690s and the mid-1710s (see Fig. 3.3). The numbers rose again from 1713 onwards reaching a peak of 271 per annum in 1735, the final year of the data series. When compared with estimates of metropolitan population change across the same period there appear some similarities. Schwarz suggests that London's population growth was slow and steady during the late seventeenth century with a phase of partial stagnation in the first decade or so of the eighteenth century followed by more rapid growth between 1715 and 1725. After 1725 however Schwarz indicates a slowing or decline in growth; an observation counter to the steadily increasing rate of accidental death shown here.[17]

[16] For a further discussion of the terms 'found dead' and 'killed' see below, sections 3.4 and 3.5.

[17] Schwarz, *London in the age of industrialisation: entrepreneurs, labour force and living conditions, 1700–1850*, (Cambridge, 1992), pp.125–28; Wrigley, E.A, and Schofield, R.S., *The population history of England, 1541–1871*, (Cambridge, 1981), pp.166–70; Harding, V., 'The population of early modern London: a review of the published evidence', *London Journal*, 15 (1990), 111–28.

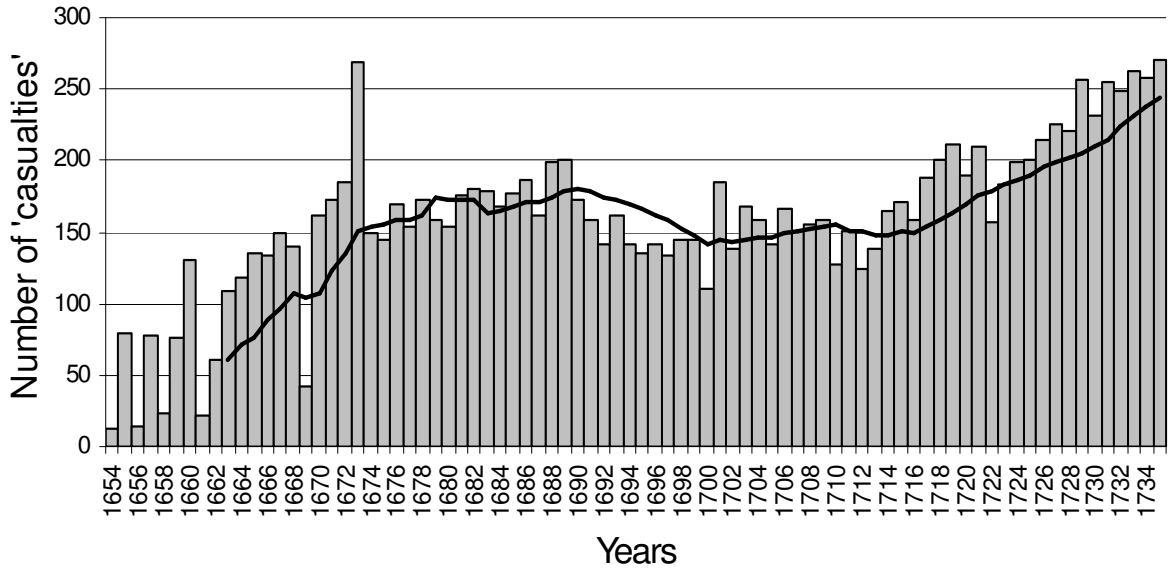

FIG. 3.3 Annual totals of 'casualties' (accidental and undefined sudden violent deaths) in metropolitan London, 1654–1735; also showing ten-year moving average

Source: Weekly *Bills of Mortality*

Seasonality

By analysing the calendar date for each sudden death it is possible to make a number of observations on the seasonality of murders, suicides and fatal accidents. It is significant that the patterns shown below are markedly different from the general seasonality of burial as established by Landers for his metropolitan sample parishes for 1695–1704 and 1750–1759.[18] Adult burial seasonality in those parishes showed a peak in January with the lowest frequency of burial in June and July; a pattern not replicated by the current data.

With regard to murders two peaks are indicated within Table 3.3 and Fig. 3.4, April and December, with a low incidence of such killings during the mid-summer period. This in all probability reflects the reduction in resident population that occurred throughout the summer months, resulting in a decline in population density and a relative abundance of food and work during that period of the year. Such factors reduced many of the social pressures that might culminate in violent behaviour.

Suicides peaked in the early summer in London as Table 3.3 and Fig. 3.4 show and not as contemporaries believed in the 'gloomy' month of November, erroneously linking poor weather conditions with the prevalence of depressive emotions.[19] In fact contemporary thought was entirely incorrect as the month with the lowest incidence of suicide was November, which accounted for just 6.9 per cent of all suicides. Analysis of nineteenth and

[18] Landers, J., *Death and the metropolis: studies in the demographic history of London 1670–1830* (Cambridge, 1993), pp.369–387.

[19] MacDonald & Murphy, *Sleepless souls*, pp.312–313.

early twentieth century suicide data indicates a comparable peak in the early summer months and a low point in December. The pattern was driven by the more common methods of suicide such as drowning and hanging; other methods demonstrated no significant seasonality.[20]

TABLE 3.3
Seasonality of sudden violent death in metropolitan London, 1654–1735

Month	Accidents		Suicides		Murders	
	Number	%	Number	%	Number	%
January	936	7.6	179	7.9	90	10.4
February	800	6.5	178	7.9	69	7.9
March	899	7.2	198	8.7	76	8.8
April	1,028	8.3	206	9.1	96	11.1
May	1,175	9.5	240	10.6	69	7.9
June	1,379	11.1	227	10.0	64	7.4
July	1,384	11.1	196	8.6	48	5.5
August	1,166	9.4	163	7.2	61	7.0
September	928	7.5	162	7.2	67	7.7
October	914	7.4	195	8.6	59	6.8
November	829	6.7	157	6.9	73	8.4
December	956	7.7	166	7.3	96	11.1
Total	12,394	100.0	2,267	100.0	868	100.0

Source: Weekly *Bills of Mortality*

The main peak of accidental death came in the summer months of April through to August, months when a great deal of activity took place across the metropolis especially in the construction trades and within the port and its ancillary facilities and trades. Accidents on the other hand had a secondary peak during the winter months of December and January, probably related to poor weather conditions and shorter periods of daylight.

[20] Ajdacic-Gross, V., Bopp, M., Sansossio, R., *et al*, 'Diversity and change in suicide seasonality over 125 years [in Switzerland 1876–2000]', *Journal of Epidemiology and Community Health*, 59 (2005), pp.968–70.

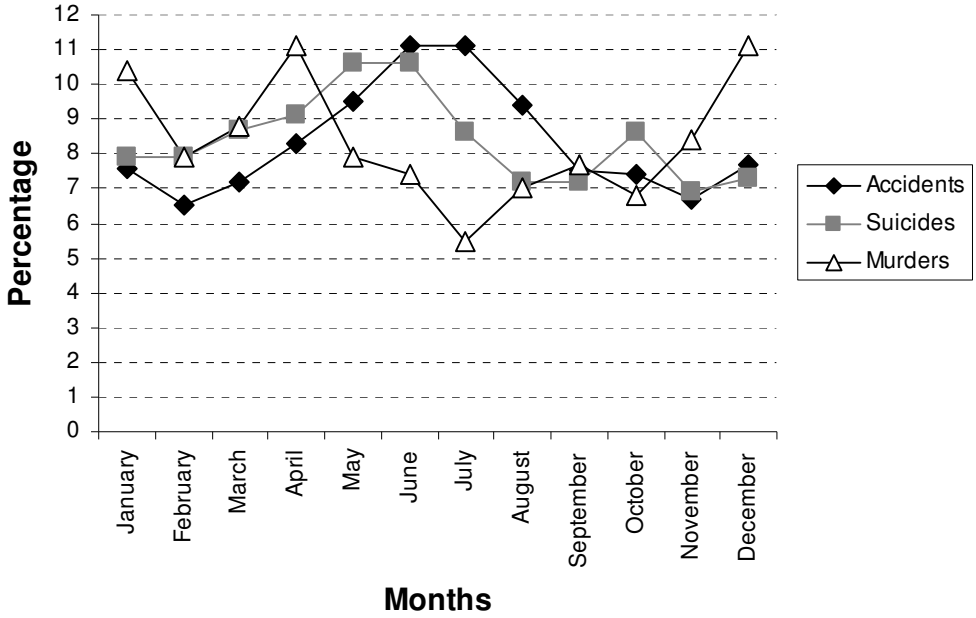

FIG. 3.4 Relative seasonality of sudden violent death in metropolitan London, 1654–1735

Source: Weekly *Bills of Mortality*

The following text reviews accidental deaths by addressing each major cause of death in turn. Discussion focuses on the general incidence and character of each type of fatality, beginning with a brief consideration of relevant social and environmental issues and the nature of related injury or trauma. This is followed by a detailed review of the circumstances associated with the more typical incidents. An analysis of the evidence for seasonality and broad geographical occurrence is also undertaken; the latter by comparison with the distribution of the London population circa 1695 (the mid-point of the *Bills of Mortality* data series, 1654–1735).[21] Where the data allows more detailed analysis has been undertaken particularly in relation to certain agencies of death, for example animals, vehicles, bladed-weapons and tools, and firearms.

[21] Spence, *London in the 1690s*, pp.63–66; Schwarz, *Age of industrialization*, pp.125–128.

Section 3.2 Drowning

Drowning accounted for just under half (42.4 per cent) of all unintentional violent sudden deaths reported in London between 1654 and 1735. The greater proportion of such deaths were associated with transport and shipping activities on the River Thames, however more mundane Thames-side activities such as bathing and fetching water could also prove dangerous. Further deaths were associated with other watercourses, most notably the River Lea and the canal known as the New River, but a variety of fatalities occurred in ditches, wells and tubs of water. While drowning could be associated with other trauma, particularly striking injuries causing unconsciousness, the simple truth that the majority of people during the early modern period were unable to swim was a significant contributory factor.

Among the 5,260 victims of drowning there were a number who undoubtedly met their end in non-accidental ways. Drowning was an acknowledged method of suicide; it was also a convenient manner in which a murderer might dispose of their victim.[22] The majority of bodies recovered were described simply as having 'drowned' with no further comment. There were, however, 1,259 drowning events recorded as 'accidental' within the *Bills of Mortality*, almost all of which provide additional information on the circumstances of death, or at least location in terms of watercourse. The remaining 4,001 drowning reports rarely included supporting information; this absence may point to a lack of knowledge concerning the events associated with the origin of the drowning, alternatively it may have stemmed from a habituated indifference built upon the incessant regularity of such fatalities.

Most of the dead are likely to have been discovered in, and recovered from, the extremely busy waterway of the Thames. Attempting to establish the identities of the dead or the possible origins of their deaths would have been a difficult process. There were often few witnesses to such incidents, the site of immersion could be some considerable distance from the point of discovery, and a number of incidents will have occurred during the hours of darkness. Even the application of simple forensic observation would have been complicated by the rapid decay of bodies that had been immersed in water for longer periods of time especially during the summer. Modern research indicates the average time between

[22] For example, in September 1705 'Mary Larrison drowned herself in the New River' in the parish of St John Clerkenwell; she was just one among 108 identified suicidal drowning events reported by the *BofM* between 1654–1735, (HS19, p.220). With regard to the use of immersion as a means to conceal murder the *Daily Courant* reported a rather clumsy attempt on 14 March 1730: 'On Thursday last in the afternoon a man was taken out of the New River Head near Sadler's Wells, who is supposed to have been murdered and robbed, by his pockets being turned out, and being cut and mangled very much; he was carried to Clerkenwell burying ground, to be seen openly, if that any person should know to whom he belonged.'

immersion and recovery for a body in the River Thames is around three weeks, additionally it was found that such bodies might drift as much as 3km from their original point of entry.[23]

Whatever the circumstances of such incidents the overall number reported as drowned provides a relatively accurate numerical account of this 'cause' of death (more so in the case of suicide by drowning than in the case of concealed murders where the actual cause of death may have been something quite different). That drowning was in essence an instantaneous event further supports the dependability of the numerical count, if one recovered from a 'near drowning' then death was avoided and no report would find its way into the *Bills*. Such a straightforward link between cause of death and the reporting of such was often not the case with those who suffered, for example, burning or falling injuries followed by a death some days or weeks after the accident event. It was in part the immediacy and perceived fatal inevitability of drowning that delayed developments in effective methods of resuscitation.[24]

The circumstances of drowning

As noted above the *Bills of Mortality* provide little or no additional information concerning the deaths of the majority of the 5,260 reported victims of drowning. Nonetheless it is clear that by far the greatest proportion died in accidents that took place on the River Thames. A review of those reports that do provide additional information indicates a range of circumstances that contributed to such deaths but also elaborates those drowning events that took place in ponds, ditches, pits, cisterns and tubs.

It is probable that somewhere in the region of four thousand individuals drowned in the River Thames across the ninety-one years of the study.[25] The River was so frequently the site of drowning that from 1695 onwards the *Bills* often record such deaths as in 'the River of Thames' rather than providing a parochial location. Many of these victims were likely to have been employed in maritime occupations such as sailors, watermen, lightermen and bargemen, but also partially land-based maritime trades and callings that included a sailmaker, ships carpenter and several ballastmen.[26]

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[23] Brewer, V.L., 'Observed taphonomic changes and drift trajectory of bodies recovered from the tidal Thames, London England: a 15-year retrospective study', *Proceedings of the American Academy of Forensic Sciences*, 11 (2005), p.286.

[24] It was not until the mid-eighteenth century that serious medical attention turned to the possibility of resuscitation, or as it was more often termed 'reanimation'. Quinlan, S.M., 'Apparent death in eighteenth-century France and England', *French History*, 9 (1995), pp.34–35, 39–42. Also see Bradwell, S., *Helps for suddain accidents endangering life*, (London, 1633), pp.94–106, for methods to aid those recovering from near-drowning.

[25] A figure of 4,284 was obtained by combining all those stated explicitly as having drowned in the Thames (1,377) with those undifferentiated drownings reported from Thames-side parishes.

[26] For example: Ralph Millbourne, apprentice sail maker, St Katherine by the Tower, 17 July 1704 (GL, Ms.9666, *BofM* 11 July 1704); Robert Russel, ship carpenter, St Paul Shadwell, 26 December 1719 (LMA P93/PAU3/34, *BofM* 22 December 1719); William Clampit, ballastman, 23 June 1720 (LMA P93/PAU3/34, *BofM* 21 June 1720);

Of the many who died with maritime associations limitations of space will allow only a few examples to be presented. In May 1663 'Thomas Dilling a waterman was drowned and buried' in the riverside parish of St Mary Somerset; the register for St Paul Deptford records the burial on 3 December 1739 of 'John Whitby, Mariner, of Romford in Essex, drowned in Mr Brensdon's Dock'; and in December 1711 'Thomas Tegg, bargeman … was drowned' and subsequently buried in the parish of St Mary Queenhithe.[27] On 18 December 1666 Samuel Pepys, who was no stranger to the Thames, recorded with a degree of tragic irony that he had heard 'the ill news that poor Batters, that hath been born and bred a seaman, and brought up his ship from sea but yesterday, was, going down from me to his ship, drownded in the Thames'.[28]

The nature of the port of London as a place of transit with people from many differing geographic origins coming together is clearly indicated by the noticeable frequency with which bodies of anonymous individuals were recovered from the Thames. Many of these foreign mariners, travellers and migrants were noted in the burial registers of riverside parishes simply as 'strangers'. For example, at St Margaret Westminster on 10 October 1664, 'A man unknown drowned' was buried; the burial register of St Katherine by the Tower reports that on 4 June 1704, 'a man whose name not known accidentally drowned in the River of Thames as he was stepping from the side of a ship called the Young Tobias of Harling in Freisland to which he did belong'; even away from the Thames anonymous drownings were reported, as in this example from St John Hackney, 'a young man was found drowned in a pond near the 'barnes' not knowing from whence he came, [and] was buried 21 March 1663'.[29] That such individuals were unknown to their finders and their neighbours did not mean that they were treated with indifference. Coroners would often empanel an inquest jury to investigate such discoveries; as was the case in January 1661 in the parish of St John Clerkenwell where 'a man that was drowned near the waterhouse who was not known who he was, after Mr Evans, Coroner, with his Inquest had viewed the corpse, it was buried.'[30]

Aside from the open water of the Thames itself the sometimes chaotic and often poorly maintained wharves and docks that lined its margins were recorded as sites of drowning. In total the *Bills* record the drowning of twenty-eight individuals in and adjacent to Thames-side docks and wharves. Such events could even take place in the busiest of waterfront locations: for example the *Bills* note that five people were drowned at Billingsgate Dock. Among these

[27] HS60, p.103 (29 May 1663), *BofM* 26 May 1663; LMA P75/PAU/1; GL, Ms.9153/2 (9 December 1711), *BofM* 4 December 1711.

[28] *Pepys*, 18 December 1666; (The accompnaying note elaborates upon this entry in Pepys diary; 'Christopher Batters was in command of the Joseph fireship. He had just sold £10-worth of fish to a fishmonger and appears to have been drinking in celebration: *CSPD* 1666–67, pp. 505–6. The body was not found until the end of the following March.'); also possibly *BofM* 26 March 1667 (St Katherine by the Tower).

[29] HS88, p.74; GL, Ms.9666; GL, MS. 480/1.

[30] HS17, p.337 (17 January 1661), *BofM* 15 January 1661.

was ‘Ann Wiggens, a stranger [who] was drowned in Billingsgate Dock’ and was buried by the parish of St Botolph Billingsgate in 1687.[31] An even higher death toll, eleven, was associated with London’s first purpose built wet dock. The Howland Great Wet Dock was constructed during the late 1690s on the western bank of the Thames at Rotherhithe, covering an area of some ten acres it is known to have been in use by 1703 when it was noted that ships moored there suffered less damage in the great storm of that year than those anchored in the Thames.[32] Drowning events occurred at a variety of other waterside sites; including those within the City of London as witnessed by an entry in the burial register for the parish of St Michael Queenhithe at the beginning of 1656, ‘Christopher Weayamyr, salter, being drowned in Queenhithe Dock near Mr. Baggs [Brooks?] wharfe.’[33]

Even those who had little occupational reason to frequent the Thames were exposed to its dangers when they became travellers. Using the services of Thames watermen and the wherries and ferries they rowed provided a daily exposure to the risk of drowning for many thousands of Londoners. In a typical example of such a drowning event in 1731 it was reported that, ‘a wherry [was] overset in Wandsworth Reach, by a Westcountry barge, a passenger and waterman drowned.’[34] A similar double drowning was noted in the burial register of the riverside parish of St John Wapping, in May 1724 Elisabeth Staveley from Stepney and John Hart from Wapping Old Stairs were ‘accidentally drowned near London Bridge by the oversetting of the boat wherein [they then were]. As reported in the Coroners warrant.’[35] Similar incidents occurred away from the congested surface of the Thames, in April 1728, ‘Joseph Barnett, victualler, drowned from the ferry-boat’ in the parish of St John Hackney, presumably while crossing the River Lea.[36]

While bridges may have removed some of the dangers that ferries presented, they held particular dangers for those who attempted to travel beneath them. London Bridge, with its sixteen narrow arches that spanned the gaps between one timber-revetted ‘starling’ and the next, acted as a partial dam or weir and so created a tremendous rush of water during the ebb tide.[37] Passing through these arches at this time of the tide was known as ‘shooting the bridge’; a treacherous activity during which many boats overturned and as a consequence numerous lives were lost. The *Daily Courant* reported such an episode in 1730, ‘On Monday last a wherry in passing through London Bridge, struck against the sterlings and was overset,

[31] GL, Ms.4546 (26 April 1687).
[32] Broodbank, J.G., *History of the Port of London*, (London, 1921), I, pp.67–69.
[33] GL, Ms.9147 (7 January 1656).
[34] *Gent’s Mag*, 26 May 1731.
[35] LMA P93/JN2/24 (22 May 1724), *BofM* 19 May 1704.
[36] GL, Ms. 480/1 (19 April 1728), *BofM* 16 April 1728 (‘drowned in the River Lee’).
[37] There were nineteen arches in all, however three were leased to the London Bridge Waterworks and housed waterwheels. Weinreb, B., and Hibbert, C. (eds.), *The London encyclopaedia*, (London: Macmillan, 1983), pp. 481–83.

and the waterman was drowned.'[38] In an even more dramatic event five individuals drowned in September 1731 when, 'A boat was overset with seven passengers, going thro' London Bridge, four of whom and the waterman, were drowned.'[39] Even those travelling through the bridge on larger vessels were not immune to danger, on this occasion the churchwardens of St Magnus the Martyr at the northern end of the bridge had to pick up the bill, as they made clear in their accounts, 'Paid the Coroner & charges of the burial of John Pouny, a poor man who was drowned in a lime hoy going through the Bridge ... £2 17s 4d'.[40]

As noted drowning events often resulted in multiple fatalities, occasionally in terms of the numbers killed such events should rightly be defined as nothing less than disasters. Samuel Pepys was involved in the aftermath of a mass drowning in the winter of 1660:

> Lords day. Being called up early by Sir W. Batten, I rose and went to his house and he told me the ill news that he hath this morning from Woolwich: that the Assurance (formerly Captain Hollands ship and now Captain Stoakes, designed for Guinea and manned and victualled), was by a gust of wind sunk down to the bottom. Twenty men drowned. Sir Wms both went by barge thither to see how things are – and I am sent to the Duke of York to tell him.[41]

In this case however Pepys was possibly more concerned about the loss of the ship than the men aboard who as sailors would have been exposed to the threat of drowning routinely. An Admiralty enquiry found that a sudden storm during the night had caused the sinking, however a further mass drowning just under two weeks later suggests the weather at the time may well have been generally poor and that such incidents might have been expected. The register of St Katherine by the Tower notes on 21 December 1660 that 'there were 13 men and one woman drowned and buried and their names were unknown.'[42] The *Bill of Mortality* for that week (18 December 1660) records that at St Katherine by the Tower seventeen people in total drowned, the burial register lists two other named victims of drowning during that same week.

Other multiple drowning events had more to do with particular circumstances than the weather; in the summer of 1731 *The Gentleman's Magazine* reported that, 'Mr. Jakeman, a cabinet-maker, Mr. Stephens, a scowerer, and another person, going into a boat from on board a ship, it overset by the weight of Mr. Jakeman, who coming too hastily on the side of it, and they, and the waterman were drowned.' The *Bill of Mortality* for the week

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[38] *Daily Courant* 25 February 1730, possibly *BofM* 24 February 1730 or 3 March 1730 (Both noted as men who had drowned in the River Thames and were buried in St Saviours Southwark).

[39] *Gent's Mag* 7 September 1731, *BofM* 14 September 1731 (This particular *Bill* reports six drownings in the River Thames with burials in St Saviours Southwark, St George Queens Square, St Paul Shadwell, St John Wapping, and two in Christ Church Surrey).

[40] GL, Ms.1179/1, p.550, (1702).

[41] *Pepys*, 9 December 1660. Also see accompanying note: 'The night's storm had taken the ship by surprise; both master and mate were ashore, the guns were not lashed, and many portholes were open. See report of an enquiry in TNA, Adm. 2/1745, ff. 21r, 23v; Duke of York, Mem. (naval), pp. 10–11. Cf. also *Mercurius Publicus* 13 December, p. 807.' The location of the event in the downstream reaches of the Thames at Woolwich placed the sinking beyond the boundary of the Bills of Mortality.

[42] HS76, p.173; *BofM* 18 December 1660.

commencing 20 July 1731 notes four individuals who were drowned, three explicitly 'in the River of Thames'; two were buried at St John Wapping, one at Rotherhithe and the last in the parish of St Brides.[43]

But the worst incident of mass drowning on the Thames during the period of this study undoubtedly occurred in 1673. The *Bill* for the week of the 8 April records twenty-nine deaths by drowning, all but two of which were allocated to the parish of St Margaret Westminster. The following week a further eighteen such deaths were reported, the week after nineteen were noted as drowned but only three of these were allocated to the parish of St Margaret.[44] The parish clerks company when compiling these weekly bills chose not to elaborate upon such an unusually large number of deaths, sixty-six in total. And it was unusual; the average number of drownings reported during the month of April throughout the decade of the 1670s, for example, was just six. Clearly this was a multiple fatality event of some significance.

The first insight into how such a large mortality toll came about is to be found scrawled in the margin of the London Guildhall Library copy of the relevant *Bill*. A barely legible manuscript note reads, 'Those thirty were soldiers newly pressed coming out of [*illegible*] and drowned passing [by the] ferry [boat] from [Westminster] to Lambeth the boat overturned.'[45] That they were indeed soldiers can be confirmed by further references within contemporary burial registers: On the 11 April 1673 the register for St Margaret Westminster records the burial of 'twenty-two soldiers drownded', none were named. Over the following two weeks the same register indicates a further twenty-three soldiers were buried, of those only two were named; one as Henry Evans, the other as Thomas Bridle.[46] The churchwardens' accounts for St Margaret Westminster indicate that the parish was obliged to pay for the burial of forty-nine 'drowned soldiers' between 8 April and 6 May 1673, there was also an expenditure of £2 6s 8d on seven coroner's inquests taken upon 'those bodies of drowned soldiers'.[47]

Two other parishes noted the burial of drowned soldiers around this date, and it is perhaps significant that in those places they were either positively identified or attempts were made at identification. In the downstream parish of St Andrew by the Wardrobe the burial

[43] *Gent's Mag* (23 July 1731), *BofM* 20 July 1731.

[44] *BofM* 15 April 1673, 22 April 1673. It is likely that almost all of these were related to the same event, with the tidal action of the river dispersing those bodies not immediately recovered over a wider area as the weeks passed.

[45] *BofM* 8 April 1673 (bound in Bell, *London's Remembrancer*).

[46] HS89, p.58.

[47] The churchwardens' account records the burial of twenty-six 'soldiers drowned at ye Horsferry' during the week of 8 April 1673, with seventeen more the following week and four the week after. During the weeks of 29 April 1673 and 6 May 1673, two further, but this time named, drowned soldiers were buried, William Thornton and John Armstrong, respectively; WAC, E53 (audited 5 June 1673).

register states; 'Buried 23 April, a soldier drowned with many others going over the water in a ferry boat, whose shirt was marked with A. I.'[48] Among the last burials that can be safely associated with the event are those of four soldiers in the parish of St Mary Lambeth, the ferry boat's apparent destination, interred between 25–29 April; all were named.[49] It is interesting to note that as late as 26 April the officials in St Margaret Westminster were still burying apparently unidentified corpses.[50]

Why did this tragedy occur and why was so little effort made by the parochial officials of St Margaret Westminster to identify the men who had drowned? The various burial registers indicate that at least fifty-three deaths were likely to have been associated with this event, however the death toll may have been higher.[51] If a correlation is attempted using the St Margaret's churchwardens' account (forty-nine associated burials) and the burial registers of other parishes then a figure of at least fifty-six deaths can be calculated.[52] Whatever the actual death toll the circumstances of the disaster seem clear.

In April 1673 England was engaged in the Third Dutch War and the demands of both navy and army meant the impressment of men occurred on a regular basis throughout the streets of London. It is possible that this particular group of 'newly pressed' men were being taken from the city into the countryside south of the Thames.[53] To get them from one-side of the river to the other involved loading them onto a suitable boat, in this case the flat-bottomed and punt-like Horseferry. If the design of the Horseferry as it is depicted in figure 3.5 was similar to that which capsized in 1673 then the potential instability of the ferry can be quickly appreciated. Loaded with at least sixty men, possibly significantly more, the shallow-draft vessel could easily have become swamped with water. Add to this the apparent lack of handrails and the fact that these men had been selected to be soldiers not sailors and it is all too easy to see how the disaster might have occurred. But there is a further factor; in 1691 John Gadbury published a 'diary of the weather' compiled from his observations on the daily meteorological conditions in London between 1668 and 1689. Gadbury's description of the London weather during the first week of April 1673 is characterised by terms such as, 'cold winds, violent hail storms', 'much snow' and 'blustring winds & cold rain'.[54]

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[48] GL, Ms.4507/1, *BofM* 22 April 1673.

[49] LMA P85/MRY1/343, 'Allen Selley, Richard Dunne, Calib Middleton } A Soulgier [soldier] that was drowned' (25 April 1673), *BofM* 22 April 1673; 'William Williams, a Soulgier [soldier] that was drowned' (29 April 1673), *BofM* 29 April 1673.

[50] HS89, p.58.

[51] HS89, p.58; GL, Ms.2088/2, Ms.4507/1; LMA P85/MRY1/343.

[52] WAC, E53 (1673); GL, Ms.2088/2, Ms.4507/1; LMA P85/MRY1/343.

[53] By 30 April men pressed for naval service were being gathered in Westminster, held at 'Covent Garden Church' [St Pauls], and then transferred to vessels, though some may have been moved directly to areas in Southwark; *CSPD 1673*, p. 191.

[54] Gadbury, J., *Nauticum Astrologicum … Unto which is added a diary of the weather for XXI years together, exactly observed in London, with sundry observations thereon…* , (London, 1691), p.152.

Conditions on the Thames must have been very poor, the surface was undoubtedly choppy and the water temperature itself critically low. These were circumstances that may have contributed to the cause of the disaster but which also would have made the chances of survival for those thrown into the icy water very poor.

FIG. 3.5 Detail from *The Thames at Horseferry*, c.1706–10, after Jan Griffier the Elder

Source: Museum of London

If the cause of the disaster is a little clearer the apparent administrative failures, or at least omissions, associated with its aftermath are more difficult to unravel. Was the failure to provide the dead with an identity in the parish of St Margaret Westminster an indication that the parochial officials were unable to cope effectively with such a large scale traumatic event, were they overwhelmed by the scale of the tragedy? This is perhaps unlikely given their relatively recent experience of the plague epidemic of 1665. Although the churchwardens' accounts indicate that there was a limited series of coroner's inquests no further evidence of inquiry can be found. The location of the disaster and the personnel involved would have put the event beyond the jurisdiction of the High Court of Admiralty, which had established procedures to deal with such incidents.[55] Government reports for April 1673 note damage to shipping and ports around the country caused by the harsh weather but make no mention of

[55] See above section 2.3.

this particular event.[56] Contemporary newspapers, though admittedly limited in scope during the 1670s, provide no reference to the disaster. There also appears to have been no special publication of broadsheets or ballads associated with the disaster as there were with a number of other similar or even lesser events.[57]

One possible explanation for the above absences and omissions may be that, given this was a time of war and political instability, official censorship was being strictly enforced and perhaps with good reason. Such an event could easily, and very damagingly, be seen as demonstrating military incompetence in the heart of the nation's capital and furthermore was associated with the highly unpopular system of impressments. Thus suppression of news of the disaster was likely to have been seen as an essential response. It is quite possible that steps were taken to keep the aftermath of the disaster 'quiet'; hence the rapid mass interment of unidentified victims in St Margaret's churchyard. Rather than being overwhelmed by the scale of the tragedy it is perhaps more likely that the parochial officers were subjected to particular external pressures which encouraged them to deal expeditiously with the recovered bodies while those in more distant parishes were unaware of such strictures and hence made normal efforts to identify and record the victims.

Away from large-scale disasters there were also numerous small scale domestic tragedies that would have been just as emotionally overwhelming for those involved; children were often reported as the victims of drowning.[58] The everyday processes of washing clothes and cooking food could provide the circumstances for accidental drowning. To give just one example among many, the burial register of St Giles without Cripplegate recorded that in 1679 'Henry Browne, son of John Browne, labourer, accidentally drowned in a tub of soap suds.'[59] At other times more adventurous children might find themselves in danger of drowning while away from the home, at moments such as these friends and playmates could be tempted to reach beyond their own capabilities while attempting a rescue. It is entirely possible that the deaths of two boys in 1716 in a pond on the outskirts of

[56] For example, on 4 April Phineas Pett at the navy's Woolwich Dockyard informed the Navy Commissioners that extremely bad weather 'these last few days [had been] a great hindrance to all our works', while on the 9 April Captain Amos Beare informed the Navy Commissioners that he had been forced to delay sailing from Woolwich due to 'a great fog'; *CSPD 1673*, p.118, 131.

[57] For example see, *Sad and deplorable news from Oxfordsheir & Barksheir being a lamentable and true relation of the drowning of about sixty persons …* (1674); *On the memory of Mr. Caleb Skinner, and Mr. Hezekiah Middleton; merchants. Who were drowned at Black-wall …* (1690).

[58] The *BofM* report fifty drownings explicitly as children and eight as infants.

[59] GL, Ms.6419/99 (26 April 1679). *BofM* 22 April 1679. The *Bills* record the deaths of 178 individuals who drowned in tubs or pails of water; these are likely to represent the drowning of very young children (although reference to a 'tub' could infer an adult brewing-related death). Such domestic 'bucket drowning' events remain an issue in parts of the world today. The inherent instability in the physiology of toddlers is cited as a contributing factor; a toddler's high centre-of-gravity making them more likely to fall into a bucket or pail, and then less likely to be able to right themselves once in an inverted position. Rajagopal, S., 'Drowning in children', *BMJ.com Rapid Responses* (2002), <http://bmj.com/cgi/eletters/324/7345/1070>. Also see Bradwell, *Helps for suddain accidents*, pp.103-105, for a method of reviving a child near-drowned in a 'tub of soap suds'.

Clerkenwell reflect just such an event; the burial register of St Botolph Aldersgate records that in the summer of 1716, 'Jude Meres and James Carter drowned, aged 13 [and] aged 10 years'.[60] As expected the River Thames also claimed the lives of children, such as 'Roger Wright a child from Wapping, accidentally drowned in the River of Thames' and buried in the parish of St John Wapping in 1719.[61]

Some apparently innocuous activities could lead to drowning. In the early summer of 1731 'Samuel Browning, apprentice to an apothecary in Spittlefields drowned by washing in the River Lee on the 22nd inst., was buried [at St John Hackney] on the 25 day of May by Coroner's Warrant.'[62] Later in the same year *The Gentleman's Magazine* reported 'Mr Stone, a young man about 17, heir to £400 per. ann. who was bathing himself in the Thames, was drowned near Standgate [in Lambeth]'.[63] And in 1738 washing or swimming in open water yet again resulted in death when, despite the efforts of others to save him, 'Silvanus Evans, drowned by bathing' in the parish of St John Hackney.[64]

Another routine activity, fetching water, could also have fatal consequences. In 1659 the register for St Katherine by the Tower records the burial of 'Thomas Clark, drowned in a brewer's well'.[65] In a similar possibly occupationally related death 'William Seamonds, clothworker, … was drowned in [a] draw well' and was buried in the churchyard of St Michael Bassishaw in March 1662.[66] Of course it may be that drunkenness was associated with these deaths. In total the *Bills of Mortality* reported the deaths of forty-one individuals who had drowned in wells, a high proportion of whom may have been children. Even if a person decided to take their horses to water for a drink rather than fetching it themselves they could run into trouble. Again *The Gentleman's Magazine* was keen to report in May 1731 that 'a coachman watering his horses in the Thames near Richmond, venturing too far, was drowned.'[67]

There were a number of watercourses in the London area other than the Thames and they all contributed to the toll of drowned Londoners (see Fig. 3.6). In Hackney in the winter of 1663 'Jereme French, the beadle, was drowned in the downes brook' a relatively minor

[60] GL, Ms.3854/3 (5 August 1716). These deaths probably relate to the *BofM* 31 July 1716 which records the death of '2 drowned in a pond in St Giles Cripplegate', the adjoining parish, an argument supported by the *Weekly Packet* 4 August 1716 which reported 'several boys have lately been … drowned in a pond near Woods Close, in which there's a deep hole, where slipping in they were immers'd past recovery in a few moments'. Woods Close was actually located in the parish of St John Clerkenwell.

[61] LMA, P93/JN2/24 (19 March 1719), *BofM* 17 March 1719.

[62] GL, Ms. 480/1, *BofM* 25 May 1731.

[63] *Gent's Mag*, 7 August 1731, possibly *BofM* 17 August 1731 (St Mary Newington).

[64] GL, Ms. 480/2 (18 July 1738); *Read's Weekly*, 22 July 1738.

[65] HS76, p.170 (28 March 1659).

[66] HS73, p.116 (7 March 1662), *BofM* 4 March 1662.

[67] *Gent's Mag*, 24 May 1731. Richmond was, of course, beyond the limits of the Bills of Mortality.

stream.[68] Another waterway was cited in July 1684 when 'Charles Edwards [and] John Weely … drowned in Hackney river.'[69] Even the well-embanked artificial waterway built under the direction of Sir Hugh Myddleton could claim lives. In March 1695 the burial register of St Giles Cripplegate recorded another double drowning, in this case 'Ann Markham [and] Elizabeth Mathews, spinster[s], accidentally drowned in the New River.'[70] Just as these watercourses fed into larger rivers, including the Thames, they were themselves supplied by innumerable lesser ditches and drainage channels, especially in the lower lying areas away from the city centre. A fall into such a water filled ditch by a person made incapable by reason of extreme youth, old age, or perhaps alcohol could easily result in death.[71] The burial register of St Giles Cripplegate records the interment on 5 May 1686 of 'Eleanor Polliter, widow, drowned in a ditch'.[72] To the south of the River Thames in the parish of St George the Martyr a similar incident occurred in 1701, 'Mary, wife of Henry Minter [in Burts Garden in the Mint, a smith,] drowned accidentally in a ditch of water'.[73] In the winter of 1718, in another low-lying part of the metropolis this time to the east of the city, 'Anne, daughter of John Goodby in New Gravel Lane [Shadwell], barber, accidentally drowned [in a ditch]'.[74]

Various bodies of standing water such as millponds, fishponds and reservoirs were located within the environs of London (see Fig. 3.6). Similarly many horse ponds were maintained to provide water for the large number of horses and other animals required by the inhabitants. Such ponds were frequently implicated in drowning events, with the *Bills of Mortality* reporting at least 134 associated deaths. To give just one example, in 1684 'John Cartwright, linnen draper, drowned in a pond in Shoreditch parish', he was buried at St Giles Cripplegate.[75] Ponds and flooded quarry pits, of which there were many following clay or gravel extraction, were seen through the eyes of children as places of play, yet they held extreme dangers. The register of St John Hackney records the burial on 24 June 1664 of 'Thomas Francis, a child, [who] was drownded in a gravel pit near Stamford Hill.'[76] In a similar incident, this time south of the Thames in the parish of St George the Martyr, 'John Elliott, a parish child, drowned accidentally in a gravel pit or pond' during April 1686.[77] Children and adults could also drown in smaller pits filled with water. The *Bills*, between

[68] GL, Ms.480/1 (11 December 1663).
[69] GL, Ms.480/1 (1 July 1684), *BofM* 1 July 1684.
[70] GL, Ms.6419/11 (26 March 1695), *BofM* 26 March 1695, however this reports only one drowning from the parish.
[71] See below, section 3.10 for a discussion of those reported as having 'suffocated' or 'stiffled' in ditches.
[72] GL, Ms.6419/10, BofM 4 May 1686.
[73] LMA, P92/GEO/142 (3 May 1701), P92/GEO/143 (4 May 1701).
[74] LMA, P93/PAU3/34 (15 December 1718), *BofM* 9 December 1718.
[75] GL, Ms.6419/10 (28 April 1684), *BofM* 22 April 1684.
[76] GL, MS.480/1, *BofM* 21 June 1664.
[77] LMA, P92/GEO/142 (22 April 1686), *BofM* 20 April 1686.

1659 and 1732, report the deaths of eight individuals who died in such circumstances; two in saw-pits, three in lime-pits and three, all children, in tan-pits.[78]

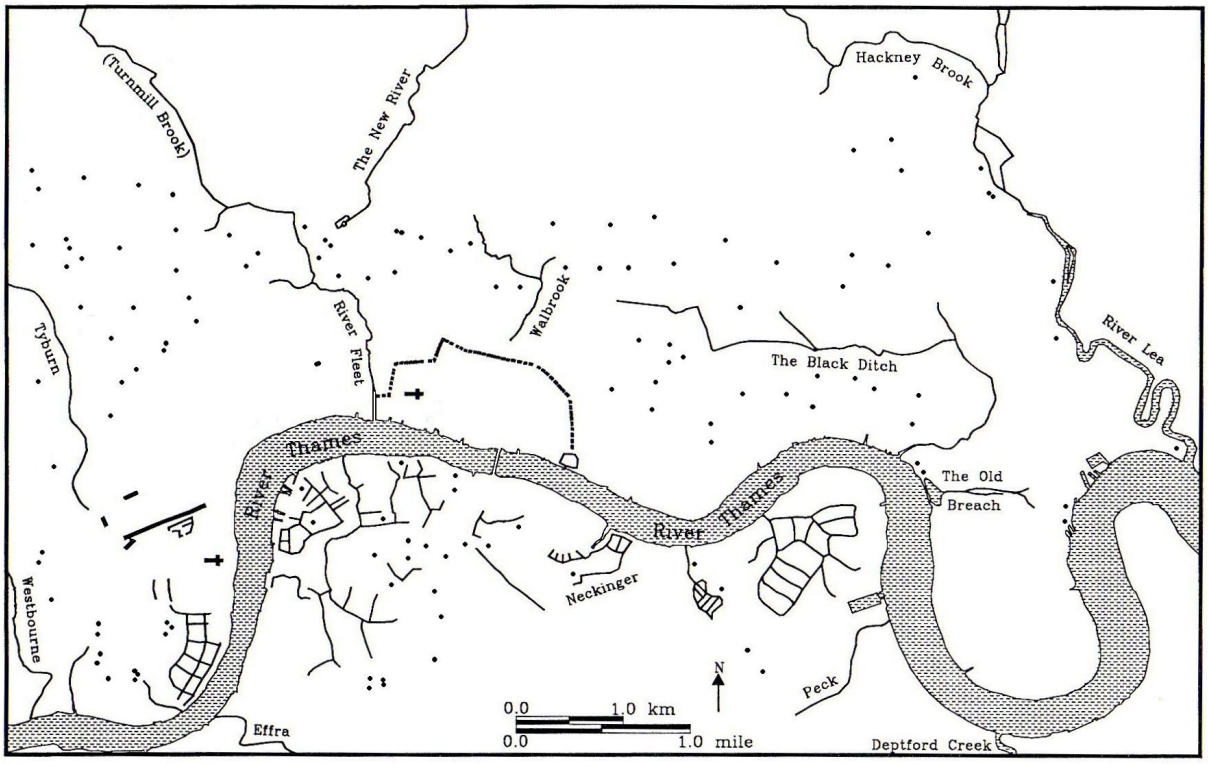

FIG. 3.6 Water-courses, ponds and drainage systems in the metropolitan London area during the early eighteenth century (adapted from Spence, *London in the 1690s*, p.26)

Source: Dickinson, *Water Supply of Greater London* (1954); Gascoyne, *Survey of the Parish of St Dunstan Stepney* (1703); Ogilby & Morgan, *New and Accurate Map of the City of London* (1676); Rocque, *Plan of the Cities of London and Westminster* (1747); Strype, *Survey of the Cities of London and Westminster* (1720).

But even in the more built-up neighbourhoods of the metropolis, and well away from the Thames, there were yet further opportunities for individuals, both young and old, to succumb to a death by drowning. Four fatalities from the parish of St Giles Cripplegate demonstrate the range of urban dangers that existed: in May 1687 'John Blackwell servant to Richard Dent, dyer, accidentally drowned by falling into a cistern of water.'[79] Another servant came to grief in 1705 when 'Moses Stevenson, servant to Mr [Ralph] Thomson, soapboiler, [was] killed by a fall into a cistern of soap lees.'[80] Women were, of course, equally at risk: 'Elizabeth Palmer, spinster, accidentally drowned in a tun of beer wort' in the summer of

[78] *BofM* 25 May 1680, 24 May 1714 (saw-pits); 6 September 1659, 3 April 1711, 2 July 1728 (lime-pits); 4 May 1731, 28 September 1731, 13 June 1732 (tan-pits, all south of the Thames).

[79] GL, Ms.6419/10 (21 May 1687), *BofM* 17 May 1687.

[80] GL, Ms.6419/13 (10 November 1705), *BofM* 6 November 1705; CLRO Ass. Box. 32/15 (The 1692 poll tax for the ward of Cripplegate Without lists Ralph Thompson as a relatively wealthy soapmaker at an address in Red Cross Street near Fox and Crown Court, paying £16 rent per annum).

1714.[81] While during December 1672, and in a decidedly more horrific manner, 'Katherine Gurnett, widow, drowned in a house of office'.[82]

Seasonality

When the reporting of drowning events that occurred between 1654 and 1735 is considered across the course of the calendar year a clear pattern emerges of high numbers of fatalities occurring during the summer months with much lower numbers during the winter (see Fig. 3.7). It is clear that a significant factor influencing this seasonal distribution was the weather. During hot summer weather Londoners were more likely to be drawn toward areas of open water and to engage in swimming or bathing activities, thus putting themselves at risk. Other times of the year were not however without risk. During spring and autumn heavy rains tended to create flash-flood conditions in most of the lesser watercourses within the London area, thus increasing the possibility that the unwary traveller might be swept away.[83] And as noted in foggy weather and storms the Thames could easily become a dangerous environment for even the largest of vessels.

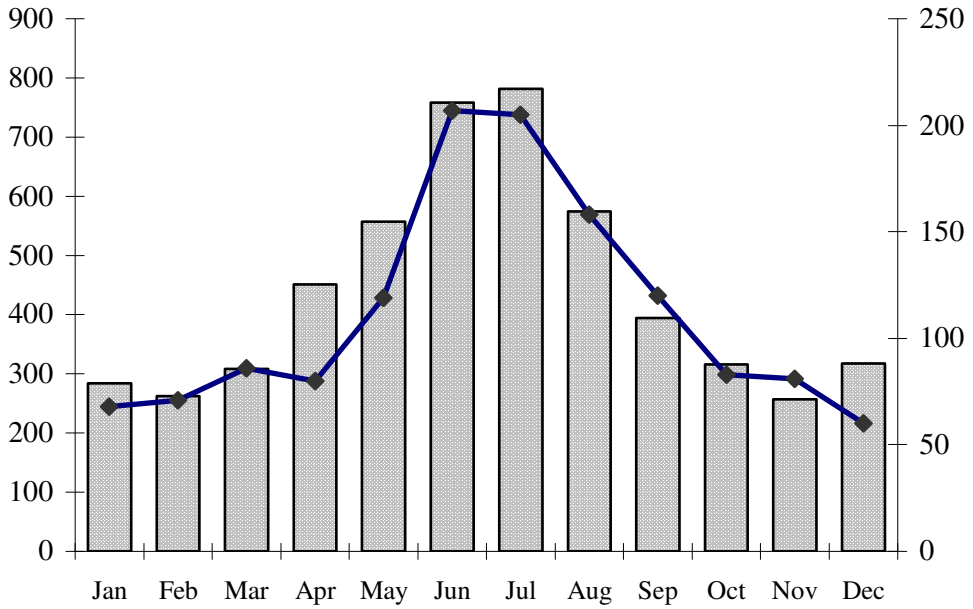

FIG. 3.7 Seasonality of drowning in metropolitan London 1654–1735
(Columns show total fatalities per month, left-hand axis; line shows drowning per month reported as 'in the River of Thames' from 1695 onwards, right-hand axis)

Source: Weekly *Bills of Mortality*

[81] GL, Ms.6419/14 (20 August 1714), *BofM* 17 August 1714.
[82] GL, Ms.6419/9 (20 December 1672), *BofM* 17 December 1672.
[83] Spence, *London in the 1690s*, p.25.

The later seventeenth century was well known as a period of severe winters, which on several occasions resulted in the River Thames becoming extensively frozen.[84] Such severe weather might be thought to have limited the opportunities for drowning, after all at such times the Thames watermen complained bitterly of their inability to work, but as the ice began to thaw particular dangers awaited those who were tempted to venture out onto the frozen surface of river or pond. The burial register of St Stephen Coleman Street records one such a death in February 1721 when, 'Aron Peter drowned in a pond of water by the sudden breaking of the [ice] where on he was sliding.' The *Bills of Mortality* and contemporary newspapers suggest however that he did not die alone; the last *Bill* for January 1721 records '2 drowned in a pond by breaking of the ice', in the adjacent semi-rural parish of St Leonard Shoreditch, while the newspapers report 'two boys, whose parents lives in Swan Alley, Coleman Street … were drowned in the pond behind the Haberdashers Alms-House, the ice breaking under them as they were sliding on it'.[85]

Taking a more general view the month with the greatest frequency of drowning events was July, during which 782 deaths occurred. The summer months were a particularly busy period within the port of London and the high numbers of deaths at that time may well reflect the much larger number of people, including seafarers, who were active on the River Thames at that time. The month with the lowest recorded number of drownings was November with 257 deaths. Again this was a low point in the cycle of port activity and hence few associated with river activities would have been exposed to danger, added to which it was a time of year when only the foolish would attempt open water bathing. Across the study period as a whole just under six drowning fatalities occurred per month.[86]

When the frequency of drowning events explicitly reported for the River Thames, between 1695–1735, is considered a very similar distribution is revealed (see Fig 3.7). The only month showing a proportionally greater number of total drowning fatalities is April, which is partly an effect of the Westminster ferry disaster of 1673, although an increase in suicidal activity during the spring and early summer may also account for some of the additional drownings reported at non-Thames sites. Nonetheless the general correlation between the two methods of reporting generally confirms that the River Thames recorded the greater number of drowning events.

[84] The River Thames froze during the following winters; 1654–55, 1683–84, 1708–09, 1715–16, and 1739–40; Weinreb, B., and Hibbert, C., *The London encyclopaedia*, (London, 1983), pp.305–306.

[85] GL, Ms.4455 (6 February 1721); *BofM* 31 January 1721; *Applebee's Original Weekly Journal* 11 February 1721; *Weekly Journal or Saturday's Post* 11 February 1721.

[86] A figure averaged from 907 months of *BofM* data.

Geographical patterns

A simple approach to the geography of drowning, though apparently enticing, would underestimate the diversity of circumstances associated with this particular form of sudden death. While the vast majority of drowning deaths clearly occurred in either watercourses or areas of open standing water some took place well away from such features. Complicating geographical analysis watercourses in early modern London often formed administrative boundaries. While this may have resulted in only minor 'misattributions' between one parish and another inside the area of the Bills — such as Turnmill Brook which ran between St James Clerkenwell and St Pancras — at the external limits of the Bills it may have proved more significant. The eastern boundary of the Bills was, for example, formed by the River Lea which ran between St John Hackney (which was within the Bills) and the County of Essex (which was not), thus reports concerning those bodies retrieved on the eastern bank of the river are likely to be absent from the published *Bills*. This factor is likely to have resulted in an underestimation of the overall level of drowning in that particular watercourse.

Whatever the fine detail of the administrative boundaries it is clear that the majority of drownings took place in the River Thames; a situation that is strongly confirmed when the number reported as having drowned 'in the River of Thames' is combined with those whose deaths were recorded in riverside parishes and compared to the total for all drownings (Table 3.4). Nonetheless, a number of other watercourses were often mentioned as sites of drowning, including the River Lea, the New River and the Hackney River (or Brook).

When looking at the overall distribution of drowning across the metropolis it is clear that the single area to demonstrate the highest rate of drowning was the eastern riverside parishes; both overall at 34.9 per cent of all drownings and more especially in relation to those deaths linked to the River Thames after 1695, 54.2 per cent (or 96.1 per cent of all drownings in that area between 1654 and 1735). Indeed when general population levels are considered it is evident that the eastern riverside parishes provide almost three times the level of drowning that might be expected (34.9 per cent as opposed to a population share of 13.0 per cent). Other areas, aside from that of Surrey within the Bills and to a marginal extent Westminster, exhibited levels of drowning that were far below their share of the London population (see Table 3.4).

The significance of the Thames stands out again in the second highest level of drowning. This was associated with Surrey within the Bills which reported 29.5 per cent of all drownings, a massive 90.8 per cent of which were linked to the river. In such riverside areas drowning was found to dominate other forms of accidental or sudden death; for example in the burial registers of St Paul Shadwell between 1707 and 1750 some 127 entries can be associated with accidental death, ninety-nine (78.0 per cent) of these recorded death by

drowning.[87] Areas that demonstrated the lowest level of drowning were the 'land-locked' northern and eastern parishes (2.4 and 2.8 per cent respectively). Nevertheless even those areas reported some who drowned 'in the River of Thames', the northern parishes recording ten such deaths, the eastern parishes seventeen. But confirming that drowning took place in situations not directly associated with the Thames those two areas reported a further 246 deaths (or 4.7 per cent of all metropolitan drownings).

Table 3.4
Geographical distribution of drowning in metropolitan London, 1654–1735

	All drowning		Estimated Population	Reported as 'Thames'		'Thames' and associated parishes	
Metropolitan areas	Number	%	%	Number	%[1]	Number	%[2]
City within the Walls	496	9.5	16.6	190	66.7	378	76.2
City without the Walls	264	5.0	13.2	58	40.9	163	61.7
Westminster	269	5.1	4.4	58	45.3	150	55.8
West End	408	7.8	18.8	93	38.6	300	73.5
Northern parishes	125	2.4	7.2	10	13.5	10	8.0
Eastern parishes	148	2.8	8.7	17	35.4	17	11.5
Eastern riverside parishes	1,830	34.9	13.0	448	54.2	1,759	96.1
Middlesex within the Bills	154	3.0	3.4	3	0.0	3	2.0
Surrey within the Bills	1,549	29.5	14.7	438	46.8	1,407	90.8
Total	5,243[3]	100.0	100.0	1,313[3]	[32.0]	4,187	[80.0]

Notes: 1. Drowning reported as located 'in the River of Thames' as a percentage of all drowning for each area between August 1695 and December 1735. 2. Drowning 'in the River of Thames' and riverside parishes as a percentage of all drowning (1654–1735) for each area. 3. Seventeen drowning reports failed to provide burial location.
Source: Weekly *Bills of Mortality*

Given that the greatest number of drowning fatalities were associated with the Thames it is possible to refine the distribution of such deaths with reference to those that were reported in the *Bills of Mortality* using the phrase 'drowned in the River of Thames'. Between 1695–1735 1,313 fatalities were recorded in this way, of which 504 (38.4 per cent) were buried in parishes up-stream of London Bridge. The larger proportion of such deaths however, occurred in that part of the river down-stream from London Bridge, 809 (61.6 per cent). This was the element of the river known as the Port or Pool of London, one of the busiest port areas in Europe and the Atlantic world; the increased number of drownings in that area no doubt a reflection of both a greater population at risk and the sometimes chaotic nature of the Pool as a workspace.

Further analysis of the same reports demonstrate a majority of those down-stream fatalities were landed, and buried, on the north bank of the river. Those eleven parishes from

[87] LMA, P93/PAU3/34 & 35.

St Magnus Martyr at the north end of London Bridge to St Anne Limehouse in the east, dealt with 549 such deaths (67.9 per cent), whereas the three parishes on the southern shore buried only 260 (32.1 per cent); this probably was a reflection of the more built-up character and maritime focus of the northern side of the Thames.

Section 3.3 Falls

The urban environment directly contributed to the second most numerous category of accidental death, that of falling. The built fabric of London provided ample opportunity for falls to occur; falls from wharves and warehouses, ladders and scaffolds, or walls and roofs. Notwithstanding the frequency of such events not all falls were fatal, with the degree of resultant injury dependent upon a combination of factors; the age and agility of the victim, the height from which the fall originated, and whether it was a 'clean' fall, from the yard-arm of a ship into still water for example, or a 'dirty' fall such as tumbling down uneven stairs. The *Bills* give some indication of the circumstances of such events, though little guide to the age or physical stature of the victims. The height of falls is rarely inferred, but this is not necessarily significant as a number of the recorded fatalities took place at street level. The duration of the fall mattered more if the fall was complex, or 'dirty'. Falling through elaborate timber scaffolding, for example, may have inflicted multiple injuries that, though not resulting in instantaneous death, were beyond the curative capabilities of early modern medicine. Even a relatively straightforward domestic fall could deliver serious injuries, as was the case in February 1719 when Mary Martin, a poor woman of Wapping, was 'mortally bruised on her head and body by an accidental fall down stairs.'[88]

While simple broken limbs could be repaired through the interventions of a surgeon or 'bonesetter' — or in certain cases by being left to heal successfully in a deformed manner without such intervention — little could be done, beyond binding and bleeding, for more extensive internal injuries.[89] Though often not immediately fatal, a fall which resulted in a compound fracture, with the associated risks of shock, blood loss, infection and the possibility of radical medical intervention in the form of amputation, was a life threatening event. Whether such delayed post-event deaths were recorded as 'casualties' is unclear, but the dramatic nature of such incidents would suggest that unless the time period between the fall and death were an extended one the cause of death was likely to have been given as falling.[90]

[88] LMA, P93/JN2/24; *BofM*, 24 February 1719.
[89] Bradwell, *Helps for suddain accidents*, pp.79–88; Hawes, *The poore-mans plaster-box*, pp.8–11.
[90] This problem is mirrored by criticism of contemporary accident statistics made by the British Medical Association (BMA) to the House of Commons Transport Select Committee in 1983. The

The circumstances of fatal falls

Fatal falls claimed the lives of 1,469 Londoners between 1654 and 1735 (Table 4.2). Where additional information was reported falls could be further categorised. The major circumstance associated with such deaths was falling down stairs, an event that accounted for 216 deaths. Falls from windows and houses, presumably mainly from roofs, caused the deaths of 209 and 201 individuals respectively. The more explicitly occupational hazard of working on ladders and scaffolds accounted for a further 188 deaths. The only other occupational field in which falling presented a significant hazard was the maritime sector where 171 sailors fell to their deaths from masts and rigging or into holds.[91] Finally a number of falls occurred in on London's streets where holes, gullies, cellars and vaults provided innumerable opportunities for lethal tumbles. In addition to those deaths noted explicitly as caused by falls two further causes of death can be interpreted as derived from such events; bruising and broken limbs.

Accidental deaths in the domestic environment most often resulted from falls. Often such deaths originated in simple stumbles, however shoddy construction, poor maintenance and inadequate lighting undoubtedly contributed to the frequency of such events. The domestic focus is perhaps confirmed by the noticeable frequency with which women suffered stair-related accidents; such as the 'maidservant of John Harris, linendraper, who died by a fall down a pair of stairs' in late November 1663 or 'Mary, daughter of Charles Barton, tailor, killed by a fall down a pair of stairs' in the parish of St Giles Cripplegate in March 1695.[92] It is possible that alcohol was a contributory factor in a proportion of such accidents, perhaps especially so in the case of 'John Browne, a vintner who was killed by an accidental fall down a pair of stairs at the Queens Head Tavern in Paternoster Row [and] was buried in St Faith's church yard [on] 25 May 1672'.[93] A more explicitly alcohol-related death occurred the following year in April 1673. The burial register for the parish of St Benet Fink records, 'Thomas Sharrow, Clothworker, late churchwarden of this parish. Killed by an accidental fall into a vault, on London Wall in Amen Corner by Paternoster Row & was supposed had lain dead eleven days and nights in it before anyone could tell where he was & after being viewed

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BMA pointed out that the present rules allowed widespread under-reporting of accidents as a thirty-day limit existed on the requirement to link a medical cause of death with any originating injury. See Adams, J., *Risk*, (London, 1995), p.74.

[91] Land transport was also implicated in a number of falls, particularly from vehicles and horses however these are enumerated and discussed separately; see below sections 3.6 & 3.9.

[92] HS7, p.252; *BofM* 24 November 1663, 19 March 1695; GL Ms.6419/11.

[93] In a sample of Shropshire coroners' inquests from 1780–1809 'about 10 per cent of all [accidental] deaths were ascribed to intoxification', Hair, 'Accidental death and suicide in Shropshire', p.71; GL Ms.8882, *BofM* 21 May 1672.

by the Coroner & Jury; was buried' the parish clerk felt unable to let the event pass without adding the admonition 'let all that read this take heed of drink'.[94]

Other elements of house architecture presented opportunities for falls, especially windows (209 deaths), balconies (six) and galleries (four). Women and children were often noted as having been killed by falling from windows. In August 1708 the City coroner found that Elizabeth Kenning had been 'killed by an accidental fall from a garret window in Fenix [Phoenix] Court', while 'William Pen, a child [was] killed by a fall out of a window' in the parish of St Katherine Cree in May 1673.[95] In what must have been a particularly harrowing incident for the residents of St James Garlickhithe during February 1688 'Alice, wife of one Mitchel, [was] killed accidentally by a fall out of a window being great with child'.[96] One did not have to be awake, however, to experience defenestration, in August 1676 an individual fell out of a window 'being asleep' in the parish of St Andrew by the Wardrobe. A further sleepwalking accident was reported in Westminster in July 1704.[97]

The construction and maintenance of London's urban fabric required individuals to climb ladders, work on scaffolds, or clamber across roofs and gutters. Fatal falls from such places occurred 389 times. Most frequent were falls from houses, while it would appear that the majority of those killed were undertaking building work or roof maintenance a number probably fell from their perches while simply viewing the city and its events. Among such deaths was an individual 'killed accidentally by a fall from the leads of a house in St Giles Cripplegate' in 1691, one that died 'by a fall from the rafters of an unfinished house in St Giles in the Fields' in 1702, and another who died after an 'accidental fall from the new church at St Olave Southwark' in 1728.[98]

Falling from ladders resulted in the deaths of eighty individuals, most of whom were probably bricklayers, plasterers, roofers or building labourers. For example 'James Foster, plaisterer, [was] accidentally killed by a fall from a ladder' in May 1684; coincidentally a similar incident occurred almost exactly a year later during May 1685 in the same parish of St Giles Cripplegate when 'John Cooper, plaisterer, [was] killed by the fall of a ladder'.[99]

Falling from scaffolding was an equally frequent occurrence accounting for 108 deaths. Among them 'Mr Daniell Nicholls, [a] Free[man] of the Brick Layers [Company], was accidentally killed by a fall from a scaffold' in the parish of St Vedast Foster Lane in August 1683, while in June 1738 'Edward Hill, plaisterer, [was] killed by a fall from a scaffold' at St

[94] GL Ms.4098; *BofM* 22 April 1673.
[95] GL Mss.8872/3, 7889/1; *BofM* 29 April 1673.
[96] GL Ms.9140; *BofM* 21 February 1688.
[97] *BofM* 22 August 1676, 11 July 1704.
[98] *BofM* 21 July 1691, 13 January 1702, 27 August 1728.
[99] GL Ms.6419/10; *BofM* 13 May 1684, 12 May 1685.

Giles Cripplegate.[100] Youth and inexperience could contribute to the danger of working at height as one master painter discovered in 1731 when his 'apprentice fell off a board three stories high in Cullum Street, and died on the spot.'[101]

Other work related activities were associated with accidental falls. Unguarded sawpits presented a particular hazard in both construction sites and shipyards. The *Bills* note three individuals who died falling into sawpits (in addition to those noted earlier that drowned in water-filled sawpits). Furthermore the burial register for the parish of St Brides records in June 1687 that 'William Haynes [was] killed by a fall into a sawpit when at work'.[102] Fatal falls from wharves, warehouses, haylofts and cranes occurred on a number of occasions. The bustling environment of wharves and warehouses was noted as the site of death for seven and eight individuals, respectively. The *Bills* record sixteen fatal falls from haylofts, though fail to note the death reported in the May 1731 by *The Gentleman's Magazine* of 'A servant at a livery stable in Finsbury, [who] fell from a hayloft, and died immediately'.

In the less built-up areas of London people died by falling from trees, such as John Tanner who 'died by a fall from a tree at Rotherhithe on the 5th July' [1711].[103] The *Bills* note a further twelve fatal falls from trees, including two specifically from pear trees in late summer.[104] A similar activity to tree climbing, though inherently more hazardous, was the ascending of masts and rigging by mariners; falls from which accounted for twenty-seven lives. One sailor was more precisely reported as having been 'killed by a fall from the shroud of a ship' on the Thames in 1704.[105] Falling into the holds of ships, hoys and lighters killed a further thirty-seven mariners. Finally the *Bills* report another 106 fatal falls that took place aboard ships and boats but reported no further detail.

Back on dry-land London's highly travelled yet poorly maintained streets presented innumerable opportunities for accidental falls, as one newspaper took time to report in 1733:

> Some days ago Mr Weedon, an attorney, passing through Pye-Corner near West-Smithfield, had the misfortune to break some of the small bones of his leg by a fall which was occasion'd by the badness of the pavement.[106]

Twelve individuals were said to have died following falls in the street, among them William Moore a pinmaker and Robert Stevens a confectioner both from St Giles Cripplegate.[107] Falls into pits and ditches claimed six lives though such incidents tended to occur in the less built-up areas of the metropolis such as St Margaret Westminster where one 'Richer Hudson [was]

[100] HS30, p.225; GL Ms.6419/17; *BofM* 7 August 1683.
[101] *Gent's Mag* [6] August 1731, p.356; *BofM* 3 August 1731 ('Killed by a fall from a scaffold at St Mary at Hill').
[102] *BofM* 9 October 1683, 17 November 1691, 16 November 1731; GL Ms.6540/2.
[103] GL, Ms.5152; *BofM* 3 July 1711.
[104] *BofM* 5 August 1684, 30 July 1728.
[105] *BofM* 25 January 1704 (St Dunstan Stepney).
[106] *London Evening Post* 22 December 1733.
[107] GL, Ms.6419/10; *BofM* 9 October 1683, 13 November 1683.

killed by a fall in a ditch' during February 1668.[108] On another occasion in what were clearly unusual circumstances the Middlesex coroner sitting in the parish of St John Hackney recorded that 'Thomas Stancome of Tottenham, labourer, [was] found dead in Kingsland, his head jammed in between 2 stumps of elder by a fall supposed, [and] was buried 27 July 1735'.[109] A number of more urban hazards were associated with fatal falls including signposts (two), rails or fences (two), vaults (four) and cellars (twenty-one), the latter two frequently accessed from streets or yards. This was clearly so in the case of ex-churchwarden Thomas Sharrow mentioned above but also occurred in August 1677 when an individual tumbled to their death through the open doors of a cellar in Lombard Street.[110]

It is likely that a number of falls took place during the hours of darkness when poor lighting, both indoors and out, contributed to the hazardous nature of the urban environment. As De Laune stated, in 1690, the recent provision of street lighting was beneficial 'for hereby are prevented not only fires, robberies, house breakings etc., but also several accidents and casualties by falls etc., which a man is liable to by walking in the dark'.[111] In the absence of good lighting local officials occasionally took action to safeguard the public from specific hazards. For example, in October 1697 the churchwardens of St Brides 'paid a watchman [two shillings] for night and morning the ground falling in at Mr Cookman's door' in Peterborough Court, a further payment was made the following night for 'watching the hole' before it was eventually filled in with 'rubbish'.[112] Yet, churchwardens and watchmen could do little to aid travellers when visibility was reduced by one of the 'great stinking fogs' so notable of the period, as the *Daily Courant* reported on 8 January 1730:

> During the time of the prodigious fogs, a man mistaking his way, fell into the fleet ditch, by which accident he beat out one of his eyes, and was very much bruised. Another man fell into the Common-shore [sewer] in King Street, Westminster; and a great many more accidents happened on the like occasion, both in the streets of London and Westminster; as also on the River Thames.

In addition to those deaths noted as having been caused explicitly by falls two further reported causes of death are likely to have originated in such events; bruising and broken limbs. While a number of 'bruising' deaths were a result of crushing injuries (such deaths will be discussed in section 3.13) twelve were reported to have resulted from falls. These ranged from 'John Swallow from Gun Alley in Wapping' who was 'bruised by a fall down stair[s]' to 'Josiah Moore, a man killed by an accidental fall in the street' in St Mary

[108] HS89, p.14; *BofM* 11 February 1668.
[109] GL, Ms.480/2.
[110] *BofM* 28 August 1677, (Allhallows Lombard Street).
[111] De Laune, T., *Angliae metropolis or the present state of London*, (London, 1690), p.365. Also see Hanawalt, *Growing up in medieval London*, p.77, for a brief discussion of sudden deaths in medieval London occurring mainly during the hours of darkness.
[112] GL, Ms.6552/2.

Whitechapel and which the *Bills* report as having been 'bruised to death by a fall'.[113] Among cases where trauma injuries alone were stated as the 'cause' of death it is probable that most broken legs, and many other fractures and breaks resulted from falls. The *Bills* record deaths caused by broken legs (ninety-one), broken or fractured skulls (ten), broken necks (two) and broken arms (two). Such injuries were occasionally combined with more descriptive detail that noted the agency of death as falling; for example in October 1717 the *Bills* report the death of an individual (possibly 'Nathaniel Sampson, a man from the Free School') who 'broke his leg by an accidental fall in the street' in the parish of St Mary Whitechapel.[114]

Seasonality

As stated above the timing of falls was perhaps more dependant upon the hour of the day, levels of light and weather conditions than on time of year, nonetheless, certain observations on seasonality can be made (Fig. 3.8). Between 1654–1735 there was an average occurrence of 1.62 fatal falls per month. The month during which least falls occurred was January with a total of ninety-three deaths. The winter months of January, February and March all had totals well below the overall mean. The month in which most fatal falls took place was October (147) with May supplying a figure that was only marginally lower (145). The summer months, bridging the period between May and October, with the exception of July, also demonstrated fatal fall totals well above the mean.

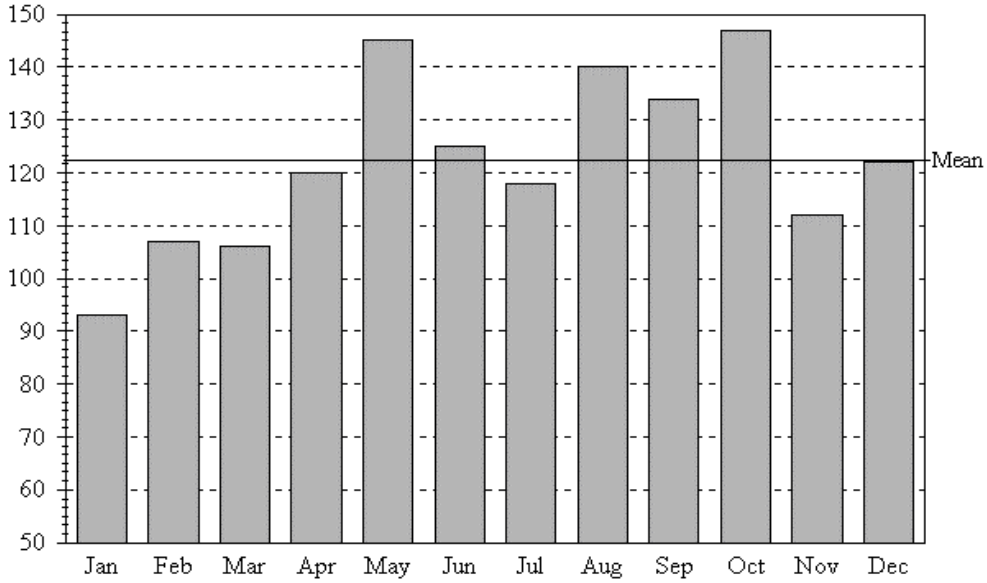

FIG. 3.8 Seasonality of fatal falls in metropolitan London, 1654–1735 (showing total fatalities per month)

Source: Weekly *Bills of Mortality*

[113] LMA, P93/JN2/23, P93/MRY1/61; *BofM* 18 July 1704, 20 April 1731.
[114] *BofM* 22 October 1717; LMA, P93/MRY1/61.

In the case of falls associated with construction and maritime activity some further comment is possible. Early modern building practice was heavily influenced by weather conditions and available daylight; poor weather, especially frosts, and shorter daylight hours during winter months restricted most on-going construction work and discouraged the commencement of new projects. Woodward indicates that only 10–20 per cent of the annual employment of labourers and building craftsmen in the north of England during the seventeenth century occurred between late November and late February.[115] This reduction in available work appears to be mirrored by a marked reduction in construction associated fatal falls during the months of December through February, which account for 15.5 per cent of all such falls (Table 3.5). Much building work resumed in April and May with the latter month demonstrating a high incidence of falls (10.8 per cent). Among possible explanations for this peak are; the introduction of new and inexperienced workers, the erection or renewal of scaffolds — always a dangerous activity — and finally the possibility that many of the spring deaths were maintenance related. Indeed the number of falls from windows also had its annual peak during May (twenty-seven) at least some of which probably represent falls through newly opened windows that in the preceding winter months had been routinely kept shut. August and September witnessed the greatest number of construction related falls, a combined total of 22.7 per cent. A peak that may reflect both the general intensification of building activity during the late summer and the increased pressure on builders to complete their activities before the unseasonable weather and longer nights of the winter arrived.

TABLE 3.5
Seasonality of fatal falls by occupational sector in metropolitan London, 1654–1735

Month	All falls		Construction associated		Maritime associated	
	Number	%	Number	%	Number	%
January	93	6.3	20	4.1	9	5.3
February	107	7.3	24	4.9	16	9.4
March	106	7.2	36	7.4	13	7.6
April	120	8.2	42	8.6	12	7.0
May	145	9.9	53	10.8	21	12.3
June	125	8.5	44	9.0	17	9.9
July	118	8.0	43	8.8	12	7.0
August	140	9.5	54	11.0	18	10.5
September	134	9.1	57	11.7	16	9.4
October	147	10.0	47	9.6	13	7.6
November	112	7.6	37	7.6	13	7.6
December	122	8.3	32	6.5	11	6.4
Total	1,469	100.0	489	100.0	171	100.0

Source: Weekly *Bills of Mortality*

[115] Woodward, D., *Men at work: Labourers and building craftsmen in the towns of northern England, 1450–1750*, (Cambridge, 1995), pp.135–138.

Falls associated with maritime activities followed a similar seasonal pattern. The lowest incidence of such falls occurred during the winter months of December and January (with a combined percentage of 11.7) no doubt as poor weather conditions restricted much activity on the Thames. Falls peaked again in May (12.3 per cent), with a secondary peak in August (10.5 per cent). Schwarz has outlined the varying seasonal demands upon the port of London with regard to shipping and employment, noting the height of activity during the summer and autumn months.[116] Given such a concentration of activity on the later parts of the year the May peak may indicate the introduction of new and inexperienced mariners to the river, but may also relate to the potentially hazardous task of preparing, through refitting and re-rigging, vessels which had over-wintered along the reaches of the Thames. The secondary peak of 10.5 per cent during the month of August doubtless stems directly from the greater number of vessels that converged upon the port during that important summer month.

Geographical patterns

The incidence of fatal falls shows some degree of variation across the principal districts of metropolitan London, Table 3.6. Areas with the lowest number of falls were those with extensive tracts of open land, most notably metropolitan Middlesex (twelve fatalities) and the eastern parishes (seventy). In both those districts the recorded proportion of falls fell below that which might have been expected given their population. The greatest frequency of falls occurred in the West End with 347 deaths, 109 of which were reported in the large parish of St Martin in the Fields. Despite a similar high rate of fatal falls in the area of the City within the walls (310) the West End displayed the greatest proportional excess of falls to population of +4.8 per cent. The comparable value for the City was +4.5 per cent, however the difference between the City and the West End shows a degree of variation over time. While 50 per cent (158) of the falls to be recorded within the City between 1654 and 1735 had occurred by the end of 1690 it was not until 1707 that 50 per cent of those falls reported in the West End (174) had taken place. That difference probably reflecting the changing intensity of building operations across the metropolis — including a possibly increased level of maintenance activity on properties occupied and displayed as objects of conspicuous consumption — and the gradual increase of population in the suburbs as opposed to the City.

Fatalities associated with construction activity comprised a third of all metropolitan falls, yet across the extents of the metropolis that proportion varied from a low of 15.7 per cent to a high of 46.6 per cent, see Table 3.6. Though the proportion of such deaths in the City and the West End were both above the London-wide average the greatest concentration of construction related falls was in the northern parishes. That area was notable for the rapid

[116] Schwarz, *Age of industrialization*, pp.103–123.

expansion in the housing stock that took place to the north of Holborn, and across the parish of St John Clerkenwell. There was also an increased concentration of building workers resident in the area (for example, the building sector made-up 10.3 per cent of all householder occupations in Clerkenwell in 1677) and so the possibility that a proportion of the deaths reported for the area related to post-event mortality, with the accident site being elsewhere, must be considered.[117]

TABLE 3.6
Geographical distribution of fatal falls in metropolitan London, 1654–1735

Metropolitan areas	Fatal falls		Estimated Population	Construction associated		Maritime associated	
	Number	%	%	Number	%[1]	Number	%[1]
City within the Walls	310	21.1	16.6	120	38.7	13	4.2
City without the Walls	170	11.6	13.2	53	31.2	4	2.4
Westminster	71	4.8	4.4	22	31.0	-	-
West End	347	23.6	18.8	138	39.8	1	0.3
Northern parishes	118	8.0	7.2	55	46.6	-	-
Eastern parishes	70	4.8	8.7	21	30.0	13	18.6
Eastern riverside parishes	197	13.4	13.0	31	15.7	93	47.2
Middlesex within the Bills	12	0.8	3.4	5	41.7	2	16.7
Surrey within the Bills	174	11.9	14.7	44	25.3	45	25.9
Total	1,469	100.0	100.0	489	[33.3]	171	[11.6]

Notes: 1. Occupational related falls as a percentage of all falls reported for each area.
Source: Weekly *Bills of Mortality*

In the case of maritime-related falls there was a clear north-south and east-west divide. Areas of the metropolis north of the Thames and west of the Tower were the location of only eighteen out of 171 fatal falls. The eastern riverside parishes had the highest incidence of such falls, ninety-three, or 47.2 per cent of all falls reported in that area. Those figures reflect the great concentration of maritime activity, particularly the presence of larger sea-going vessels and ship building and fitting-out trades, in that part of London. (In the riverside parish of St Paul Shadwell, in 1650, 59.8 per cent of male inhabitants were employed in the marine sector, as sailors, lightermen, or watermen, with a further 10.7 per cent involved in shipbuilding activities).[118] A similar, if slightly less emphatic, situation pertained south of the Thames with forty-five maritime related falls reported for that area, 25.9 per cent of all falls. Of those fatalities 88.9 per cent occurred in the parishes which lay downstream of London Bridge; St Olave Southwark, St Mary Magdelen Bermondsey and St Mary at Rotherhithe.

[117] Spence, *London in the 1690s*, pp.147–148.
[118] Power, M.J., 'Shadwell: the development of a London suburban community in the seventeenth century', *London Journal*, 4 (1978), p. 36.

Section 3.4 'Found dead'

The terms 'found' and 'found dead', which appear regularly within the *Bills of Mortality*, present particular interpretative difficulties. Such terms when not joined with the word 'murdered' must, at the very least, indicate an unexpected, probably sudden and certainly unaccompanied death. As with any such term it is probable that a number of intentional homicides are to be found within this category as are some suicides, this is especially so in the case of the frequently reported recovery of bodies from the River Thames. When there were no witnesses to a death, and no outward signs of a cause of death, the moment of discovery of the body would by default become the most significant aspect of any notification. This is confirmed by the observation that of the 1,423 bodies reported as 'found' between 1654–1735 only 386 (27.1 per cent) failed to provide additional descriptive information concerning the circumstances of discovery. While a further analysis of this type of report can add only a little to a wider understanding of sudden death it does provide some insight into the final moments of some of early modern London's most vulnerable individuals.

The circumstances of those found dead

During the period of the study the *Bills* reported the discovery of 1,423 individuals 'found dead'. Among that number were a sizeable group of children and infants (120 and 201, respectively). Infant mortality in the metropolitan area between the mid-seventeenth and mid-eighteenth centuries averaged some 300 deaths per 1,000 births.[119] While those with means, or settlement, could secure an appropriate burial for their deceased offspring the poorer elements of society, especially if transitory, frequently could not; thus a proportion of those children abandoned were likely to have been left in the hope that they would receive the necessary rites at the expense of the parish. To this end a group of fifty-eight individuals were noted as 'found' in church-yards, church-porches, or by church walls and gates; of that number forty-two were infants or children. To give one example; in the winter of 1660 an unknown 'male child, found dead and sowed up in a cloth and layd neare the new church yard' in the parish of St John Clerkenwell was viewed by the coroner and then buried at the expense of the parish.[120]

Of course a proportion of infants recorded as 'found' were likely to have been the result of illegitimate pregnancies; resulting in the clandestine leaving of infants who were still-born, who died of immediate post-delivery infection or congenital illness, or the victims of infanticide. For example, the *Bills* report thirty-one cases of bodies being left in 'band-boxes'

[119] Landers, J., 'Mortality and metropolis: the case of London 1675–1825', *Population Studies*, 41.1 (1987), pp.64–66; Schwarz, *Age of industrialization*, pp.132–33; Wrigley and Schofield, *Population history*, p.160.

[120] HS17, p.336.

— of the sort milliners and seamstresses would use — (of which sixteen were explicitly noted as infants or children), and a further seventy-six left in 'coffins' (of which forty-four were infants or children). A proportion of deceased infants found in public places may have been abandoned alive in the hope that they would receive suitable care. Such a circumstance may relate to the 1704 discovery near Bishopsgate, within the City parish of St Ethelburga, of a female child 'in a handbasket'.[121] Other infants did not fare so well, the bodies of four were abandoned on 'dunghills' or in boghouses, houses of office and privies (nineteen in total). A more likely occurrence, however, was for infants and children that were 'found' to be discovered simply lying 'in the street'; forty-five were recorded as such out of a total of 269 individuals of all ages that were 'found in the street'.

Bodies were found in a wide variety of situations, some were found lying in the fields that surrounded the metropolis (fifty), others within easily accessible structures such as barns (four), haylofts and hay-cocks (seven), stables (two), brick-kilns (five), empty-houses (two), or in cellars and vaults (fourteen). For example, in late November 1732 a man named 'Thomas Turner [was] found dead in a slaughter house in the Bowling Alley' in St James Clerkenwell.[122] The area was perhaps attractive to the poor or homeless as only two months later in January 1733 the burial register for St James records that 'Simon Marshall, [was] found dead in an empty house in the Bowling Alley'.[123] But it was not only the homeless who experienced death alone; a few were noted as having been 'found dead' in their lodgings or even in their own beds (six).

Seasonality

The averaged monthly incidence of bodies being 'found dead' was less than two per month. It is unlikely that there was a particular seasonal occurrence for the discovery of infant children and the still-born; as such deaths were clearly occurring across the full extent of the year. In the case of adults however being 'found dead' was more likely to relate to poverty, isolation and deprivation and it would seem to make sense that the majority of such deaths, especially among the elderly, would have taken place during the winter months; figure 3.9 suggests that this may well been so.[124]

[121] *BofM* 26 September 1704.

[122] HS20, p.125 (30 November 1732); *BofM* 28 November 1732.

[123] HS20, p.126 (13 January 1733); *BofM* 9 January 1733. On homelessness and rough sleeping see Hitchcock, T., *Down and out in eighteenth-century London* (London, 2004), pp.23–48.

[124] See Galloway, P.R., 'Annual variations in deaths by age, deaths by cause, prices, and weather in London 1670 to 1830', *Population Studies*, 39.3 (1985), pp. 496–500.

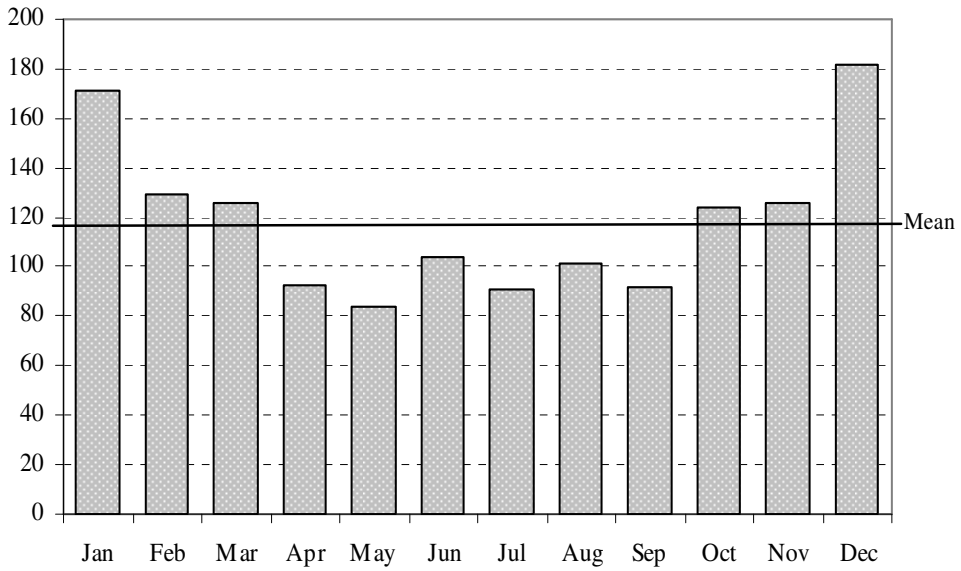

FIG. 3.9 Seasonality of those 'found dead' in metropolitan London, 1654–1735 (Showing total fatalities per month)

Source: Weekly *Bills of Mortality*

The month with the greatest occurrence of bodies being 'found' was December (182) closely followed by the equally inhospitable month of January (171). The two months before (124 & 126) this deep mid-winter period and the two months that came after (129 & 126) also showed levels just above the overall mean. The remaining months of the year, between April and September, all demonstrated levels well below the mean. The month with the lowest incidence of bodies being 'found dead' was May (eighty-four), a time of year that traditionally ushered in the more indulgent summer months. Unlike the more general seasonal pattern for drowning those found deceased in the Thames and other watercourses only marginally increased during the summer period. The highest incidence of such discoveries was in June (twenty-eight), however August supplied only eighteen such deaths, almost exactly the same as the overall monthly mean, which stood at 18.5. The month providing the lowest level of drowning discoveries was November, with just eight deaths, however both October and December had numbers above the mean at twenty-two and twenty-one, respectively.

Geographical patterns

Overall the geographical distribution of found bodies varied little from the background distribution of population for the nine aggregated metropolitan areas, see Table 3.7. A closer reading however indicates a very slightly increased occurrence in the areas of the West End, the riverside area to the east of the city, and the northern parishes. In the riverside area it would seem that the very high number of bodies recovered from the Thames and other watery environments helps to explain the increase. The northern parishes reported very few

drownings, but if we are correct to assume poor migrants made up a significant proportion of all those 'found dead' then it would have been within this liminal district of the metropolis that they might well be expected.

TABLE 3.7
Geographical distribution of those 'found dead' in metropolitan London, 1654–1735

Metropolitan areas	'Found dead'		Estimated Population	Found in the River Thames	
	Number	%	%	Number	%[1]
City within the Walls	226	16.0	16.6	25	11.1
City without the Walls	151	10.7	13.2	7	4.6
Westminster	60	4.2	4.4	1	1.7
West End	284	20.0	18.8	17	6.0
Northern parishes	148	10.5	7.2	3	2.0
Eastern parishes	87	6.1	8.7	1	1.2
Eastern riverside parishes	224	15.8	13.0	103	46.0
Middlesex within the Bills	60	4.2	3.4	0	0.0
Surrey within the Bills	178	12.5	14.7	64	36.0
Total	1,423[2]	100.0	100.0	222[3]	[15.6]

Notes: 1. Those 'found dead' in the River Thames as a percentage of all 'found dead' within each area; 2. Five reports were not located; 3. One report was without burial location.

Source: Weekly *Bills of Mortality*

Section 3.5 'Killed'

As was the case with the term 'found dead' those reported as having been 'killed' were likely to have collectively suffered a variety of deaths. The term 'killed' however suggests a form of deliberate or at least semi-intentional causation; thus many of these deaths should perhaps be attributed to murder or manslaughter rather than accident. Nevertheless, a close reading of the *Bills of Mortality* indicates that other forms of fatal agency were often associated with the term. Why individual parish clerks, or others, should on occasion resort to this ambiguous term is hard to ascertain, however an 'intentional' element within the circumstances of the incident may be a significant factor.

The circumstances of those 'killed'

The weekly *Bills* record 817 individuals recorded as having been 'killed'. Among that group 149 provide further information, what is more 120 of that number (18.0 per cent of the total) were explicitly recorded as having been accidental deaths, with a wide variety of causes or agencies of death being noted.

A small group of 'causes' of death stand out among this category; chief amongst these was the use of the term 'slain', recorded on eighteen occasions. 'Slain' in this context is

likely to have indicated a deliberate killing, though possibly not premeditated. A further indication of violence was more explicit in the phrase 'killed in a quarrel', which occurred ten times, yet this still indicates a lack of premeditation. Additionally seven individuals were reported as having been 'killed in a duel'. Duelling was illegal during this period, if however the 'rules of honour' had been followed a victor indicted for murder was unlikely to face conviction by a sympathetic jury.[125] Five people were noted as having been 'killed with a sword', another two 'with a pistol'; these also may have been associated with duelling, and if so reinforce the ambiguities associated with the term 'killed'. Further incidents of fatal violence were reported, including one person 'killed by blows and kicks', another 'by a soldier', two more 'by fighting', one 'with a cudgel', and a further two with quart pots.[126]

Another area of early modern social relations where violence also held an ambiguity of right and wrong was within the confines of marriage and the household.[127] If premeditation was proved the killing of a husband by a wife might result in a conviction for petty treason, however a wife-killing husband was only likely to be charged with murder — a lesser offence — unless the death was established as the final act in an extended pattern of abuse, or there was clear evidence of premeditation.[128] Nevertheless, in a number of cases where women killed their husbands the possibility of premeditation was put to one side as the guilty verdict came to rest more on issues of family relationships as witnessed by neighbours or others.[129] The weekly *Bills* record the deaths of four wives 'killed by her husband'; none of these incidents were reported as 'murders', at least in the *Bills*.[130] Domestic violence may have lain at the root of a further entry in the *Bills* dated to June 1683 when two unborn infant casualties were recorded. The parish clerk of St Benet Fink in the City of London related that they had been 'killed in the womb by blows'.[131]

Relationships between masters and servants had a similar legal basis as that between husband and wife, thus masters or mistresses were entitled to physically chastise disobedient or idle servants. In October 1672, at St Andrew Holborn, a female servant was reported was 'killed by her mistress'.[132] In a further example of the grey area between legitimate and

[125] Beattie, *Crime and the courts*, pp.97–98; Andrew, D., 'The Code of Honour and its critics: the opposition to duelling in England, 1700–1850', *Social History*, 5 (1980), pp.412–13; Shoemaker, R., *The London mob: violence and disorder in eighteenth-century England*, (London: Hambledon and London, 2004), chapter 7.

[126] *BofM* 16 November 1675; 28 May 1723; 26 April 1720; 8 October 1723; 16 August 1670; 12 June 1666; 2 April 1667.

[127] For a discussion of domestic violence see Hunt, M., 'Wife beating, domesticity and women's independence in eighteenth-century London', *Gender & History*, 4.1 (1992), 10–33.

[128] Between 1654–1735 the *BofM* report eight husbands who 'murdered' their wives, four wives who 'murdered' their husbands, two masters who 'murdered' their servants and a school-master who 'murdered' one of his pupils.

[129] Beattie, *Crime and the courts*, pp.99–104.

[130] *BofM* 8 May 1666; 22 February 1670; 22 March 1670; 16 August 1670.

[131] *BofM* 5 June 1683. A similar case is reported by Hunt, 'Wife beating', p.17.

[132] *BofM* 15 October 1672.

illegitimate killing a man was reported to have been 'killed by the press-master on the river at Blackwall' during the generally unpopular third Dutch War of 1672. The use of the term 'killed' rather than 'murdered' suggesting that this fatality was understood as an allowable part of the process of military discipline associated with the press-gang.[133]

Explosions of one sort or another accounted for several of those reported as 'killed'; the most significant example being thirteen people 'killed in the late fire and blowing up of houses …' in the vicinity of Tower Street in the City of London in January 1715. It is possible that some or all of these individuals were watermen employed as fire-fighters and drawn from the neighbourhood of Wapping, from whence their deaths were reported. The cause of the fire was a gun-powder explosion in the premises of a firework manufacturer.[134] Fireworks were associated with three further deaths in this category; in St James's Square in November 1697 a man and a woman were 'killed by a rocket stick', while another fatality in late October 1674 in Southwark, was associated with a 'squib'.[135] The failure of guns to fire properly was implicated in two deaths; in 1685 a man was 'killed discharging his blunderbus' in St Andrew Holborn, while another was 'killed by the flying of a gun barrel' in the parish of St Botolph Aldgate during the winter of 1692.[136]

Among other causes of death within this group, five people were noted as having been killed by lightning or 'thunder', four with tobacco pipes — presumably following falls or violence — and a further thirteen were killed onboard ships in the River Thames.[137] Sporting activity held its share of dangers; some sports were in themselves risk-laden whilst in others the danger related more to the specific health, or ill-health, of the participants. In the early summer of 1662 John Mills, a Suffolk man who was lodging at the Spread Eagle in the parish of St Peter Cornhill, became involved in a wrestling match. During the bout Mills suffered a fall that left him with a serious head wound from which he soon after died. The City coroner took a view of the body and subsequently issued a warrant allowing the parish to 'decently … inter his body', which they did on the 26 May.[138] Wrestling claimed another victim in the summer of 1665 when a man was killed in the parish of St Margaret Westminster.[139] Boxing was also undertaken in early modern London either as a sport or as a means of settling disagreements. This too resulted in a fatality when 'William Calloway, a man from Whites

[133] *BofM* 11 June 1672.

[134] *BofM* 11 January 1715, 18 January 1715. For more on this event see below, section 3.9.

[135] *BofM* 27 October 1674 (St Olave Southwark); 30 November 1697 (St Paul Covent Garden), *The Post Boy*, 2 December 1697; *BofM* 7 December 1687 (St James Westminster).

[136] *BofM* 14 July 1685, 15 November 1692.

[137] See below, section 3.9, for a discussion of deaths caused by lightning strikes and, section 3.12, for a discussion of deaths related to tobacco pipes.

[138] HS1, p.214, *BofM* 20 May 1662.

[139] *BofM*,16 May 1665.

Yard' in Whitechapel was 'killed in boxing' in September 1729.[140] On another occasion, in 1671, the more innocuous pastime of running became a fatal activity when 'William Calvert, a butcher, was killed with running … a race at Clerkenwell'.[141]

Finally sometimes the cause of death cannot be conclusively known even though further details are available; on 18 December 1663 William Wright was buried in the churchyard of St Giles Cripplegate, he had been 'accidentally killed with a pair of bellows', exactly how this death came about is unknown, though the bellows may have been of an industrial size.[142] A similar situation arises when we consider the death of a criminal whom the *Bills* report simply as having been 'accidentally killed going to rob a house' in the summer of 1697.[143]

Seasonality

As might be expected with a term as ambiguous as 'killed' there appears little in the way of any annual pattern associated with seasonality. The average monthly rate was just less than one person reported 'killed' per month (see Fig. 3.10). The month that demonstrated the highest occurrence of the term 'killed' was January with ninety cases, though thirteen of these arose from a single incident; the fire in Tower Street in 1715. The month with the lowest occurrence of this term was September, with a figure of fifty-two.

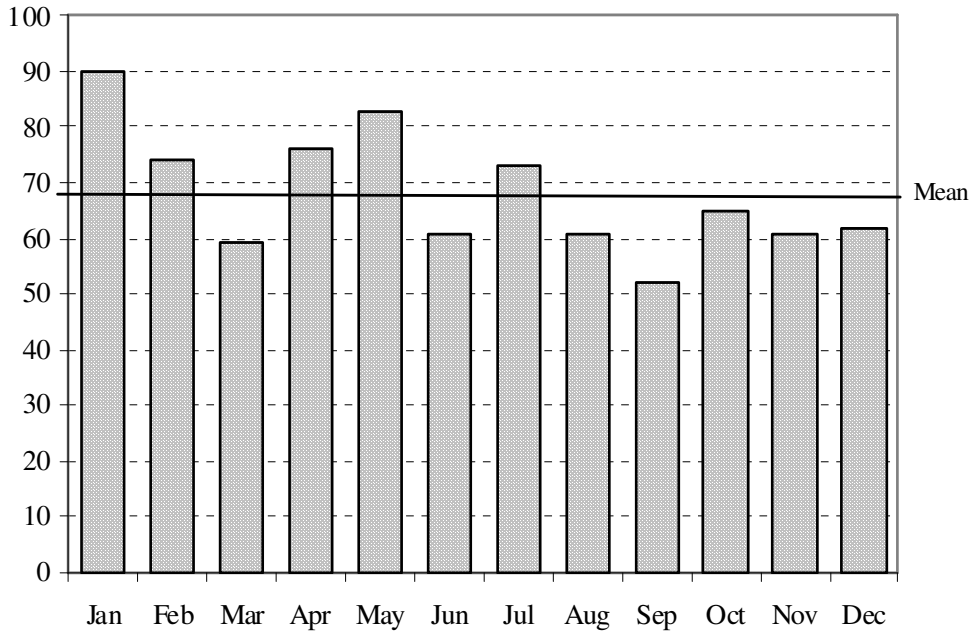

FIG. 3.10 Seasonality of those reported as 'killed' in metropolitan London, 1654–1735 (Showing number of fatalities per month)

Source: London *Weekly Bills of Mortality*

[140] LMA, P93/MRY1/61, 13 September 1729; *BofM* 9 September 1729. Also see Shoemaker, *London mob*, pp.195–214

[141] HS19, p.27, 1 May 1671; *BofM* 25 April 1671.

[142] GL, Ms.6419/7; *BofM* 22 December 1663.

[143] *BofM* 29 June 1697.

Geographical patterns

While there was limited evidence for any particular seasonal trend in relation to the use of the term 'killed' there appeared to be a significant geographical pattern to its use. The West End area of the metropolis demonstrated a concentration of those recorded as 'killed' at almost twice the level that might have been expected given its share of the metropolitan population, see Table 3.8. The population share of this district stood at 18.8 per cent, yet 44.5 per cent (362) of those recorded as 'killed' were reported by the parish clerks of the district. The parish of St Margaret Westminster exhibited a similar pattern with 9.5 per cent of reported killings (seventy-seven) compared to a population share of just 4.4 per cent. Areas with lower than expected levels of reporting included the adjacent districts of the City within and without the walls with a combined total of 14 per cent (114) of all casualties of this nature compared to their total population share which stood near to a third of all Londoners at 29.8 per cent. The remaining areas had figures nearer to what might be expected given their proportion of the metropolitan population.

TABLE 3.8
Geographical distribution of those reported as 'killed' in metropolitan London, 1654–1735

Metropolitan areas	'Killed'		Estimated Population
	Number	%	%
City within the Walls	60	7.4	16.6
City without the Walls	54	6.6	13.2
Westminster	77	9.5	4.4
West End	362	44.5	18.8
Northern parishes	69	8.4	7.2
Eastern parishes	30	3.7	8.7
Eastern riverside parishes	72	8.8	13.0
Middlesex within the Bills	12	1.5	3.4
Surrey within the Bills	78	9.6	14.7
Total	814[1]	100.0	100.0

Note: 1. Three reports gave no location, or occurred beyond the limits of the *Bills of Mortality*.

Source: Weekly *Bills of Mortality*

It is possible that the increased use of the term 'killed' in the West End and Westminster areas resulted from variations in the reporting nomenclature followed within those districts, although a parish by parish review of reporting styles provides little to support such an observation. It is therefore likely that the greater frequency of use reflects a greater level of inherent violence within those parts of the metropolis that were less vigorously regulated than others, such as the City within the Walls.[144] In fact when the distribution of those

[144] For a short discussion of libertine violence being focused on the western suburbs rather than the City see Statt, D., 'The case of the Mohocks: Rake violence in Augustan London', *Social History*, 20.2

'murdered' is considered a similar pattern is seen with most areas supplying figures close to their population share apart from the West End which exhibited a figure twice that than might be expected.[145] It is perhaps likely that both of these hypotheses are to differing degrees correct. It may well be that certain aspects of administrative activity in the western part of the city were less thorough — exemplified by the use of ambiguous terminology — when compared to other districts where parochial administration in particular was more coherently managed and had a longer bureaucratic pedigree. For similar reasons it is probable that fatal violence occurred more frequently in the West End than in other parts of the metropolis.

Section 3.6 Struck by objects or materials

The chance of a Londoner being struck a fatal blow by an object or mechanical device became progressively more likely during the course of the early modern period as London became one of the great commercial entrepots of Europe. The metropolis focused much of its economic resource in its thriving port and its dynamic commodity trade. Such trade involved the movement of goods from ship to quayside and from quayside to warehouse or market. At each stage porters, lightermen and others were exposed to danger. The haste of commerce undoubtedly amplified the risks and it is likely that heavy or badly packed cargoes were not infrequently swung carelessly from crane or derrick sometimes to fall with fatal consequences.

London was of course a heavily built-up environment and, as noted previously, the dynamic nature of construction activity created a wide range of hazards. Many individuals were injured by falling building materials or tools, or by the collapse of scaffolding. Even when completed the houses and buildings of the metropolis still presented a danger, killing and injuring a number of people when they collapsed during storms, or through decay or demolition. Others received damaging blows from a variety of mechanical installations associated with manufacturing, such as brewers' plant or mills driven by wind or water. Yet other Londoners suffered less dramatic but equally fatal injuries; being struck dead by assorted pieces of furniture, canes, bottles, sticks and stones.

Many fatalities resulted from head injuries, for example in February 1734 Samuel Burton a servant was accidentally 'killed by a brick falling on his head' as he rode his

(1995), pp.190–192; also see Guthrie, N., '"No Truth or very little in the whole Story"? — A reassessment of the Mohock scare of 1712', *Eighteenth-Century Life*, 20.2 (1996), 33–56.

[145] The number reported by the *BofM* as 'murdered' in the West End was 303 or 35.2 per cent of all those reported murdered in the metropolis during 1654–1735. The population share of the West End was 18.8 per cent.

master's horse through Crutched Friars, the brick having fallen from a chimney.[146] Other fatalities were associated with crushing or multiple injuries, such as those sustained in April 1730 by Robert Hinde, a porter:

> [who] removing some goods belonging to Mr Bradshaw near the George Inn in Tyburn Road, going down stairs, his foot slipt, and he fell on his head with his burden, which bruised him so much, that he died next morning.[147]

Early modern surgeons responded to such injuries with binding and bleeding, which might work well with minor bruising, head injuries however were more troublesome. Major skull fractures and associated internal bleeding presented significant challenges; nonetheless London's surgeons were adept at delicate cranial operations when required, often resorting to cleansing and rudimentary reconstructive surgery, and if absolutely necessary trepanation.[148]

Teasing apart the causes of such injuries within the brief reports printed in the *Bills of Mortality* is difficult, yet it is apparent that such injuries were typically noted for their traumatic violence. In most instances the trauma was accidental in origin, but violence could at times be intentional, such as the blows struck with a pewter pot that 'killed' Sarah Surrupsal in St Martin in the Fields in 1710.[149] Yet it was precisely the greater degree of visible violence and trauma associated with such injuries that drew attention to them. In attempting to classify a single group of such fatalities within the *Bills* it has been necessary to combine two major descriptive agencies; those specifically killed by a 'blow' or 'blows' and those deaths described more simply with reference to being hit or struck. The *Bills* record such deaths using either explicit commentary, such as 'killed by a blow on the head with a brick bat', or more inferential description, for example 'killed by a piece of timber'.[150]

The circumstances of striking fatalities

Dropped or falling timber was implicated in seventy of the 714 fatalities within this category. At 9.8 per cent this was the most frequent agency of death reported among those struck by objects. Some who died in this way may have been passersby, such as Sarah Blakey of Shadwell who was 'accidentally … killed by the fall of a piece of timber' in 1710, or the victim of an incident reported by the *Daily Courant* in 1730:

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[146] LMA, P93/MRY1/61; *BofM* 5 February 1734; *Daily Courant*, 4 February 1734; *Read's Weekly*, 9 February 1734.

[147] *Weekly Journal*, 11 April 1730; *Fog's Weekly Journal*, 11 April 1730.

[148] Beier, L.M., *Sufferers and healers: the experience of illness in seventeenth-century England*, (London, 1987), pp.73–74; Wiseman, R., *Several chirurgical treatise*, (London, 1676), pp.386–403; Woodhall, J., *The Surgeons Mate* (London, 1617), pp.135–138; Yonge, J., *Wounds of the brain proved curable …* , (London, 1682).

[149] *BofM*, 11 July 1710; OBP, 6 September 1710, Elizabeth Gratrix (ref. t17100906-21), Gratrix was found guilty of manslaughter after beating Surrupsal following a quarrel at dinner. The victim 'languished' for a month before death, which may have influenced the clerk's decision to use the term 'killed' in preference to 'murdered'.

[150] See for example, *BofM* 15 November 1664 or 8 May 1655.

> On Thursday, about 5 in the evening, an ancient woman, who was carrying home some provisions which she had just bought, passing by an old house that was pulling down near the White Swan Brewhouse behind St Georges Church, Southwark, had her brains dashed out by a beams falling from the said house.[151]

Others struck by timber had a more obvious occupational relationship with the material. To give one example, in mid-December 1669 the register of St Michael Cornhill records that 'Robert Lovejoy, a carpenter [was] killed by a fall of a piece of timber'; Robert was particularly unlucky having completed his apprenticeship only a few months before his death.[152] Many in the construction and maritime trades were routinely exposed to the danger of falling timber, however, others also spent time working with the material. In a somewhat ironic example 'Thomas Powell, [a] joiner [was] killed accidentally upon timber at St Andrew Wardrobe' on the 12 July 1707. He was buried four days later in the parish of St Dionis Backchurch. As a resident of the parish he was also noted within the return for the Poll Tax of 1698, where his occupation was given as 'coffinmaker'.[153]

Timber was also used in constructional activity for scaffolding or temporary staging. The collapse of such structures resulted in the deaths of twenty-five individuals, 3.5 per cent of all those struck by objects. Although discussed in this section the fall from the collapsing structure may have had equal significance as a cause of death. The majority of collapses resulted in only single deaths, such as that of 'Richard Acres a labourer killed by the fall of a scaffold at Mr Robert William's his building in Lime Street, [on] Aug. 2, 1671'.[154] The posting book for the surveying of new foundations during the post-Great Fire rebuilding notes that Williams paid for foundations to be staked out for a building in Lime Street on 2 March 1669.[155] On other occasions multiple deaths occured, in September 1698 two people were killed by the 'fall of a scaffold' in the parish of St Mary Woolnoth.[156] In a more dramatic incident, and one not associated with building work, eight people were killed by the collapse of 'several scaffolds' on 20 October 1714. The structures had been installed in Palace Yard Westminster to provide platforms from which to view the coronation of George I.[157]

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[151] LMA, P93/PAU3/34; *BofM* 26 July 1720; *Daily Courant*, 23 March 1730; *BofM* 24 March 1730 (St Mary Newington).

[152] HS7, p.257; Marsh, B., (ed.), *Records of the Worshipful Company of Carpenters: volume 1: Apprentices' Entry Books 1654–1694* (Oxford, 1913), p.59 (Lovejoy had been indentured apprentice to Phillip Boarder for seven years in May 1662).

[153] HS3, p.276; CLRO Assessment Box 71/9.

[154] HS3, p.238.

[155] Jones, R, and Reddaway, T.F. (eds.), *The survey of building sites in the City of London after the Great Fire of 1666*, (London, 1967), vol.I, p.43. If the scaffolding associated with this building was erected late in the summer of 1669 it may have been standing for two years and endured two winters before it finally collapsed in 1671.

[156] *BofM* 20 September 1698.

[157] *BofM* 19 October 1714; *Daily Courant*, 22 and 23 October 1714.

A number of other objects were often implicated in fatal striking incidents. Among those, stones took seventeen lives and bricks a further sixteen. The majority of stones fell from constructional works, such as the stone which fell from the steeple of St Dionis Backchurch during its rebuilding in 1671 and killed Ralph Gilbert a labourer from Cordwell in Derbyshire employed on the work.[158] Others died when stones were thrown; in 1697 for example what may have begun as a childish game ended in tragedy. The *Bill of Mortality* for 15 June notes a person 'killed by a stone thrown by a child' in St Andrew Holborn. The stone thrower, Thomas Purcell, was indicted for the murder of Richard Banister but as 'it was done by accident, he being very young, the Jury acquitted him'.[159]

Falling bricks also killed those engaged in building work, such as 'John Price, labourer, accidentally killed by the fall of a parcel of brick[s]' in the parish of St Giles Cripplegate during April 1684.[160] In one notable incident at a site just west of Temple Bar five individuals were 'killed by the fall of some bricks' in October 1671. They were variously buried at St Clement Danes, St Mary in the Savoy and St Giles in the Fields.[161] Only three of those killed by falling bricks died before the Great Fire of 1666, all in parishes beyond the City walls. The remainder of brick-related fatalities occurred after 1666, some taking place in parishes within the area of the rebuilding.

Construction workers and labourers were also at danger of being hit and killed by other falling objects. Objects associated with such incidents included a pick-axe in the summer of 1668 at Whitechapel, a window frame dropped in the parish of St Olave Hart Street in 1671, and in a rather unusual instance a man was killed 'by another man falling on him from a ladder' in St James Westminster during 1703.[162] Building labourers also engaged in demolition and maintenance works which could result in building collapses. In one incident in January 1730 a workman had a lucky escape when the drinking of beer helped rather than hindered his chances of survival:

> The same day a house pretty much out of repair in Bedfordbury fell down; a bricklayer's labourer who was employed to pull off the pantyling to lighten it, had got off about 200, and was gone to get himself a pint of beer being cold, when it fell down without doing any further damage.[163]

Occupied buildings that collapsed also caused deaths, striking or crushing people, as they fell. Samuel Johnson supplied a generally correct warning when he wrote that in London 'falling Houses thunder on your Head', as between 1654–1735 at least 170 people were

[158] HS3, p.238; *BofM* 16 May 1671.
[159] OBP, 7 July 1697, Thomas Purcell (ref. t16970707-8).
[160] GL, Ms.6419/10; *BofM*, 29 April 1684.
[161] *BofM* 17 October 1671.
[162] *BofM* 16 June 1668, 8 August 1671, 13 July 1703.
[163] *Daily Courant*, 8 January 1730.

killed by collapsing houses and falling chimneys.[164] Particularly striking about such incidents was the high rate of multiple fatalities. As many as seventy-six deaths resulted from the collapse of just twenty-five houses. Those multiple deaths ranged from two individuals killed when a house in St Mary Whitechapel collapsed in November 1681, to six people killed by the fall of a house in St Martin in the Fields in May 1686.[165] Occasionally building collapses may have been predictable as is suggested by the report of six fatalities caused by 'the fall of some old houses', also reported as rooms built 'over some old stables', adjacent to Puddle Dock in the parish of St Andrew by the Wardrobe in 1727.[166] The parish burial register amplifies our knowledge of the incident; those killed were Mary Gulliford and her son William, Ann Jones and her two children John and Catherine, and another women Elizabeth Todd, all of whom the clerk described as 'buried in the ruins of old decayed houses that tumbled down in the parish'.[167] At other times such incidents were clearly unexpected such as the 'sudden fall of a house in Newgate Street' which left two dead in March 1718,[168] or the collapse reported in a May edition of the *Weekly Journal* in 1730:

> Thursday morning about 4 o'clock, the house of Mr Waller a tailor in Angel Court, by Story's Gate, Westminster, fell down to the ground, except the parlour in which Mr Waller and his wife were in bed, so that they received no hurt thereby; but eight people that were in the upper part of the house were miserably bruised, in so much that 3 or 4 of them are thought past recovery.[169]

Despite such pessimism none of the injured were reported as fatalities within the associated *Bills of Mortality*. On another occasion an individual was killed when attempts made to preserve the structural integrity of a building on the verge of collapse at St Giles in the Fields went tragically wrong:

> Last Tuesday as some workmen were shoring the front house turning into Air Street from Hockley in the Hole, part of the wall fell in, and buried one of the carpenters in the rubbish; he was taken out alive, but died in about three hours after.[170]

In all the collapse of some eighty houses are recorded by the *Bills* during the period of the study.

Chimneys also fell with some regularity killing many. Between 1654 and 1735 thirty-one chimney collapses, resulting in the deaths of thirty-eight individuals, were recorded by the *Bills*. Multiple fatalities were again a feature of such incidents with seventeen fatalities arising from just seven incidents. Most chimney falls occurred during the winter months,

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[164] Johnson, S., *London: a poem, in imitation of the third satire of Juvenal*, 2nd edn. (London, 1738).
[165] *BofM* 8 November 1681, 11 May 1686.
[166] *BofM* 17 January 1727; *Daily Journal*, 18 January 1727; *British Journal* (1722), 21 January 1727.
[167] GL, Ms.4507/1
[168] *BofM* 12 March 1718.
[169] *Weekly Journal*, 2 May 1730.
[170] *Weekly Journal*, 25 April 1730.

November to February; only six fatalities were recorded outside that seasonal period. Bad weather in early January 1690 was associated with at least four chimney collapses, claiming six lives.[171] The Great Storm of November 1703 resulted in widespread damage across England, in London the *Bills* record fourteen deaths caused by the collapse of chimneys during the storm.[172] Within that count were two double fatalities, one in St James Westminster and one in St Dunstan Stepney. The Great Storm was also implicated in the collapse of houses; the *Bills* note a double fatality in St Botolph Aldersgate, a further collapse in St Giles without Cripplegate and finally a death caused by the fall of 'the roof of a house' in Holborn.[173] Only one of those deaths was explicitly referenced within the parochial records, that of 'Thomas Watkins, carpenter, killed by the fall of his own house', in St Giles Cripplegate.[174]

The commercial and manufacturing activities of the metropolis were also implicated in the deaths of those struck by a wide range of commodities. In December 1663 at St Katherine by the Tower a man named 'William Ham' was crushed by a grindstone.[175] In 1689 the 'fall of a load of faggots' at Islington resulted in a fatality.[176] Two Londoners were killed by falling bales of cloth, one of whom was probably 'William Norfolk, a man killed from Blew Anker Yard [Whitechapel]' in February 1695.[177] A falling bale of cotton killed a further individual during March 1713.[178] In the parish of St Stephen Coleman Street in 1684 a person was mortally injured 'by the fall of a bundle of hides'.[179] The fall of three barrels of beer took as many lives, including that of 'Robert Lynnell, labourer, accidentally killed by the fall of a barrel of drink' in Clerkenwell in 1684.[180] Another barrel, on this occasion filled with shot, fell from a cart in the parish of St Mary Somerset in 1716 with lethal consequences.[181] A dropped butt of sugar killed an individual at St Dunstan in the East in 1686 and in St Martins in the Fields during 1683 an unfortunate person was killed by 'the fall of a tub of prunes'.[182] Finally, in St Olave Hart Street in 1693 'Theophilus Farmer, servant to Mr Turvill, [was]

[171] *BofM* 7 & 14 January 1690.

[172] Defoe, D., *The storm: or, a collection of the most remarkable casualties and disasters which happen'd in the late dreadful tempest, both by sea and land*, (London, 1704). In all Defoe noted twenty-one people killed and 'above two hundred people very much wounded and maim'd' during the storm within the area of the Bills of Mortality, p.74.

[173] *BofM* 23 & 30 November 1703, 7 December 1703.

[174] GL, Ms.6419/13 (30 November 1703).

[175] *BofM* 8 December 1663; HS76, p.176.

[176] *BofM* 25 June 1689. Also see *BofM* 9 January 1666 (St Martin Vintry), 6 June 1682 (St Gregory by St Paul's), 1 September 1724 (Shoreditch).

[177] *BofM* 19 September 1676 (Allhallows Barking), 19 February 1695; LMA P93/MRY1/59.

[178] *BofM* 17 March 1713 (St Katherine Cree).

[179] *BofM* 1 July 1684.

[180] *BofM* 12 December 1676 (St Botolph without Aldersgate), 11 March 1684 (Clerkenwell), 13 December 1720 (St James Westminster); HS19, p.101.

[181] *BofM* 9 October 1716.

[182] *BofM* 21 December 1686, 15 May 1683.

killed by [the] fall of a barrel of raisons on his head', the relevant entry in the *Bills* elaborates that the 'cask [fell] from a crane'.[183]

Cranes were located on the docks and wharves of the Thames within the City and in the eastern riverside parishes. In total twenty-six are illustrated in Morgan's 1682 panorama of London and the Thames (Fig. 3.11).[184] Such devices were implicated in the deaths of fifty-three individuals, sixteen of whom were noted explicitly as having been killed 'in a crane'. Many early modern cranes were powered by operators who walked inside large winding-wheels, the possibility of mechanical failure or a simple, yet catastrophic, stumble was ever-present. One person was 'killed with the wheel of a crane at Botolph Billingsgate' in May 1681, one month later another labourer died in a similar manner at Allhallows Barking, near the Tower.[185] Cranes, and the goods they moved, also caused injury and death to those working around them. In November 1693 a person was 'killed by the fall of a cask from a crane' in the parish of St Olave Hart Street, while in the spring of 1709 a man died after being hit 'by the bar of a crane' at Lambeth.[186]

Other mechanical installations were associated with various injuries and fatalities. Incidents ranged from an isolated death caused by a ropemaker's sledge at Shadwell in 1691, through three others killed by falling plant in breweries and a distillery, to six deaths caused by bells or their frames.[187] Mills, whether wind or water powered, were also responsible for fatalities. Seventeen people died after being hit or crushed by what were, for the period, fast-moving, high-energy, machines. While windmills accounted for most deaths, other types of mills were also cited, for example, in April 1656 Francke Middleton, son of a distiller, was 'killed by a malt mill' at Cripplegate, and in November 1726 a person died of injuries received after becoming entangled in the 'cogs of a wire-mill' in Southwark.[188] A number of the victims in mill-related accidents appear to have been young or inexperienced in their workings, such as 'Mr Richards, Clerk of the Guildhall Chapel, [who in May 1731] was viewing a windmill by Bow, [when] the sweeps turning of a sudden, dashed out his brains.'[189]

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[183] HS46, p.238; *BofM* 7 November 1693.

[184] Morgan, W., *Prospect of London and Westminster taken at several stations to the southward thereof* … , (London, 1682).

[185] *BofM* 24 May 1681, 21 June 1681. For a discussion of accidents related to inexperienced crane labourers see, Forbes, T. R., 'Crowner's Quest', *Transactions of the American Philosophical Society*, 68.1 (1978), p.18–9.

[186] *BofM* 7 November 1693, 12 April 1709.

[187] *BofM* 23 June 1691, 6 March 1660 (St Leonard Shoreditch), 8 August 1676 (St Giles without Cripplegate), 6 March 1722 (St Olave Southwark), 29 May 1666 (St Antholin), 26 December 1676 (St Andrew Holborn), 13 March 1683 (St Giles without Cripplegate), 18 August 1685 (St Botolph without Aldgate), 23 November 1686 (St Swithin), 25 September 1722 (St Ann Westminster)

[188] GL, Ms.6419/5; *BofM* 15 November 1726 (St Saviours Southwark).

[189] *Gent's Mag*, 2 May 1731.

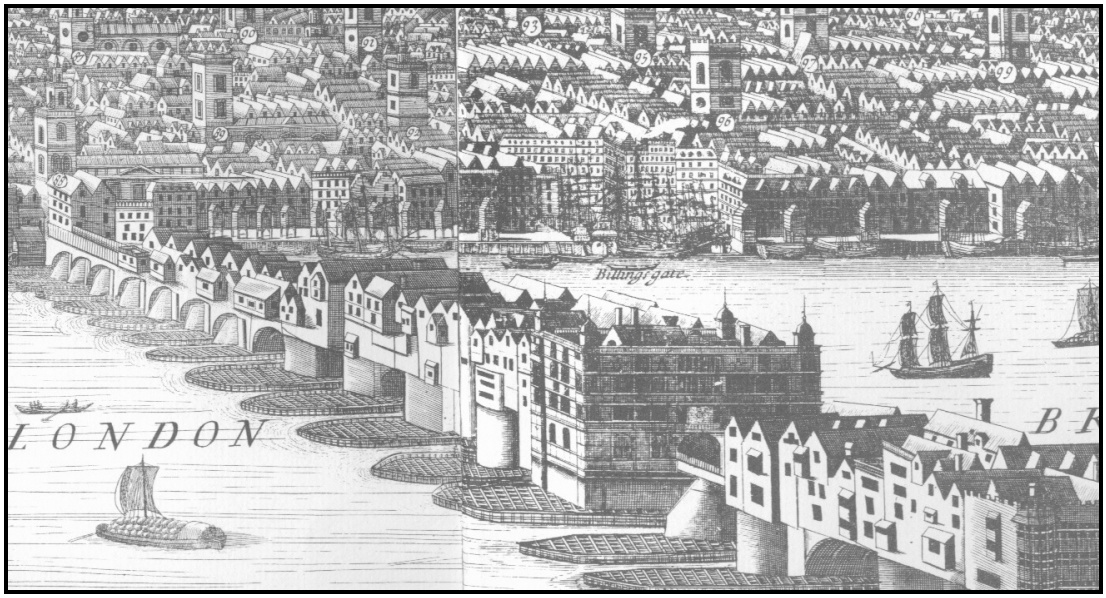

FIG. 3.11 Detail from *Prospect of London and Westminster* 1682 showing the waterfront of the pool of London downstream of London Bridge. Note the many warehouses and cranes.

Source: Morgan, *Prospect of London* (1682)

Within the domestic sphere a variety of objects were associated with deaths caused by being hit or struck. In those circumstances however there was a greater likelihood that intentional violence underlay such trauma. Objects implicated ranged from earthen mugs, through canes and sticks, to hammers, bottles, and oars or 'sculls'.[190] Some incidents were clearly unintentional, such as the 'accidental blow with a quoit' which killed Elizabeth Whitworth at Hackney in the summer of 1723, or in 1717 when a gate at the Steel Yard in the City fell off its hinges with fatal consequences for the person repairing it.[191] Other cases appear less clear-cut, for example the death of a person killed by a 'blow with a pail' in St Martin Orgar during 1659, the individual hit with a waterman's oar in 1663 at Allhallows the Less, or 'John Miller, a lighterman, killed by a waterman's boat hook' in October 1721.[192]

There were also incidents that were undoubtedly intentional, though it will remain unknown if more limited harm, rather than death, was the true aim of the assailants. To give two examples; in 1655 a person was killed after being 'hit on the head with a brass candlestick' at St Mary le Bow and in a somewhat less dignified incident a man died after 'a black pot [was] thrown at his head' at Holborn in 1678.[193] Some incidents were less easily

[190] For example, see *BofM*, 9 April 1672, 8 June 1680, 31 July 1711, 1 November 1715, 3 March 1696, 29 April 1707, 1 September 1685.

[191] *BofM* 28 May 1723; GL, Ms. 480/1. *BofM* 6 August 1717; *Original Weekly Journal*, 10 August 1717.

[192] *BofM* 18 October 1659; 17 November 1663; 3 October 1721; GL, Ms.5152; OBP, 11 October 1721, William Palmer (ref. t17211011-43); the implicated wound occurred during a mid-river scuffle after the men's vessels accidentally collided passing through London Bridge. Palmer was found guilty of manslaughter.

[193] *BofM* 11 December 1655, 29 January 1678.

categorised, such as the person who died after they 'struck against a post swimming in the New River' in the summer of 1702.[194] And how should the 1676 death of a man 'by a blow at the fencing school at St Andrew Holborn' be classified — intentional or unintentional? The jury at the ensuing Old Bailey trial lacked evidence to 'prove the real cause' and acquitted the defendant.[195] Making sense of such a large and diverse number of fatalities is difficult; nonetheless a careful analysis of seasonal trends and geographic patterns sheds some light on this heterogeneous group of 'casualties'.

Seasonality

Aside from those fatalities associated with dropped building materials — and so linked to the construction 'season' — it is unlikely that any single seasonal pattern can be construed for such deaths. On the other hand certain weather conditions are likely to have influenced the occurrence of some incidents. Storms and windy weather caused roof tiles, loose timbers, tree branches, dilapidated chimneys and even entire houses to come crashing down in and around the metropolis. An increase in storm activity during November and March was reflected by peaks of sixty-six and sixty-seven deaths, respectively (see Fig. 3.12). The numbers killed during the winter months of January and February were however somewhat below the annual mean possibly as there were fewer opportunities for striking events to occur as many people remained indoors. The greatest number of fatalities, seventy-one, was associated with June; a peak probably related to an intensification of port and commercial activity as a number of the deaths appear to have resulted from dropped objects or goods. It is also likely that the summer months increased the population at risk as warmer weather and longer daylight hours enticed a more Londoners onto the streets and wharves of the metropolis. Nevertheless, the average monthly incidence of striking fatalities over the entire 907 month period was just 0.79, making this a relatively rare form of accidental death. Although the high incidence of multiple fatality events and their traumatic character should be borne in mind.

[194] *BofM* 28 July 1702.
[195] *BofM* 9 May 1676; 28 June 1676, anon. (ref. t16760628-2).

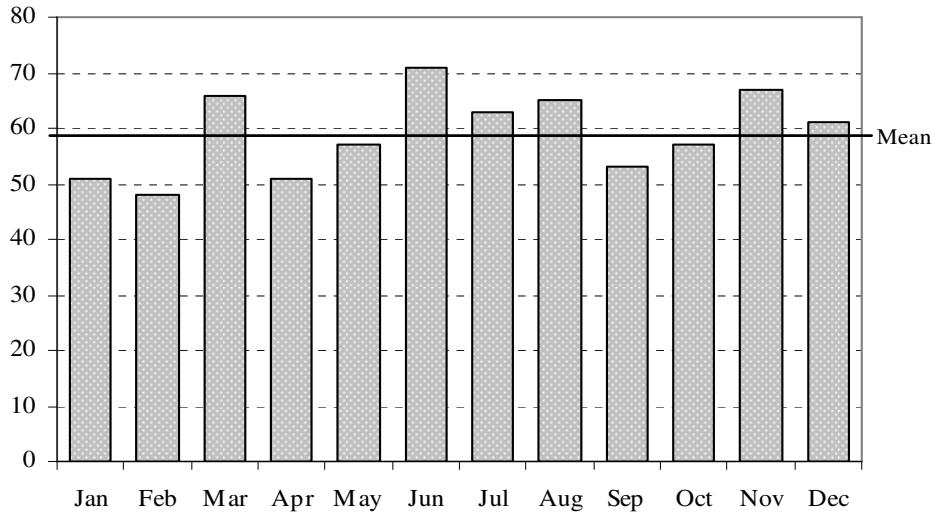

FIG. 3.12 Seasonality of striking fatalities in metropolitan London, 1654–1735
(Showing number of fatalities per month)

Source: Weekly *Bills of Mortality*

Geographical patterns

The greatest incidence of striking fatalities was in the City within the walls, which experienced 152 such deaths (21.8 per cent) (see Table. 3.9). When compared with the City's share of population, 16.6 per cent, it is clear that the area had a disproportionate number of deaths. The City's crowded and complex urban environment, together with its dynamic commercial activities, undoubtedly played a part in this increase. It should also be noted that many of those deaths (forty-seven) were associated with construction activities. The area was also the location for thirty-four of London's fifty-three fatal crane accidents. Among that number the waterfront parishes of All Hallows Barking and St Dunstan in the East each reported eight such fatalities. Only two other areas recorded crane related deaths, metropolitan Surrey (ten) and the eastern riverside parishes (nine).

Away from the City the distribution of striking fatalities was not significantly out-of-line with the general distribution of population. Only two areas showed slightly higher then expected numbers, the City without the Walls and the eastern riverside parishes (probably for similar reasons to those of the City). The area with the lowest occurrence of striking fatalities was metropolitan Middlesex where twelve events were noted (1.7 per cent), exactly half that might have been expected. This area included extensive tracts of open-land and a relatively low density of habitation helping to explain the disparity. Not that the countryside around London was entirely without such dangers, in December 1692, for example, five individuals

died when a single haystack collapsed in the large eastern riverside parish of St Dunstan Stepney.[196]

TABLE 3.9
Geographical distribution of striking fatalities in metropolitan London, 1654–1735

Metropolitan areas	Striking fatalities		Estimated Population	Construction associated	
	Number	%	%	Number	%[1]
City within the Walls	152	21.8	16.6	47	30.9
City without the Walls	108	15.5	13.2	42	38.9
Westminster	25	3.6	4.4	8	32.0
West End	125	18.1	18.8	47	37.6
Northern parishes	49	7.0	7.2	28	57.1
Eastern parishes	35	5.0	8.7	14	40.0
Eastern riverside parishes	100	14.4	13.0	22	22.0
Middlesex within the Bills	12	1.7	3.4	7	58.3
Surrey within the Bills	90	12.9	14.7	25	27.8
Total	696[2]	100.0	100.0	240	[34.5]

Notes: 1. Construction-related fatalities as a percentage of all such deaths reported for each area; 2. Eighteen reports in this category gave no location.

Source: Weekly *Bills of Mortality*

Among those striking fatalities that could be associated with construction activity the area with the highest proportion of such deaths was Middlesex within the Bills (58.3 per cent) however this represented only seven individuals. By contrast in the northern parishes there were twenty-eight construction related deaths, or 57.1 per cent of all striking fatalities within that area. As noted previously in the case of fatal falls associated with construction, those deaths probably reflect both increased building activity across the northern extents of the metropolis and the increased number of building workers who dwelt in the area. In the latter case the possibility of the site of injury being distant from the location of death should be borne in mind. Those parishes with the lowest proportion of construction-related deaths lay within the eastern riverside area. There only twenty-two of the 100 fatal strikings (22.0 per cent) could be assigned to construction. Among that low number, however, it is probable that several were associated with shipbuilding accidents rather than house building — thirteen of the group were killed by falling timber. Overall those struck by timber, bricks, scaffolding and other objects in a construction context comprised just over a third of the total number of striking fatalities, 240 individuals or 34.5 per cent.

[196] *BofM* 13 December 1692.

Section 3.7 Killed by vehicles

Land transport was a hazardous yet necessarily widespread activity across both the built-up and more open extents of the metropolis. Every working day in the late seventeenth century as many as two-thousand carts, coaches, drays, and waggons made their way through London's crowded streets.[197] Their generally slow moving nature — even the faster coaches found negotiating the thronging London streets a hindrance to speed — meant they were probably involved in relatively few accidents, however when such events occured the resultant injuries could be severe. Early modern carts and coaches were of heavy timber construction often pulled by large horses. Carters and carriers vehicles were also often heavily loaded, brewer's drays and woodmonger's carts could, for example, weigh between one and two tons when fully loaded.[198] Consequently, a range of trauma injuries were associated with vehicle accidents, chief amongst those were broken and crushed limbs and skulls, the severing of limbs, and fatal bruising, most notably of shoulders, chests and abdomens. As previously stated early modern medicine could deal well enough with simple broken bones and dislocations, however, treatment for severely crushed limbs usually involved life-threatening amputations. The treatment of serious internal injuries was once again restricted to bleeding, purging (sometimes through the creation of artificial fistulas) and binding. Whatever the resultant injury between 1654 and 1735 vehicle-related accidents were responsible for the deaths of 669 Londoners, see Table 3.10.

The circumstances of vehicle related fatalities

By far the greatest number of vehicle-related deaths (406 or 60.7 per cent) was associated with the ubiquitous cart, the owners of which found almost unending employment in moving goods and materials from quays to warehouse, from field to market and from shop to home (Table 3.10). Many children and older people fell victim to cart related accidents. Such individuals were likely to have a poorer ability to judge the distance and speed of moving vehicles which, if associated with poor mobility, made avoidance more difficult.

Those Londoners killed by carts ranged, particularly in age, from 'Francis Papworth an infant killed with a cart' at St Giles Cripplegate in April 1668 and 'Ann Hugget, [a] child killed by a cart' in the more rural surroundings of Hackney in June 1712, to 'Margaret Hall, pensioner, killed by a cart wheel' in August 1718 and 'William Billip, aged 70, killed accidentally by a cart' during July 1734 both in St Giles Cripplegate.[199] The occurrence of

[197] Spence, *London in the 1690s*, pp.31–37.

[198] Gerhold, D., *Road transport before the railways: Russell's London Flying Waggons*, (Cambridge, 1993), pp.26–30; Jackson, W. T., *Development of transport in modern England*, 3rd edn. (London, 1966), pp.60, 103, 223–224; Albert, W., *The turnpike road system in England, 1663–1840*, (Cambridge, 1972), p.133.

[199] GL, Mss.6419/8, 480/1, 6419/14, 6419/13; *BofM* 14 April 1668, 5 August 1718, 9 July 1734.

Londoners displaying such high or low ages among those killed by carts is notable, however even the more youthful, and presumably more agile, members of London's community were not immune from such accidents. For example in early June 1708 'Thomas Griffen, a boy about 16 years of age [was] killed by a cart wheel'.[200]

TABLE 3.10
Vehicle-related fatalities by vehicle type in metropolitan London, 1654–1735

Vehicle	Number	%
Cart	406	60.7
Coach	135	20.2
Dray	75	11.2
Waggon	37	5.5
Other vehicles	16	2.4
Total	669	100.0

Source: Weekly *Bills of Mortality*

The actual cause of death, in terms of injuries sustained, is occasionally noted by the *Bills of Mortality* or within parish burial registers. In the register of St George the Martyr in Southwark, for example, in August 1684 'Thomazin Grout, Widow pentioner' was said to have been 'killed by a cart run over her head'.[201] On another occasion to the east of the City in Whitechapel 'William Shipperman, boy, [was] killed by a bruise with a cart', and buried on 19 June 1689.[202] Newspapers also took delight in graphically reporting such deaths; on Monday 23 March 1730 the *Daily Courant* reported that 'On Friday morning a poor man in crossing the way on Bread Street Hill, when a cart was going by, fell down, and the cart wheel going over his head, he died instantly.'[203]

Those who spent a prolonged amount of time on the streets of London were most often placed in peril by the movement of carts. In the parish of Cripplegate in early September 1686 Richard Dickson was fatally injured by a cart, Dickson was a tinker an occupation that undoubtedly kept him on the streets for many hours of the day and so in constant proximity to vehicles of all sorts.[204] The poor also figure frequently as cart accident victims, such as the nameless 'poor woman accidentally killed by a cart' in the parish of St Peter Cornhill in October 1727, or Sarah Driver 'a poor woman killed by a cart in Lime Street' in early December 1750.[205]

[200] GL, Ms.6419/13; *BofM* 1 June 1708 (St Giles Cripplegate).
[201] LMA, P92/GEO/141; *BofM* 19 August 1684.
[202] LMA, P93/MRY1/59; *BofM* 18 June 1689.
[203] *BofM* for the week beginning 17 March 1730 records an individual 'killed by a cart' at St Nicholas Olave, the parish immediately south of St Mildred Bread Street.
[204] GL, Ms.6419/10; *BofM* 31 August 1686.
[205] HS4, p.130; *BofM* 31 October 1727; HS3, p.317.

It is not surprising to find those who spent their days working directly with carts occasionally became their victims. In April 1668, 'George Elliot, a carman, [was] killed between two carts' near Aldgate, while another carter named Thomas Sheapherd was unfortunately 'killed with his own cart' in the parish of St Dionis Backchurch during October 1681.[206] Others were killed by falling from carts, such as 'John Davis, a man from the Towns End, killed by a fall from a cart' in June 1704 and buried at St Mary Whitechapel, or 'William Harris, a youth, killed by a fall from a cart' at St George the Martyr in Southwark in 1693.[207] Newspapers also took an interest in the specific injuries received by those who fell from carts; for example in 1732 the *Gentleman's Magazine* reported that on '27 April, One Crane [was] flung off a cart near Edmonton, and kill'd on the spot, the wheel running over his breast.' The following item from the *Daily Courant* published on 23 April 1730 describes in great clarity the dangers that faced the unwary carman:

> Yesterday in the afternoon a carman sitting upon the cops of his cart coming up from the Keys, happening to turn short, was by a sudden jolt thrown off his cart, and the wheel of the cart bruised the right side of his body in such a terrible manner that his life is despaired of.

The second most dangerous vehicle on London's streets was the coach — private, stage or Hackney — which claimed the lives of 135 individuals. While coaches may have been somewhat lighter than heavily laden carts, when the conditions allowed they could move at higher speeds and thus manifested an additional form of hazard for pedestrians. Again children and the aged figure among those killed by coaches, for example; 'Jospeh Marlow a ch[ild] killed by a coach wheel' at Whitechapel in May 1707, 'Martha Howson a child killed by a coach wheel' in the parish of Holy Trinity the Less in May 1712, and 'Elizabeth Langley an ancient widow, killed by a coach' at Hackney in August 1717.[208] As noted the increased potential for coaches to travel at higher speeds could directly lead to accidents, especially overturning. The nature of coaches as transports of people meant that such incidents often resulted in injuries or deaths. One such occurrence was recorded by Samuel Pepys in 1669:

> Up and with W. Hewer by hackney-coach to Whitehall, where the King and Duke of York is gone by 3 in the morning and had the misfortune to be overset with the Duke of York, the Duke of Monmouth, and the Prince, at the King's-gate in Holborn; and the King all dirty, but no hurt. How it came to pass I know not, but only it was dark and the torches did not, they say, light the coach as they should do.[209]

A more serious incident, but with an apparently similar root-cause, was reported by the *Daily Courant* on 12 January 1730:

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[206] *BofM* 16 April 1667; GL, Ms. 9224; *BofM* 18 October 1681; HS3, p.248.
[207] LMA, P93/MRY1/59, P92/GEO/142; *BofM* 20 June 1704, 16 May 1693.
[208] LMA, P93/MRY1/59; GL, Mss.9156, 480/1; *BofM* 13 May 1707, 6 August 1717.
[209] *Pepys*, 8 March 1669.

> In the Great Fog that was on Tuesday evening last, a gentleman's coachman driving his master, mistress, a child and its nurse to their house in Chelsea, by the thickness of the said fog mistook the road, and one of the coach wheels going into a ditch, overturned the coach; by which Accident one of the Nurse's arms was broke, and the gentleman and his wife much bruised.

The *Bills* also refer to overturning coaches as a cause of death. Such fatalities occurred in the parish of St Martin Orgar in July 1655, in St Dunstan Stepney in July 1687, on Tower Hill in August 1722, at Wapping in June 1730, and in the parish of Allhallows Barking in November 1733.[210] Both the driving position and the practice of passengers riding on the top of coaches made falling from such vehicles a particularly hazardous event. The *Bills* record thirty such fatalities, some were passengers or servants, like the individual who died after a 'fall from behind a coach' at Ludgate in 1685, or the person lethally 'bruised by a fall from behind a coach' at St Dunstan Stepney in April 1716.[211] Others were more likely to have been coachmen, such as the faller from a coach-box at Staines Bridge who was buried at Christ Church London in June 1699, or more convincingly the coachman who fell 'out of his coach box' at St Andrew Holborn in December 1703.[212]

Drays and waggons were fewer in number than carts and coaches and were consequently implicated in fewer accidents. Both types of vehicles were, however, heavy and cumbersome to manoeuvre, especially in the more crowded and narrow streets of the City. Drays caused seventy-five deaths between 1654 and 1735. A brewer's dray killed 'William Medcalf, a man from the work house' at Whitechapel in 1731, while 'Robert Reynolds, son of Mr Reynolds brewer, [was] killed by a dray' in the parish of St Giles Cripplegate in April 1681.[213] Waggons caused only thirty-seven deaths probably because they were exceptionally slow moving and their metropolitan activities were restricted to accessing or egressing the city inns at the terminal points of their long distance journeys. Nonetheless, waggons with loads weighing up to forty hundredweight (approximately two metric tons) and pulled by a team of six or even eight relatively large, shire-type, horses were clearly formidable vehicles. The team of horses were usually harnessed in a line or 'at length' and were commonly driven by an out-rider positioned near the front.[214] Stopping such a vehicle urgently or even being aware of a potential accident toward the rear would have challenged the best of waggoners. Among those killed by such vehicles were, 'Alice Wilkins, daughter of Henry Wilkins carpenter, accidentally killed by a waggon' in St Giles Cripplegate in 1684, and perhaps

[210] *BofM* 17 July 1655, 19 July 1687, 21 August 1722, 30 June 1730, 20 November 1733; *The Post Boy* 23 August 1722 (Francis Drury, Hackney-coachman).

[211] *BofM* 11 August 1685, 24 April 1716.

[212] *BofM* 6 June 1699, 14 December 1703.

[213] LMA, P93/MRY1/61; GL, Ms.6419/10; *BofM*, 5 April 1681, 14 September 1731; OBP, 13 October 1731, John Farren (ref. t17311013-48). William Metcalf was a lame man whose walking stick was broken by John Farren's dray as it passed him causing him to fall beneath the rear wheel which resulted in a broken thigh of which he later died. The jury returned a verdict of chance medley; this was the last time an Old Bailey jury would routinely deliver such a verdict.

[214] Gerhold, *Road transport*, p. 29; Albert, *The turnpike road system*, p.133.

more surprisingly and hence the subject of a coroner's inquest 'John Ross, waggoner, killed by his waggon at Kingsland turnpike' in Hackney just before Christmas 1733.[215] Finally the circumstances of some vehicle deaths were more obscure, certainly with regard to the type of vehicle involved. In April 1705, for example, an individual was 'killed by the shafts of a carr' at St Mary Battersea, and buried in Whitechapel, while in May 1713 another was killed by becoming 'hanked in the leading string' of a horse-drawn vehicle in Bermondsey.[216]

Those who owned or operated vehicles no doubt viewed pedestrians collisions with some trepidation, especially given the potentially punitive effects of deodand, let alone a possible charge of manslaughter, or even murder. Some recorded events may reflect such fears. In June 1747 William Crow was taken up dead 'from the road side [in Whitechapel aged] 3 $^{3}/_{12}$ [killed by an] accident'. On this occasion, with such a young victim, it is possible that the vehicle driver was unaware of the accident. In an incident more suggestive of a hit-and-run event 'Thomas Tucker a man [...] from Towns End [... was] killed by an unknown accident' in Whitechapel, the *Bills* in particular note that he 'died of a hurt received on the road occasion unknown'.[217]

Seasonality

Between 1654 and 1735 the *Bills* report a total of 669 vehicle-related deaths, equating to an averaged incidence of 0.74 per month across the study period (see Fig. 3.13). Most vehicle accidents occurred between April and August, with a peak of seventy-four in the month of June. While March, September and October all had vehicle accident counts near the overall monthly mean of 55.7 the winter months of November through February had a much lower incidence; February recording only thirty-eight fatalities. This seasonal pattern suggests that the bad weather of winter did not cause more frequent accidents, the reverse evidently being the case. It is therefore likely that the associated poor road conditions acted to reduce the opportunity for accidents by physically preventing vehicles taking to the roads and encouraging pedestrians to stay indoors. The pattern also supports the contention that the majority of accidents involving vehicles were likely to have occurred during daylight, most carts being operated only during the working day, which was of course longer during the summer months. Nonetheless coaches, especially Hackneys, were active during the hours of darkness and as noted above were prone to accidents at such times.

[215] GL, Mss.6419/10, 480/1; *BofM* 22 April 1684. Henry Wilkins lived in Grub Street a neighbourhood that was often busy with vehicles of all descriptions; Marsh, *Records of the Worshipful Company of Carpenters*, p.143.
[216] *BofM*, 3 April 1705, 26 May 1713.
[217] LMA, P93/MRY1/61; *BofM* 7 September 1725.

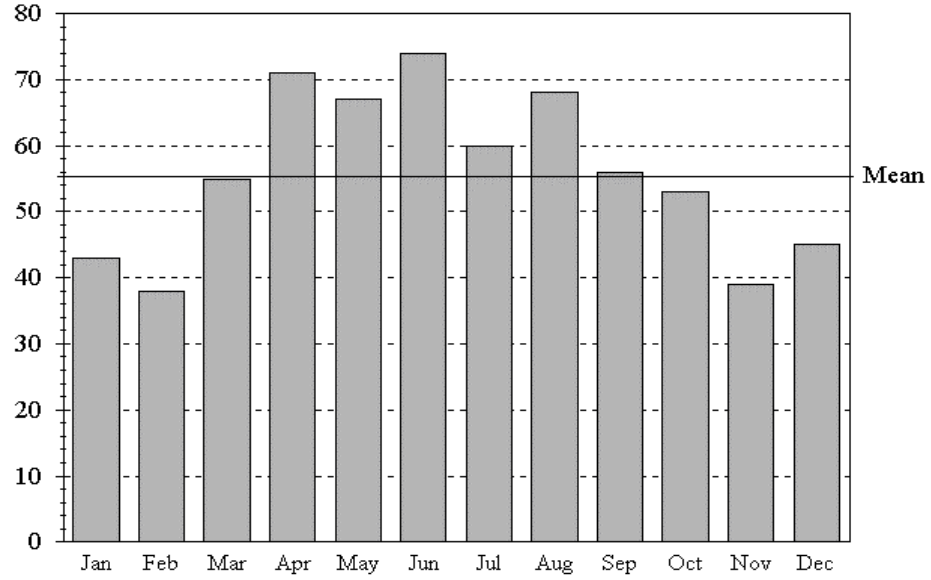

FIG. 3.13 Seasonality of vehicle-related fatalities in metropolitan London, 1654–1735 (Showing total fatalities per month)

Source: Weekly *Bills of Mortality*

When broken down by vehicle type, as shown in Table 3.11, further detail in the seasonal pattern is evident. Accidents involving carts occurred in a relatively similar monthly distribution to that of all vehicle accidents, peaking in June with 12.8 per cent of all vehicle fatalities. May, June, August and October all had a frequency of cart related-accidents higher than the proportion for all vehicle accidents during those months. July and September were marginally lower, while the lowest incidence of cart accidents was between November (5.2 per cent) and April. Thus cart-related fatalities were focused upon the summer months, during which urban roads were in their best condition and trade was at its busiest.

Unlike cart activity it would seem that coach use was fairly evenly spread throughout the metropolitan year with as much traffic in winter as summer. Nonetheless, it is notable that the month with the highest proportion of coach-related fatalities was December (11.9 per cent). This figure may in part be a result of more difficult road conditions and poorer visibility brought about by winter weather. During the months of November through to March the occurrence of coach accidents were consistently higher than for all vehicle accidents and thus in sharp contrast to the pattern established for carts. Those two patterns for vehicle fatalities, if they reflect degrees of vehicle usage, suggest a divergence in activity based upon a summer seasonal focus for the movement of goods and a steady all-year-round trade in the transport of people.

TABLE 3.11
Seasonality of vehicle-related fatalities by vehicle type in metropolitan London, 1654–1735

Month	All fatalities		Carts		Coaches	
	Number	%	Number	%	Number	%
January	43	6.4	25	6.2	12	8.9
February	38	5.7	22	5.4	8	6.0
March	55	8.2	30	7.4	12	8.9
April	71	10.6	40	9.9	12	8.9
May	67	10.0	41	10.1	12	8.9
June	74	11.1	52	12.8	11	8.1
July	60	9.0	33	8.1	15	11.1
August	68	10.2	48	11.8	11	8.1
September	56	8.4	32	7.9	11	8.1
October	53	7.9	39	9.6	4	3.0
November	39	5.8	21	5.2	11	8.1
December	45	6.7	23	5.7	16	11.9
Total	669	100.0	406	100.0	135	100.0

Source: Weekly *Bills of Mortality*

Geographical patterns

The greatest number of vehicle accidents occurred in the West End (131), though if compared with the large population of that area this is not particularly remarkable, (see Table 3.12). The City without the Walls displayed the largest disparity between estimated population and frequency of vehicle fatality; there 13.2 per cent of the metropolitan population was exposed to 16.1 per cent of such events. That frequent accidents took place in that area undoubtedly resulted from an increased number of vehicles operating on narrow poorly maintained streets and the great density of population resident in that district.[218] The population to experience the least exposure to vehicle accidents was that of the eastern riverside parishes. The built-up parts of that district clung to the banks of the Thames, consequently the river was more frequently utilised for transport purposes than the inland roads. This inference was supported somewhat by noting that fifty-one of the sixty-nine accidents to take place in that area occurred in St Dunstan Stepney, a parish possessing a proportionally short length of river-frontage.

[218] See Spence, *London in the 1690s*, pp.45–48.

Table 3.12
Geographical distribution of vehicle-related fatalities in metropolitan London, 1654–1735

Metropolitan areas	All fatalities Number	%	Estimated Population %	Cart related fatalities Number	%[1]	Coach related fatalities Number	%[1]
City within the Walls	112	16.7	16.6	73	65.2	18	16.1
City without the Walls	108	16.1	13.2	64	59.3	20	18.5
Westminster	38	5.7	4.4	21	55.3	11	29.0
West End	131	19.6	18.8	57	43.5	54	41.2
Northern parishes	50	7.5	7.2	24	48.0	14	28.0
Eastern parishes	49	7.3	8.7	37	75.5	4	8.2
Eastern riverside parishes	69	10.3	13.0	47	11.6	5	7.3
Middlesex within the Bills	30	4.5	3.4	21	70.0	4	13.3
Surrey within the Bills	82	12.3	14.7	62	75.6	5	6.1
Total	669	100.0	100.0	406	[60.7]	135	[20.2]

Notes: 1. Cart and coach fatalities as a percentage of all vehicle fatalities reported for each area.

Source: Weekly *Bills of Mortality*

When broken down by vehicle type the relationship between the character of areas and the type of vehicles which appear to have operated within them becomes apparent, especially so in the case of carts and coaches, (see Table 3.12). Cart-related incidents predominated in those parishes south of the Thames, where they accounted for 75.6 per cent of all vehicle fatalities. While other equally rural parts of the metropolis, that is the Middlesex parishes within the Bills and the eastern parishes, had very similar proportions of cart accidents, the City within the Walls was the only built-up area to have a level higher than the London-wide figure of 60.7 per cent; carts were cited in 65.2 per cent of vehicle accidents in that area. Just over half of those incidents were noted in river-front parishes, suggesting links with the almost unceasing activity of transporting goods from quayside to the City's interior.

In the case of accidents involving coaches it was the more urban and generally less commercial neighbourhoods that were the focus for such incidents. Coaches were involved in just over a fifth (20.2 per cent) of all vehicle accidents but in the West End that proportion was more than doubled at 41.2 per cent. Other areas with a relatively high occurrence of coach-related accidents were Westminster and the northern parishes, areas which adjoined the West End. It is likely that there was an intensification of private coaches in those areas given its concentration of aristocratic and gentry residents. Furthermore the increase in leisure activities during the hours of evening or night in the western metropolis undoubtedly drew Hackney-coaches into the district at a time of day conducive to vehicle accidents. Those areas with lower levels of coach accidents were the more rural and poorer neighbourhoods to the east of the City and especially south of the Thames.

Accidents involving drays and waggons, though low in overall numbers, also demonstrate some degree of geographic clustering. Across London drays were implicated in 11.2 per cent of all vehicle accidents, yet in the eastern riverside parishes they accounted for 18.8 per cent of accidents. Two other areas had a noticeably high occurrence of dray-related accidents; Westminster and the City without the Walls at 15.8 and 13.0 per cent respectively. Levels probably related to the increased incidence of brewing establishments in those districts, especially east of the Tower. Waggons were the cited in 5.5 per cent of all London vehicle-related fatalities. While most areas deviated little from this value, within the range 4.4–6.1 per cent, two districts had notably high figures. Waggon-related deaths comprised 12.0 per cent of all accidents in the northern parishes, and 10.0 per cent in Middlesex within the Bills. Those areas were traversed by substantial post-roads, later turnpikes, heading to the north and west of the country. It is likely that it was the conjunction of open road and urbanized area on the northern fringes of the metropolis that fostered an increase in reported accidents. It is significant that Westminster, with no post-roads, reported no waggon fatalities.

Section 3.8 Killed by animals

Animals within the early modern urban environment fell into two major categories, those used for transport and those brought to the city's markets as livestock. The cosmopolitan nature of London meant that a smaller third group of animals were also present, mainly for the purposes of recreation or security; cats, dogs, bears and more exotic species were all to be found at one time or another.

Horses supplied the primary means of motive power for land transport during the early modern period; either in association with vehicles, or when used by singleton riders.[219] London had very many such animals; a military census of horses within the area of the Bills of Mortality taken in 1722 computed a population of at least 23,000, or one horse for every twenty-four Londoners.[220] Yet access to horses, especially for riding, was relatively restricted. Wealth or status was the primary key to equestrian activity, though many petty-dealers and small-scale merchants also resorted to riding as part of their occupational activities. Even if the opportunity to ride was somewhat restricted coming into contact with horses as a pedestrian or bystander must have been a very frequent event in the crowded streets of the metropolis. Consequently the injuries associated with such animals were of two principal types; falling injuries suffered by riders and striking or crushing injuries suffered by pedestrians. In both cases minor injuries, including broken bones and fractures, were often

[219] See above, section 3.7, for accidents involving horse-drawn vehicles.

[220] Maitland, W., *The history and survey of London: from its foundation to the present time*, (London, 1760), pp.532–534.

successfully rehabilitated. The contemporary prognosis for head injuries was often less hopeful. Severe head injuries received following a fall from a horse, or by being kicked, were likely to lay behind a majority of those fatalities noted simply in the *Bills of Mortality* as having been 'killed by a horse'.

A much smaller proportion of animals of other species took lives. Chief amongst these were cattle that were, as noted above, herded to the markets and butchers of the metropolis 'on-the-hoof' by drovers. The numbers brought to London varied from year to year; however around 1700 some 88,000 were estimated to have passed annually through the London markets.[221] In this case it was the drovers themselves and the pedestrians they passed who were most at risk. The injuries suffered by those killed by cattle ranged from crushing injuries caused by trampling to wounds occasioned by being gored. Among other animals that caused deaths dogs, which were present in large numbers across the urban area, were significant. Most died as a result of being bitten or savaged. Injuries that resulted from such attacks, even if limited in extent, might easily become infected leading to a delayed, yet clearly associated, death. The medical response to dog-bites was similar to that applied to of other types of cutting injuries; though recourse was also made to specialised wound dressings.[222] The frequent use of the term 'mad-dog' in fatality reports suggests both contemporary fears of uncontrolled or 'disorderly' animals and a cultural, if not medical, characterisation of such wounds as polluted. The projects to eliminate stray dogs from the streets of London and elsewhere in response to the threat of plague during the sixteenth and seventeenth centuries were often founded upon such beliefs.[223]

The circumstances of those fatalities caused by animals

Between 1654–1735 the *Bills of Mortality* report 406 Londoners killed by a variety of animals from horses and oxen to dogs and bears. In many cases there is little more in the reports other than an indication of the particular type of animal, however some include other comments such as 'kicked', 'gored', 'fall', or 'bitten'. It is therefore possible to group these deaths according to the animal involved, and to a lesser extent by the kind of injury received.

Horses were cited as responsible for the deaths of 361 people; 264 of those reports provide further detail. It is evident that horses, unlike vehicles, were more of a danger to their riders than to pedestrians; 164 people died as a result of falls from horses, yet only 100 were killed by being kicked. A difference indicative of the inherent danger of equestrian activity in

[221] Chartres, J., 'Food consumption and internal trade', in Beier, A.L., and Finlay, R. (eds), *The making of the metropolis: London 1500–1700* (Harlow, 1986), pp.182–183.

[222] For example see, Bradwell, *Helps for suddain accidents*, pp.53–75; Hawes, *Poore-mans plaster-box*, p.7.

[223] See Jenner, M., 'The Great Dog Massacre', in Naphy and Roberts, *Fear in early modern society*, pp.44–61.

the potentially noisy and turbulent circumstances of a town, as an example from March 1731 graphically illustrates; 'A wholesale button-maker in King Street, was flung from his horse in the road near the Artillery wall by a cart, whereby his thigh was broke, and he died immediately'.[224] While the *Bills* rarely extend their descriptions beyond indicating a 'fall' or a 'kick' parochial burial registers often include additional evidence.

Male or female, rich or poor, young or old, all were at risk when they mounted a horse. In February 1656 John Coleman demonstrated how significant a poor landing could be when he died after he 'fell of[f] a horse into a pitt' at St John Clerkenwell.[225] As noted women riders were equally at risk of falling; on 11 October 1669 'Anna Sophia Ward [was] killed by a fall from a horse' while riding in the parish of St Botolph Aldersgate.[226] Gentlemen and others of rank also died while riding, as was the case when 'Samuel Sande [?Rand] a Gentleman in Rules Alley at Anchor Ally Corner, [was] Accidentally killed by a fall from a horse', in the summer of 1712.[227] While many who rode horses did so as a privilege of their status the structure of early modern households frequently brought servants into contact with horses. Two instances of servants meeting injury and death in riding accidents serve as examples: In 1691 'Richard Bird, a servant, [was] killed by a fall from a horse' in the parish of St George the Martyr, while on 18 February 1715 'Robert Patefield, foot boy to Mr Dawsonne Esq., [was] killed by a fall from his master's horse on Hackney Downs'.[228]

The association between horse-related accidents and travel is apparent in the number of 'strangers' noted within parish burial registers who died by falling from their mounts. For example, in 1673 'William Greene a stranger [was] killed by the fall of a horse in this parish'; St Dionis Backchurch.[229] In another similar incident 'Christopher Liell a stranger [was] accidentally killed by a fall from a horse'. This incident, in March 1707, was reported as having occurred in the Hamlet of Mile End Old Town possibly on the busy Whitechapel Road as the register entry and the relevant *Bill of Mortality* indicate burial in the nearby parish of St John Wapping, which prior to 1694 was a constituent part of the parish of St Mary Whitechapel.[230] A number of entries in the *Bills* record falls from horses that occurred beyond the area circumscribed by 'The Bills'. In July 1702 a man died after a 'fall from his horse at Hampton in Middlesex' yet was returned to London for subsequent burial

[224] *Gent's Mag* [30] March 1731. See *BofM* 16 March 1731, which refers to a death caused by a broken thigh; however no mention is made of a fall from a horse or location given.

[225] HS17, p.307.

[226] GL, Ms.3854/1.

[227] LMA P92/GEO/143 (21 June 1712), P92/GEO/142 refers to 'Samuel Rand a gentleman, accidentally killed by a fall from a horse'; *BofM* 17 June 1712 (St George the Martyr).

[228] GL, Ms.480/1, *BofM* 15 February 1715; LMA P92/GEO/142, see *BofM* for either 12 or 26 May 1691.

[229] HS3, p.240; *BofM* 9 December 1673.

[230] LMA P93/JN2/23. *BofM* 25 March 1707.

in the parish of St Stephen Walbrook.[231] Other extra-mural locations for similar accidents were; Hayes, Gaddesden Magna in Hertfordshire, Barnes in Surrey, Wandsworth, Tottenham, and in one instance simply 'in the country'. In each case the dead or dying individual was conveyed to London for eventual burial.[232]

Two groups of people were in danger of receiving kicks from horses; pedestrian bystanders in the streets and yards of the city, and those whose daily work brought them into contact with the animals. Fast-moving horses could be a particular danger to pedestrians with injurious collisions often resulting. One such incident in Whitechapel during January 1743 resulted in a fatality, the burial register reads, 'Sarah Kirkham, a woman, killed in the road by a horse running over her [aged] 36 [years]'.[233] Those who spent their lives on the streets might find themselves especially at risk as demonstrated by the death of 'William Warden, [a] Beggar, killed by a horse' in the parish of St Giles Cripplegate in November 1671.[234] Children, with limited abilities at judging distance and speed, and less experience of the dangers associated with horses were also at risk. In Whitechapel in August 1723 'Anne Funstone, a child, [was] killed by a horse at the Town's End'.[235] In another incident in the same parish 'Thomas Lovelace, a child from Cathering Wheel Alley, poor, [aged] 8 ¾ [years, was] kicked by a horse' died instantly and was buried on 6 August 1746. Together with other boys Thomas had been 'running after a horse in Stepney Fields' when the horse kicked him in the head.[236] Children were also at risk in industrial contexts as demonstrated by the following entry in the St John Hackney burial register, '26 September 1677, Mary Bradley, a girl killed by [the kick of] a mill horse'.[237]

London's stables, inns and coach-houses supplied employment for many yet those same environments often brought worker and horse together in confined or crowded circumstances. A situation possibly associated with the death of 'George Hall, hostler, killed accidentally by the kick of a horse', in St Giles Cripplegate in September 1708.[238] In 1705 Daniel Duckworth was 'killed with a [fall from a] horse', buried at St Katherine Coleman, his employment is not stated in the register however the 1692 poll tax return reveals Duckworth as an inn-holder resident in Helmet Court in Bishopsgate Ward Within.[239]

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[231] *BofM* 14 July 1702.
[232] *BofM* 3 August 1703, 21 August 1705, 26 April 1715, 4 June 1723, 6 August 1728, 3 September 1706.
[233] LMA P93/MRY1/61.
[234] GL, Ms.6419/8; *BofM* 14 November 1671.
[235] LMA P93/MRY1/61; *BofM* 30 July 1723.
[236] LMA P93/MRY1/62; *General London Evening Mercury*, 2 August 1746.
[237] GL, Ms.480/1; BofM 25 September 1677.
[238] GL, Ms.6419/13; *BofM* 14 September 1708
[239] GL, Ms.17,833; *BofM* 24 April 1705; CLRO Ms.32/26.

Cattle posed a lesser threat to Londoners; such animals were principally driven along the main roads from the north and east directly into the markets of the city, thus avoiding most of the smaller urban streets. The major cattle market was at Smithfield to the north-west of the City, but some animals found their way into other meat markets or took alternative routes through the metropolis thus exposing a higher number of Londoners to hazard. In one particularly unfortunate incident in 1675 an individual was 'killed by an ox and a horse'; a notably dramatic event for the city-centre parish of St Margaret Lothbury.[240] Overall twenty-two individuals were killed by cattle, including; eleven by oxen, five by bullocks, four by bulls and two by cows. In 1706, for example, 'Thomas Batchelour from Willotre Alley [in Wapping was] killed by an ox.'[241] Areas to the east of City were often employed for fattening cattle before they progressed to market and such activity may lie at the root of this fatality. On another occasion it is likely that an animal driven to market may have become disorientated in the bustling city streets and so uncontrollable. The event was retold in the pages of *The Gentleman's Magazine*, 'An ox gored a man in Cheapside in a terrible manner, one of his thighs being broke short; of which he died in about 4 hours.'[242] The terror urban dwellers associated with uncontrolled animals is apparent in the use of the term 'mad' found in three of the eleven reports of deaths caused by oxen.

As noted above another animal frequently referred to as 'mad' was the dog. Seven of the seventeen deaths caused by dogs were partly explained by using the term, though it is interesting to note that from 1728 the term becomes a constant element in reports of dog attacks. This may suggest an increasing notion of disorderly animals constituting a threat to the regularity of the increasingly modern metropolis. Of note among reports in the *Bills* are 'a women killed by her own dog and bitch' in Southwark in 1673, and an infant 'smothered in a cradle by a dog' during the winter of 1698.[243] Whilst it might be assumed that children would be among the reported victims of dog attacks the *Bills* provide no specific evidence to support the view. Indeed the only burial register to provide descriptive information on a dog attack refers to an adult; 'Ann Jarmer [?German], a woman, killed by a dog' in the parish of St Giles without Cripplegate in May 1739. Ann was attacked late in the evening by a large mastiff dog as she went to fetch water in the Artillery Ground. The dog belonged to the owner of a nearby livery-stable; the animal was usually chained but on this occasion got free. Although rescuers came quickly to her aid, killing the dog, it was too late to save her life.[244] On the other hand Samuel Pepys recorded in 1662 that, 'I did also hear how the woman

[240] *BofM* 3 August 1675.
[241] LMA P93/JN2/23; *BofM* 2 April 1706.
[242] *Gent's Mag* [26] February 1731.
[243] *BofM* 21 January 1673 [St Olave], 4 January 1698 [St Katherine Coleman].
[244] GL, Ms.6419/17; *Daily Gazetteer*, 22 May 1739; *Daily Post*, 22 May 1739; *London Daily Post and General Advertiser*, 22 May 1739.

formerly nurse to Mrs. Lemon (Sir W Batten's daughter) her child was torn to pieces by two dogs at Walthamstow this week, and is dead – which is very strange.'[245]

Even stranger were those occasional deaths caused by unexpected or exotic animal species. Two types of cats caused deaths, in the first a person was reported to have 'died by the bite of a cat' — in all probability a domestic animal — in the parish of St Dunstan in the West during September 1730.[246] The second incident was however much more unusual, in April 1713 the *Bills* reported that an individual had been 'killed on shipboard by a tyger', the vessel was noted to have been at Rotherhithe at the time of the attack while the casualty, possibly a local, was buried in the parish of St Mary Magdelane Bermondsey. The 'tyger', and a lion, were gifts from the Emperor of Morocco and were destined for the Royal Menagerie at the nearby Tower of London.[247] Another unusual, if not truly exotic, species was the bear. Bears were responsible for two deaths reported by the *Bills*. In September 1665 in the parish of St Saviour Southwark a person was 'killed by a bear', an incident possibly associated with the Southbank tradition of bear and bull baiting. The second death occurred away from that area in the district of Clerkenwell, it is possible that the person killed there in September 1709 may have been attacked by a performing or 'dancing' bear.[248] Of course not all bear attacks were fatal as this report from the *Daily Courant* indicates:

> On Tuesday night last an apprentice of Mr Palmer, a hat dyer near the Maze Pond, going along Tooley Street, with a basket of hats on his back, another person passing by leading a bear unmuzzled, the bear laid hold of the calf of his leg and tore it quite off.[249]

While the streets of the metropolis were not the usual venue for large numbers of animals — aside from horses — those that there were clearly posed a risk to which many Londoners were exposed, even if relatively few became fatalities.

Seasonality

The presence of horses and other animals on the streets of London may well have been influenced by the time of year. During the winter months many roads across the region were difficult to negotiate hence opportunities for movement — especially longer distance travel — were often restricted. Such difficulties would have reduced the number of horses to be found on the roads, though those that were probably faced a greater risk of stumbling or falling than at other times of year. Using horses to ford rivers must have been a significantly more dangerous exercise in the autumn and winter months than at other seasons, as rivers

[245] *Pepys*, 25 September 1662.
[246] *BofM* 8 September 1730.
[247] *BofM* 21 April 1713; *The Post Boy*, 30 April 1713.
[248] *BofM* 18 September 1655, 20 September 1709.
[249] *Daily Courant*, 14 March 1730.

became swollen with increased rainfall. This was possibly the explanation for the death of Samuel Pepys's friend Robert Bowyer in February 1664:

> This day to Westminster-hall, W. Bowyer told me that his father is dead lately and died by being drowned in the River [probably the Thames near his home at Huntsmore, Buckinghamshire], coming over in the night; but he says he had not been drinking. He was take with his stick in his hand and cloak over his shoulder, as ruddy as before he died. His horse was taken overnight in the water, hampered in the bridle; but they were so silly as not to look for his master till the next morning that he was found drowned.[250]

If there were fewer horses on the roads then there was also less livestock. On the whole cattle were not maintained in large numbers within the metropolitan area during the winter months and the activity of city markets saw a seasonal fall-off. In addition to the limited number of animals on the streets the number of pedestrians was also reduced, thus the opportunity for animal and pedestrian to come into fatal or injurious contact were lessened.

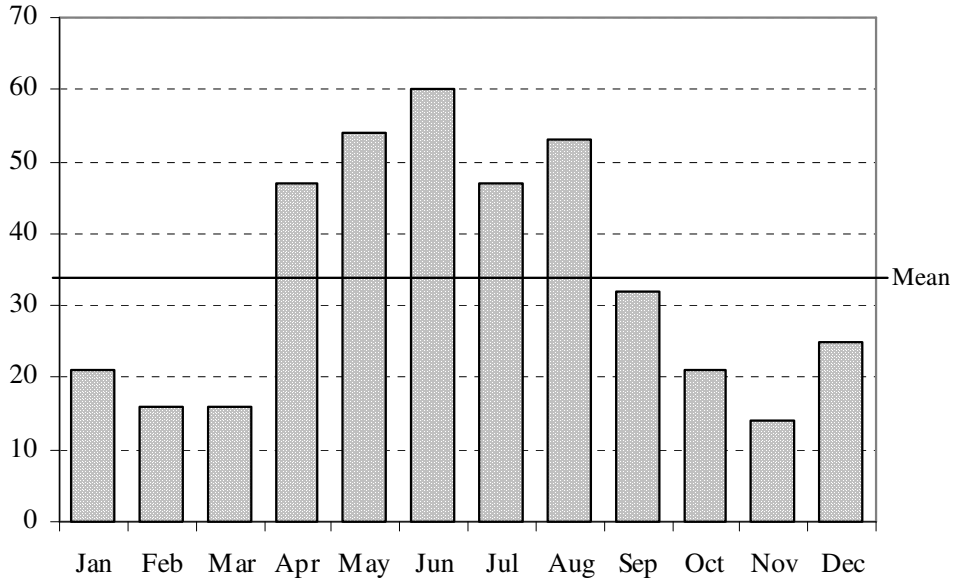

FIG. 3.14 Seasonality of animal-related fatalities in metropolitan London, 1654–1735
(Showing total fatalities per month)

Source: Weekly *Bills of Mortality*

Animal-related fatalities grouped by calendar month are shown in Fig. 3.14. The average incidence for deaths caused by animals was just 0.45 per month. The greatest frequency of animal related deaths occurred during the summer months, from April to September, and suggests that the use of animals, especially horses, was concentrated at that time of year. The month with the lowest incidence of fatalities was November (fourteen). February and March also had a low number of such deaths, each reporting sixteen casualties. The slight rise in fatalities during December and January probably reflect the increased risk of falling in wet or icy conditions. In addition those months included five of the recorded deaths caused by dogs, a significant concentration, possibly indicating that hunger may have provoked some attacks.

[250] *Pepys*, 1 February 1664.

Geographical patterns

The geographical distribution of animal related deaths is shown in Table 3.13. Most areas show little or no variation when compared with population distribution; two areas do however show some variation. The West End experienced 109 animal-related fatal accidents, 27.5 per cent of all deaths, compared to the population share of the area of 18.8 percent the greater occurrence of such deaths was clearly significant. It is likely that the number of horses, and riders, in the West End was higher than elsewhere in the metropolis; in the early 1690s over a quarter of all of London's stables were located within the West End.[251] In addition the area also saw the presence of the Royal Mews, a massive equestrian complex of 279 stables immediately north of Charing Cross.[252] The high concentration of aristocratic and gentry residence in the West End and the easy access from there to the surrounding fields and parkland undoubtedly encouraged the use and maintenance of horses for riding. The significance of horses in these casualty figures is further emphasised by the relative lack of other types of animals associated with deaths in the West End; cattle accounting for only three, though dogs were more notable causing four deaths in that area.

TABLE 3.13
Geographical distribution of animal-related fatalities in metropolitan London, 1654–1735

Metropolitan areas	Animal related fatalities		Estimated Population
	Number	%	%
City within the Walls	70	17.6	16.6
City without the Walls	40	10.1	13.2
Westminster	22	5.6	4.4
West End	109	27.5	18.8
Northern parishes	26	6.6	7.2
Eastern parishes	25	6.3	8.7
Eastern riverside parishes	26	6.6	13.0
Middlesex within the Bills	19	4.8	3.4
Surrey within the Bills	59	14.9	14.7
Total	396[1]	100.0	100.0

Note: 1. Ten reports gave no location, or occurred beyond the limits of the Bills of Mortality.

Source: Weekly *Bills of Mortality*

The area with the lowest relative incidence of animal-related fatalities was the eastern riverside parishes. That area experienced almost half as many deaths as might have been expected given its population; only twenty-six or 6.6 per cent of all such deaths. The limited occasions on which horses were used for movement in an area that relied so heavily on river borne transport clearly having an impact on the casualty rate. The relative poverty of the inhabitants of the district must also have reduced the opportunity to obtain horses to ride; an

[251] See Spence, *London in the 1690s*, pp.36–37, (26.6 per cent).
[252] Colvin, H. (ed.), *The history of the King's Works 1660–1782* (London, 1976), pp. 207–210.

observation supported by the fifteen deaths apparently caused by horse-kicks in this area as opposed to only nine who died by falling from their mounts, a relationship that was the reverse of the more general pattern.

Two factors help to explain broadly the distribution pattern of animal related deaths; first exposure to animals, and second access to horses as a means of personal transport. Thus concentrations of animals in built-up and crowded areas increased the risk of injury or death; although the better regulated environment of the City within the Walls appears to have acted to reduce the risk. Limited access to horses for riding, a factor related to social status, reduced the pool of those exposed to the danger of a horse-related accident. In practical terms this reflected the noticeably greater risk of sustaining a serious injury by falling from a horse rather than being injured as a bystander.

Section 3.9 Burnt

Throughout the early modern period fires were a perennial feature of urban life. London was no different in this respect from any other town or city; though with the Great Fire destroying more than 13,000 buildings in September 1666 the metropolis was notably different in at least one respect. In terms of small scale house fires and domestic burning injuries Londoners were nevertheless exposed to as many hazards as any other town-dweller. Multiple house fires were the most spectacular of all related incidents yet simple, often fatal, burns were caused by a variety of candles, lamps, and cooking fires. Children and women were particularly at risk; children through unsupervised exposure to flames within their reach and women through their fire-related domestic chores, a risk sometimes amplified by the voluminous nature of women's clothing.

Large-scale house fires occurred not infrequently within the metropolis.[253] Most burnt only one or two houses, others went unchecked long enough to destroy several hundred; such as the great fires of Southwark in 1676 and Wapping in 1715, which consumed 624 and 150 buildings respectively.[254] The civic and parochial authorities made efforts to provide fire-buckets, hooks and engines for just such events, though many were poorly maintained only to fail when called upon. The water companies also undertook to install fire-plugs, or hydrants, in their mains and to 'draw the plugs' when fire threatened, activities charged to parish accounts.[255]

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[253] Between 1650–1750 there were twenty-nine major fires in London each destroying ten or more houses; Jones, E.L., Porter, S. and Turner M., *A gazetteer of English urban fire disasters, 1500–1900*, Historical Geography Research Series no. 13, (Norwich, 1984), Table 3.

[254] Jones, et al, *Urban fire disasters*, Table 3.

[255] McMurray, *St Anne Aldersgate churchwardens' accounts 1636–1687*, "Paid Mr. Jenkind, turncock, for drawing the plugs at the fire, 10s.", p.368 (1741-2); Holloway, S., *Courage high! A history of firefighting in London*, (London, 1992), pp.21–26; also see Roberts, P., 'Agencies human

Following the Great Fire of 1666 a number of entrepreneurs began to offer fire insurance. Initially such policies simply guaranteed certain rebuilding costs, but relatively quickly the new insurance companies retained the services of watermen or porters to salvage property from buildings in danger. Those companies later engaged some of the same watermen to solely carryout fire-fighting activities, such individuals becoming known as 'firemen'.[256] Firemen were often placed in considerable danger by their employment and a number found their way into the *Bills of Mortality* having been burnt by the flames they were attempting to extinguish or crushed in the debris of collapsing buildings.

Although the actual cause of death for many fire-related fatalities was often complex the Parish Clerks Company tended to use the simpler and more explicit term 'burnt' within the *Bills*. Consequently the present analysis is based principally upon those reported using that term. (Such an approach precludes confusion with the symptomatic terms 'burning' or 'scalding' related to venereal diseases such as gonorrhoea).[257]

Minor burns could be dealt with by early modern medicine with a reasonable degree of success. The danger of secondary infection aside, the treatments offered encouraged a tolerable level of healing primarily through the cleaning of wounds followed by the application of butter-based ointments.[258] It is likely that many, particularly in domestic situations, suffered minor (non-lethal) burns without ever making recourse to professional medical advice. Serious burns were, however, beyond the capability of early modern medicine. Traumatic shock, dehydration and secondary infections would have made the chances of survival negligible.

The circumstances of fatal burnings

During the period 1654–1735 the *Bills of Mortality* record 383 persons who were killed by being 'burnt'. The vast majority were single isolated incidents, however there were twenty multiple-fatality events ranging from two individuals killed during a fire in Whitechapel in November 1682 to as many as eight at a fire in St James Westminster during July 1704.[259] In an additional incident the *Bills* record twenty deaths associated with a major fire in the City in January 1715, however the causes of death in this case ranged from 'killed' and 'wounded' to 'frighted', with most of the deaths seemingly the result of explosions either accidental or

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and divine: fire in French cities, 1520–1720' in Naphy and Roberts, *Fear in early modern society*, pp.9–27.

[256] Holloway, *Courage high!*, pp.27–30; Davies, E.A., *An account of the formation and early years of the Westminster Fire Office*, (London, 1952), pp.47–52; Henham, B. and Sharp, B., *Badges of extinction: the 18th and 19th century badges of insurance office firemen*, (London, 1989), pp.12–25.

[257] Pelling, M., 'Appearance and reality: barber-surgeons, the body and disease', in Beier and Finlay, *Making of the metropolis*, pp.96-97.

[258] For example see, Bradwell, *Helps for suddain accidents*, pp.120–126; Hawes, *Poore-mans plaster-box*, pp.32–34.

[259] *BofM* 21 November 1682; LMA P93/JN2/23. *BofM*, 4 July 1704; *Daily Courant*, 30 June 1704.

deliberate.[260] The relatively high frequency of fatal burnings appears to have induced parish clerks to generally omit additional information in related entries in the *Bills*, nonetheless parochial documents make reasonably extensive comment on the same or similar deaths, as do metropolitan newspapers.

Domestic burning incidents were frequent; indeed the lack of detail supplied by the *Bills* suggests contemporaries felt they had the character of an almost routine event. Some reports do however provide additional information, for example, some deaths were caused after individuals fell into, what were in most cases probably domestic, fires. Such falls could cause the death of young children or the elderly as the following two examples suggest. In May 1659 the *Bills* report an 'infant [in the parish of St Dunstan Stepney was] burnt by a fall into the fire'.[261] Some years later in early 1692 'Elizabeth Lumber, Widow, [was] accidentally killed by a fall into the fire' in the parish of St Giles Cripplegate.[262] Falling into fires was a particular danger for anyone who might suffer some sort of fit, such as the person who was 'burnt falling into the fire having fits' during January 1705 at Stratford (though they were buried in St Brides) and 'Susanna Thomas, spinster' who was accidentally burnt at Cripplegate in 1714 'in a apoplectick fit'.[263] In yet another similar incident *The Gentlemen's Magazine* records that 'Mrs Goodchild, wife to a linen draper at Charing Cross, being in a fit fell in the fire and was burnt to death. She was two months gone with child.'[264] Others became susceptible to similar dangers when their co-ordination suffered as a consequence of intoxication; in 1672 a women was burnt to death as a result of 'being drunk' in the parish of St Paul Shadwell.[265]

On other occasions clothing could accidentally catch fire leading to sometimes life-threatening injuries. The nature of women's clothing made them particularly vulnerable to such incidents as demonstrated in 1704 when a women was 'accidentally burnt by her own wearing clothes' in the parish of St Olave Southwark.[266] On another occasion, at Wapping in 1718, 'Sarah Fell … daughter of John Fell … [was] scorched and burnt on several parts of her body by the accidental taking fire of her wearing clothes' and was buried following a coroner's inquest.[267] Men could also become victims of similar incidents as one found to his

[260] *BofM* 11, 18 & 25 January, 1 February 1715; *British Weekly Mercury*, 12 January 1715; *Daily Courant*, 15 January 1715; *Weekly Journal with Fresh Advices Foreign and Domestick*, 15 & 22 January 1715. Jones *et al*, *Urban fire disasters*, record a major fire in Wapping in 1715 (Table 3) however it seems that this fire actually occurred in the south-east corner of the City of London near Tower Hill; see below for a discussion of burials at Wapping related to this fire possibly being those of firemen.

[261] *BofM* 10 May 1659.

[262] *BofM* 5 January 1692, GL, Ms.6419/11 (7 January 1692).

[263] *BofM* 9 January 1705, 16 November 1714, see also 4 February 1718; GL, Ms.6419/14.

[264] *Gent's Mag*, 12 January 1731.

[265] *BofM* 23 January 1672.

[266] *BofM* 7 March 1704.

[267] *BofM* 12 March 1718, LMA P93/JN2/24.

cost in the parish of St Giles in the Fields in 1687 when he was 'burnt by his beard taking fire'.[268]

The use of candles and open-fires for lighting and heating resulted in a group of night-time burnings of which the victims may have had little knowledge until it was too late. Once again it would seem that the very young and the elderly were at particular risk, probably as a consequence of various degrees of immobility; although alcohol probably had a part to play in many nocturnal fires. The *Bills* record ten such events three of which involved cradles and infants; most associated with candles. To give three examples for which more detail is available: At Holborn in 1661 'Mary Hall an ancient poor woman was burnt in her bed on Friday the 21st of June by misfortune'.[269] The register for St Paul Shadwell records the burial in early September 1721 of 'Jane Jewry [a women who was] accidentally burnt [and] buried by the Coroners warrant' a related report in the *Bills* notes she was 'burnt in her bed'.[270] Finally, at Cripplegate in January 1689 'John Smith son of John Smith, collier, [was] burnt accidentally by the fall of a firebrand from the fire to the cradle which set the cradle on fire.'[271]

While little can be said of the majority of burning fatalities in the case of multiple deaths or major house fires a range of sources supply additional information. As stated previously there were at least twenty multiple-fatality fires in the metropolis during the period of the study. The earliest such fire was that which raged in Threadneedle Street in the spring of 1655. While the *Bills* indicate four people lost their lives during 'the late lamentable fire' only one burial register, that of St Botolph Aldgate, makes reference to a victim: 'John Brant, was burnt at a great fire in Threadneedle Street & died in the hospital & was buried here'.[272] In many cases multiple-fatality fires took the lives of members of the same household. In Cripplegate during March 1687 such an incident occurred when

> Susanna Seaton, wife of Samuel Seaton, pewterer; Susanna daughter of Samuel Seaton, Susanna spinster servant to him; William Leet cordwainer; Mary Leet, wife of William Leet; Mary & Sarah Leet daughters of William Leet {… were accidentally burnt by a fire in the said Mr Seaton's house}.'[273]

In yet another similar incident, this time within the City walls, a group of seven people died at a fire in Christchurch parish during the summer of 1676. The burial register of that parish records their names within a bracketed entry suggestive of a mass inhumation: 'Anne Vaughan, Alice Cambell, Elizabeth Vaughan, Martha Barthwait, Elizabeth Barthwait, Gerard

[268] *BofM* 15 February 1687.
[269] GL, Ms.6673/4.
[270] LMA P93/PAU3/34, *BofM* 29 August 1721.
[271] *BofM* 8 January 1689, GL, Ms.6419/11.
[272] GL, Ms.9222/2, *BofM* 20 March 1655.
[273] GL, Ms.6419/10, *BofM* 29 March 1687.

Barthwait, [and] Gilbert Walker servant, burnt in Warwick Lane'.[274] On the night of 26–27 December 1662 there was a major conflagration in Lothbury of which Samuel Pepys notes:

> I went to Westminster-hall, where I stayed reading at Mrs. Michells shop ... she told me what I heard not of before, the strange burning of Mr. Delaun a merchant's house in Lothbury and his lady (Sir Tho. Allens daughter) and her whole family; not one thing, dog nor cat, escaping, nor any of the neighbours hearing of it till the house was quite down and burnt. [275]

The burial register for St Margaret Lothbury names the seven victims:

> Buried the first and third of January 1662 in the vault in the north side chancell the remainders of the bodies of Mr. George Delaune and Dorethy his wife; Ambrose Gilbert; Mary Giff; Mary Wead; James Conly and Mary his wife, being all deceased by a terrible and violent fire which began in the house of Mr George Delaune the 27th December about 2 a'clock in the morning and none in the house did escape. [276]

That this was a notable event is confirmed by the printing of a ballad in the aftermath of the fire.[277] On another occasion a similar fire was reported in the *Bills*, however it appears that the return supplied by the parish clerk of Allhallows Bread Street was mis-transcribed. The relevant *Bill* reports '1 burnt in the late fire at Allhallows Bread Street', however the corresponding burial register entries leave no doubt that that number should have read '5'.[278] Two entries relate to the fire, the first on 4 March 1681 recorded the burial of 'Mathew Watton … Mr Daulby's man … and Mary the maid, that were bur[n]t by the fire at his house.' The second entry made the following day, the fifth, reads 'Mrs Marthaw Daulby, Marthaw Daulby, and John Dalby, Mr John Dalby's wife, daughter and son, all three burnt and put in one coffin.'[279] It is likely that as the burial only involved a single coffin, and that of the family proper, that the clerk only reported one 'burial'. These entries also suggest that social norms were being reinforced in the aftermath of the traumatic event by burying the family and servants on separate days.

Such differences in social status perhaps come to light once again in the *Bill* for 14 April 1687 which records the deaths of three individuals in a fire at St Giles Cripplegate. The relevant burial register however only makes reference to two; 'The Honourable Charles Edgerton & Thomas Edgerton Esquires, sons of the Right Honourable John Earle of Bridgewater } accidentally burnt.'[280] Their deaths, aged 11 and 7 respectively, were the result of a catastrophic fire at Bridgwater House just north of Barbican on the night of the 11 April.[281] Similarly, despite suggestions that as many as 'a dozen' people succumbed to the flames that engulfed Whitehall Palace in 1698 the *Bills* only record the deaths of '4 burnt at

[274] HS21, p.288, *BofM* 11 July 1676.
[275] *Pepys*, 29 December 1662; see also, *Smyth*, p.57.
[276] GL, Ms.4346/1.
[277] See below, section 5.3; *A Sad and true relation of a great fire or two …*, 1662.
[278] *BofM* 1 March 1681.
[279] HS43, p.206.
[280] *BofM* 12 April 1687, GL, Ms.6419/10.
[281] 'John Egerton, third earl of Bridgewater (1646–1701)', *ODNB*.

the fire at Whitehall'. These four were buried in three differing parishes, two in St Mary Lambeth, one at St Clement Danes, and one at St Margaret Westminster. [282]

The ferocity of house fires — especially if occurring at night and so given time to increase in intensity — and the problems associated with affecting suitable rescue for the inhabitants is ably demonstrated by the following excerpt from the *Daily Courant* published on Friday 30 June 1704:

> On Wednesday night a fire broke out, in the house of Mr Matthews an Apothecary in St Alban Street in Pall Mall. In which Mr Matthews, 3 children, and 3 servants, were burnt, or smothered. His wife leaped out of a window 2 stories high, broke her skull, and died yesterday morning.

The corresponding *Bill of Mortality* notes the deaths of seven individuals burnt to death in the parish of St James Westminster and also refers to Matthews' wife's fall from a 'window two pair of stairs in the fire', confirming the fall was from a height of two storeys.[283] Nonetheless organised attempts at rescue and firefighting were made when time and circumstances allowed. Such an attempt took place on the last day of March 1730 exposing insurance company firemen, passing porters and several others to great danger. A number of complimentary newspaper accounts provide a vivid narrative of the fire and associated buildings collapse that occurred at the junction of Fleet Street and Fetter Lane and which claimed anywhere between six and sixteen lives.[284]

The first comprehensive report was rapidly presented by the *Daily Journal* on Wednesday 1 April 1730:

> Yesterday morning between 9 and 10 o'clock, a fire broke out at Mr Clinton's, a distiller, within two doors of Fetter Lane End in Fleet Street, occasioned by his still-head flying off, which, within the space of an hour and half, consumed that house, as also Mr Kingham's, potter, the Corner of Fetter Lane, Mr Allin's, shoemaker, at the Boot, and Mr Sawkins at the Magpye and Horseshoe; two of which houses falling in unexpectedly, while people were busy in removing their goods, have done incredible mischief; nine have already been taken out of the rubbish, 3 dead, and the rest miserably bruised; among which Mr Read, Sen., [of Whitefriars, Fleet Street] the printer, (who keeping an engine in his house, went out with it, to be assisting to his distressed neighbours) had his leg broken, and was very much bruised otherwise. Several firemen belonging to different Offices are also missing, which, 'tis feared, have perished in the ruins.

A second account of the fire was printed in the 1 April edition of the *Daily Post*, following a similar format it adds, '… Four persons have been already taken out dead, of which number three were Firemen and one a Footman …' and that several of the injured had been conveyed

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[282] *BofM* 4 January 1698; on the fire generally see, Thurley, S., *Whitehall Palace: an architectural history of the royal apartments, 1240-1698*, (London, 1999), pp.142–143; Jones *et al*, *Urban fire disasters*, Table 3.

[283] *BofM* 4 July 1704.

[284] *BofM* 31 March 1730, this reports six 'killed by the fall of a house' in the parish of St Brides. They were variously buried in the riverside parishes of St Benet Paul's Wharf, St Saviours Southwark, Christ Church in Surrey, St Mary at Lambeth, St Margaret Westminster and St Martin in the Fields. See the *Grub Street Journal* (9 April 1730) for a review of the numbers of fatalities reported by various newspapers.

to St Bartholomew's Hospital. A third account is drawn from the pages of the *Daily Courant*; which, with its day-by-day reporting style, perhaps evokes a better sense of the unfolding drama. The first information about the incident was printed on Wednesday 1 April:

> Yesterday morning at a half an hour after nine [several lines of print obscured/missing] their arms or legs broke, and being much bruised.

The Thursday edition updated news of the rescue effort:

> Yesterday three more men were taken out dead from under the ruins of the late dreadful fire at Fetter Lane end, and 'tis feared there are others still behind. There are seven already found dead, and one of those that were maimed, died in St Bartholomews Hospital.

Friday's paper provides the first name for a victim and again indicates the presence at the scene of firefighters:

> Yesterday the corpse of one James Mitchell, a Fire-man, was dug out from under the rubbish of the late fire at Fetter Lane end in Fleet Street.

In the Saturday edition the dramatic recovery of a woman from the ruins was reported:

> Yesterday a maid servant was dug out from [a vault of the Horseshoe ale house] under the ruins of the fire at Fetter Lane, alive, but soon expired when she came into the air. The same day the skull of a man was dug up, who is supposed to be a porter passing with a load on his back at the juncture of time that the houses fell, his knot and part of a basket being found near his skull.

On the same day (4 April) *The Weekly Journal or British Gazette* printed a comprehensive account of the fire; however the text was essentially a reprint of the account given in the *Weekly Journal* on the 1 April but with upwardly revised casualty figures (including sixteen dead) and an additional sentence relating the to the maid pulled from the debris. Mr Read, the printer, was also identified as the printer of *The Weekly Journal*. Finally the *Daily Courant* printed on Sunday 5 April reports on a further related event:

> Saturday morning 2 men stood upon the ruins of the late fire at the end of Fetter Lane, which sinking down with them, they were scorched in a deplorable manner, in so much that their skin came off; one of them, whose name was Joseph Millington, was to have been married yesterday, but died on Saturday in St Bartholomew's hospital; as did the other yesterday.

While it should be accepted that these casualties occurred the claim that Millington was on the verge of imminent marriage is of particular interest as it conforms to a now well established journalistic device intended to elicit a sympathetic response from the reader. Such a response is encouraged by contrasting the profane horror of the individual's death with an imagined lived normality — here emphasised by his 'soon to be married' status.[285]

Some fires, even if fatal and dramatic, failed to be reported by the responsible parish clerk and thus did not enter the *Bills*. The following newspaper account describes a fire in

[285] See Pickering M., Littlewood, J. and Walter, T., 'Beauty and the beast: sex and death in the tabloid press' in Field, Hockey and Small (eds.), *Death, gender and ethnicity*, (London, 1997), pp.124–141.

which three died, yet neither the *Bills* nor the relevant parish register make reference to the victims: [286]

> Last Tuesday night about 12 o'clock, a fire broke out at the house of Mr William Scutt, at the Elephant and Castle, in Kent Street, which entirely consumed that house, and very much damaged the houses on each side of it. There were three persons burnt to ashes in the Alehouse, viz. Mary Craft, Elizabeth Smith, and Thomas Clements, a dealer in cloth, who were lodgers in the said house. [287]

Fatal fires did however often draw the attention of the local coroner, as occured in January 1679 when the churchwardens of St Dunstan in the West met the costs of a post-fire inquest: 'Spent at the Horne Tavern about summoning a jury for the two men that were killed in the Temple at the fire ... 3s.', and in a later entry, 'Expended at the Faulcon [Falcon] on the Coroner and jury ... 6s.'[288] In this case the *Bills* would not record the deaths as the Temple was an extra-parochial district.[289]

Other circumstances gave rise to the deaths of individual Londoners by 'burning'. Among these nine people were killed as a result of lightning strikes. A variety of terms were used to indicate such deaths; 'burnt by a flash of lightening', 'killed with a thunderbolt', and 'killed by a clap of thunder'.[290] The last report noting two individuals who were killed by the same lightning strike in St Mary Islington during the summer of 1690. A further double fatality of this sort occurred in June 1733 at St Katherine by the Tower.[291] Most lightning incidents occurred in rural, or semi-rural, districts and it is possible that the previous St Katherine's incident took place on the open river. All nine lightning strikes happened between May and August, with five of the deaths occurring in the latter month; possibly the result of summer storms catching harvest workers in the open.

Fireworks were used widely across the metropolis during various public events, such as coronations, victory celebrations and on the fifth of November. Such incendiary devices could cause damage and death when accidentally ignited or occasionally through 'horseplay'.[292] *The Post Boy* of 15 January 1715 reported the quite catastrophic consequences of just such an accident:

> One Mr Walker, who kept a little Gun-Powder shop near Bear-Key in Thames Street, making Rockets against the 20th instant [the anniversary of George I's coronation], according to the best information we could get; the house he lived in, blew up by some accident on Thursday after five in the evening; and the wind happening to be very high all that night, the fire spread

[286] It is possible that the newspaper inaccurately located the incident which may have occurred beyond the boundaries of the Bills of Mortality.

[287] *Weekly Journal*, Saturday 2 May 1730.

[288] GL, Ms.2968/5.

[289] Despite this extra-parochial status three 'casualties' were noted in the *BofM* as having died within the Temple precincts; see *BofM* 30 November 1703, 27 June 1721, and 9 January 1730.

[290] *BofM* 5 August 1679, 3 July 1666, 12 August 1690.

[291] *BofM* 26 June 1733.

[292] The City authorities made numerous attempts to ban the making and throwing of fireworks through orders issued in 1673, 1674, 1682, 1684, 1697 and 1714; CLRO, COL/SJ/27/001–006.

> from that house to others towards Billingsgate, and backwards among the warehouses upon the keys, and did incredible damage there …[293]

While the *Bills* make no explicit reference to burning-related deaths occurring in those parishes affected by the inferno, information on some twenty fatalities were returned by the parish clerk of nearby Wapping Stepney. As mentioned earlier none of these were recorded as 'burnt', but noted more generally as 'killed in the late fire and blowing up of houses [and] buried severally'. Three of this group apparently died some days after the event of 'wounds received at the late fire'.[294] It is possible that at least some of these individuals were watermen from the down-river waterfront neighbourhood employed as firefighters. Serious injuries were however caused by accidents with individual fireworks, for example in 1696 a person died as a result of injuries caused 'by squibs' — small fireworks — in the City parish of St Benet Fink.[295] While in the spring of 1730 a soldier was seriously injured when he attempted to remove a 'serpent' thrown by a boy at a small cannon used in a military display; the cannon ignited and 'shattered his leg so much that tis thought it must be cut off'.[296]

Burning accidents also occurred in a number of industrial contexts, for example the *Bills* indicate that two individuals died after being 'burnt by varnish'.[297] One of these was noted by the burial register of St Faith under St Paul's, which records on 26 August 1707 that 'Will Hebbs [was] Burnt with a bottle of varnish, [and was] buried … [in] St Pauls church yard'.[298] It is probable that Hebbs was employed on the rebuilding St Paul's cathedral.

Multiple deaths occurred in yet another industrial accident. On 10 May 1716 there was an explosion at the royal foundry house on Windmill Hill just north of Moorgate. A large crowd had gathered to watch a number of pieces of cannon, captured from the French during Marlborough's campaigns, melted down and recast in a ceremonial fashion. Ignoring warnings given by Swiss metal worker Andrew Schalch that the sand moulds into which the molten metal was to be poured were damp Colonel Armstrong, chief engineer of the army, ordered the process to go ahead.[299] In the resulting explosion 'part of the roof was blown off, the galleries gave way … many of the spectators had their limbs broken, most of the workmen were burnt in a dreadful manner, and several lives were lost'.[300] The *Bills* record that the cascading hot metal caused fatal burns to at least six people; most deaths clearly occurring some days after the incident had taken place.[301]

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[293] Also see *Daily Courant*, 15 January 1715, and below regarding explosions.
[294] *BofM* 11, 18, 25 January, 1 February 1715.
[295] *BofM* 22 December 1696.
[296] *Daily Post*, 7 April 1730.
[297] *BofM* 14 May 1678, 26 August 1707.
[298] GL, Ms.8884.
[299] 'Andrew Schalch (1692–1776)' and 'John Armstrong (1674–1742)', *ODNB*.
[300] Woodward, M., *One at London: the story of Wesley's Chapel*, 2nd edn. (London, 1983), p.17.
[301] *BofM* 8, 15 & 22 May 1716. Also see below regarding deaths caused by explosions.

Seasonality

It might be expected that the seasons would have had a significant affect upon the temporal distribution of burning fatalities as the increased use of fires and candles for heating and lighting during the winter months proportionally increased Londoners' exposure to such hazards; as Fig. 3.15 shows this was indeed so. The month with the greatest incidence of fatal burnings was January with seventy-three. All the winter months, from November to March, had values above the calendar monthly mean of 31.9.

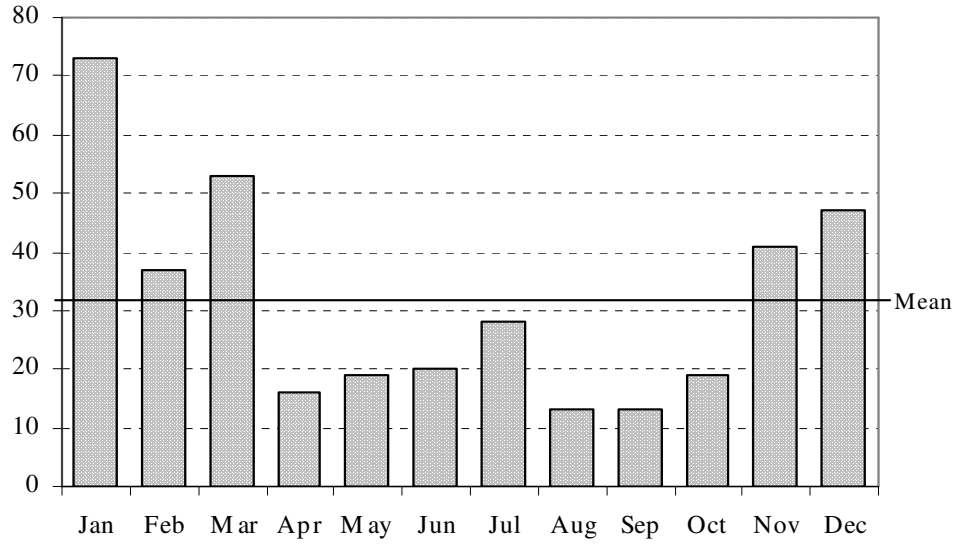

FIG. 3.15 Seasonality of burning-related fatalities in metropolitan London, 1654–1735 (Showing total fatalities per month)

Source: Weekly *Bills of Mortality*

The only summer month to exhibit more than twenty fatalities was July with twenty-eight, though this included four multiple fatality fires which resulted in at least sixteen deaths. It is possible that the particularly dry nature of this month encouraged marginally more fires to be started accidentally and subsequently to take a more vigorously hold than at other times of the year. Nonetheless the following month, August, recorded only ten fatal burnings together half of whom were killed by lightning strikes.

Geographical patterns

When burning fatalities are considered across the extents of the metropolis the general pattern suggests that such deaths were distributed in proportions roughly comparable to the population of each area, however three districts were noted with a higher than expected occurrence of such events (see Table 3.14). The City without the Walls, with seventy-one casualties, exhibited a rate considerably higher than the fifty or so that might have been expected based on its population; a similar situation held for the West End. Both these areas were heavily built-up. The City without the Walls presented a relatively run-down and poorly

maintained environment of cheaper value property. An additional fire hazard in that district was the presence of manufacturing activity such as metal working and brewing. The parishes comprising that area recorded six multiple fatality incidents, the highest number for any metropolitan area. A wide range of productive and manufacturing activities was also pursued in the West End where there was also a steady rate of new construction. Some significant pockets of older property existed, potentially increasing fire risk. In this area most of the ninety-two deaths recorded stemmed from individual incidents — only seventeen were associated with multiple fatality events — perhaps reflecting increased personal exposure to fire hazards through more extensive use of domestic heating and lighting.

TABLE 3.14
Geographical distribution of burning-related fatalities in metropolitan London, 1654–1735

Metropolitan areas	Fatal burning		Estimated Population
	Number	%	%
City within the Walls	46	12.1	16.6
City without the Walls	71	18.7	13.2
Westminster	19	5.0	4.4
West End	92	24.2	18.8
Northern parishes	40	10.5	7.2
Eastern parishes	19	5.0	8.7
Eastern riverside parishes	46	12.1	13.0
Middlesex within the Bills	6	1.5	3.4
Surrey within the Bills	41	10.9	14.7
Total	380[1]	100.0	100.0

Note: 1. Three reports in this category gave no location.

Source: Weekly *Bills of Mortality*

The lowest incidence of burning fatalities compared to population was found inside the City walls with some seventeen fewer deaths than might have been predicted. It is likely that this lower rate was related to the stringent building controls set out by the post-Great Fire Rebuilding Act, and the more heavily regulated regime the city authorities imposed.[302] Thus it is probable that many minor fires were discovered and extinguished by diligent householders, or the nightly watch, before they became fatal conflagrations. The area with the second lowest rate of fatal burning was the semi-rural extents of Surrey within the Bills. The district's open environment helped to lessen the incidence of a form of casualty that was distinctly urban in its character.

[302] The Rebuilding Act of 1667 required all new buildings to be of brick or stone; this approach was not however novel having been preceded by an Act of 1657 which also insisted on brick building methods. Bell, W.G., *The Great Fire of London*, (London, 1923), pp. 248–252.

Section 3.10 Asphyxiation

The *Bills of Mortality* stand witness to a range of deaths that can be associated with the term asphyxiation. Although that particular word was not employed within the *Bills* a range of other terms was used by the Parish Clerks' Company to indicate death caused by an inability to breathe. Men, women and children were 'stiffled', 'choaked', 'suffocated', 'hanged', 'smothered' or 'strangled'. The use of such words to indicate accidental death needs to be considered with caution, certainly the death of an infant in a 'house of office' or 'boghouse' should be read with the likelihood of infanticide in mind, while those recorded as 'accidentally' hanged or strangled may represent concealed suicides. Further the actual cause of death in some cases was probably more properly defined as drowning, yet the noxious nature of the material causing such deaths seems to have encouraged the use of alternative phrases.

The urban environment supplied a wide range of hazards that might lead to asphyxiation. A variety of enclosed structural spaces such as wells, sewers and cesspits harboured noxious or poisonous fumes. The use of charcoal burning stoves presented yet another hazard, with smaller enclosed rooms and shipboard cabins providing the associated sites of danger. In both examples the possibility of multiple fatality events occurring was very high. Other simpler hazards were associated with asphyxiation, drowning in a 'house of office' has already been noted, but smothering in beds, ditches, and mud on the foreshore also featured as did choking on food and small objects. Like drowning this was, as far as the historical record is concerned, an all or nothing type of event, if death followed it was very likely to find its way into the historical record, if on the other hand the victim recovered the event was unlikely to have been recorded at all. Within the same context, when such events were fatal they were likely to have occurred very rapidly, yet if they did not an alternative (or secondary) cause of death was perhaps more likely to be cited. Despite the sudden nature of such events, and putting the associated cultural issues to one side, attempts were undoubtedly made by rescuers to resuscitate individuals, though without an effective knowledge of the physiology of respiration successes were obviously limited.[303]

The circumstances of deaths by asphyxiation

In all 186 people died in London as a result of apparently accidental asphyxiation, or to use the language of the *Bills*: 'smothered' (ninety-three), 'suffocated' (forty-four), 'choaked' (twenty-seven), or 'stiffled' (twenty-two). If the more problematic categories of accidental

[303] See Quinlan, 'Apparent death', pp.34–35, 39–42; Bradwell, *Helps for suddain accidents*, pp.94-106.

hanging (fourteen) and strangulation (twenty-one) are included the total for the period rises to 221.

It is clear that the preferred term for the deaths of infants and children asphyxiated while in bed was 'overlaid' however at least five infant fatalities were reported using the term smothered for example the *Bills* reported in March 1709 that 'a child accidentally smothered in his bed' in the parish of St Clement Danes.[304] The category of overlaying presents particular interpretative difficulties. Overlaid children, especially infants, may have been killed accidentally by adults literally laying over them in shared beds, but alternatively such deaths may have been the truly accidental smothering of infants by heavy or perhaps damp bedding. On other occasions such incidents may have had more sinister origins, and finally there is the possibility that sudden infant-death syndrome or other undiagnosed diseases or conditions may have been responsible. Nonetheless it is clear that contemporaries felt that a good proportion of overlying fatalities represented infanticide.[305] The vagaries of 'overlayed' as the preferred term of reporting in the *Bills*, with no elaborating details, provides good justification for eliminating this reporting category from the present study.

Infants were reported as having been *smothered* in a 'house of office' or 'privy'. Such fatalities could indicate the intentional destruction of unwanted, possibly illegitimate, new-born infants; although there was also the possibility that such incidents represented the disposal of a miscarried foetus or stillborn neonate.[306] Yet of the twenty-seven deaths recorded within the *Bills* as having been caused by being smothered (seventeen) or stiffled (ten) in a 'house of office', 'privy' or 'boghouse' only three explicitly referred to infants or children, to give one example a female infant was 'accidentally smothered in a house of office' in St Giles in the Fields during 1709.[307] It should not be assumed that the remaining twenty-four victims were necessarily infants or children, as *The Gentleman's Magazine* reported in May 1731 'a man was found smothered in a Bog-House in Sun Yard, Bishopsgate'.[308] Such deaths may have been unfortunate accidents, possibly exacerbated by drunkenness, but the possibility that such discoveries represented the disposal murder victims remains high. The *Daily Courant* reported just such a case in early 1730:

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[304] *BofM* 8 March 1709.

[305] For a discussion of 'overlaying' see Hoffer, P.E., and Hull, N.E.H., *Murdering mothers: infanticide in England and New England, 1558–1803*, (New York, 1981). Also see, Gowing, L., 'Secret births and infanticide in seventeenth century England', *P&P*, 156.1 (1997), 87–115; Jackson, M., '"Something more than blood": Conflicting accounts of pregnancy loss in eighteenth century England', in Cecil, R. (ed.), *The anthropology of pregnancy loss: comparative studies in miscarriage, stillbirth and neonatal death*, (Oxford, 1996), pp.197–214; and for a brief comment on overlaying as child-killing concealed as accident see Heywood, C.M., *A history of childhood: children and childhood in the West from medieval to modern times*, (Cambridge, 2001), p.75.

[306] See, Jackson, 'Something more than blood', pp.202–206.

[307] *BofM* 14 June 1709.

[308] *Gent's Mag*, 3 May 1731.

> One day last week Sarah Townshend, who some time ago was committed to the New Goal in Southwark, for felony, was delivered of a child, which she threw into a tub of water and stiffled it; after which she threw it into the necessary house. Which being found, the Coroner's Inquest has sat upon the body, and brought in their verdict Wilful Murder.[309]

Further evidence is to be found within the *Bills* themselves, though predominantly under the more appropriate category of 'murder'. To give just two examples; the weekly *Bill* from October 1680 states 'An infant found murdered in a house of office at St Sepulchres', while a further *Bill* from September 1726 reported the murder of a boy in the parish of St James Westminster who was 'smothered and flung into a bog-house'.[310]

Infants and murder victims were found in similar circumstances on the foreshore of the River Thames. Some individuals also died apparently of accidental asphyxiation in the mud of the foreshore and other like environments. To give one example the *Bills* record during the summer of 1704 a person 'accidentally stiffled in the mud [after a] fall into Bridge House Dock' at St Olave in Southwark.[311] On another occasion a person was reported to have 'accidentally smothered in the mud of the River of Thames', they were later buried at St Martin in the Fields.[312] Such deaths were probably more accurately associated with a drowning event however the nature of the water and/or mud involved in the death persuaded the parish clerk or coroner to prefer one of the terms associated with asphyxiation. To give a further, and more horrific, example in late August 1720 'John Wilson, a boy from Wentworth Street [in St Mary Whitechapel], suffocated … in a pit filled with excrement'.[313]

Suffocation also occurred after falls into ditches — the stagnant and muddy nature of much ditch-water probably encouraging the attribution of a non-drowning cause of death — as was the case in 1674 when the *Bills* reported an individual 'smothered in a ditch' in the parish of St Stephen Coleman Street, possibly in the open space of Moorfields to the north of that parish.[314] Water-filled ditches in such areas presented dangers for young and old alike. In Hackney during the summer of 1716 a two-year old boy named William Everton was 'stiffled in a ditch', while some twenty-eight years later Samuel Sherrian (Sellman?), a poor man of seventy years of age 'suffocated in the ditch by the Free School' in Whitechapel.[315]

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[309] *Daily Courant*, 12 January 1730; *BofM* 6 January 1730, 'St Georges in Southwark, murdered in the Goal (so reported in the Coroners Warrant)'.

[310] *BofM* 19 October 1680. *BofM* 6 September 1726; OBP, 12 October 1726, Hester George (ref. t17261012-8). If this does relate to the case of Hester George it would seem that the 'boy' was in fact a still-born premature neonate; Hester was acquitted of murder.

[311] *BofM* 25 July 1704.

[312] *BofM* 24 March 1724.

[313] LMA P93/MRY1/61 (27 August 1720), *BofM* 23 August 1720.

[314] *BofM* 22 September 1674. See above for a discussion of those recorded as having 'drowned in a ditch'.

[315] GL, Ms.480/1, 18 July 1716. LMA P93/MRY1/62, 21 August 1744; *Universal Spectator and Weekly Journal*, 25 August 1744; the man was identified as a watchman of forty years service who had suffered a beating by a 'gang of robbers'.

It is possible that a high proportion of those who were recorded as having choked to death were also particularly young or possible old, though the *Bills* do not provide age related data for this particular cause of death. In all twenty-seven individuals were noted as having choked, 8.1 per cent of all asphyxiations. In sixteen cases the item that caused the fatality was indicated: eight died eating meat, gristle, fat or beef, two died when they choked on a French bean and a horse bean, while a further two were killed by the stones of a plum and a cherry. In March 1679 in Southwark a person died after choking on a needle, in September 1680 a man (apparently in a 'distracted' state of mind) choked on a silver spoon, three months later in December a, possibly younger, inhabitant of St Michael Cornhill choked to death on a farthing.[316] The final choking incident recorded by the *Bills* during this period was in October 1735 when a person living in Islington 'choaked in eating his dinner'.[317]

Occasionally individuals suffocated when they became trapped beneath materials, sometimes during work-related activities. In 1674 'Ane Simons [was] smothered with a parcel of rags' in the parish of St James Clerkenwell, in Southwark during 1689 David Shaw died when he was 'smothered in a heap of dirt', and in November 1714 'William Parham, labourer, [was] accidentally smothered in pulling down an old house' in St Giles without Cripplegate.[318] The term used in each of these cases was 'smothered', however it is possible that these fatalities resulted from crushing injuries rather than straightforward asphyxiation. Other potentially work-related deaths displayed clearer evidence of in-situ suffocation.

In a few instances manufacturing processes, possibly associated with maintenance activities, were linked to asphyxiation; for example in 1714 a person was reported to have 'suffocated in a soap-boilers oil cistern', another died in 1731 when they 'suffocated in a distillers vat'.[319] In both cases it is possible the victims were overcome by fumes while undertaking cleaning activities within semi-enclosed plant, (they may also therefore have been children). Kilns and ovens could also produce noxious fumes and this was probably the root cause of the death of a man who 'suffocated in a brick-kiln' in St Dunstan Stepney during the autumn of 1731, and of another person (possibly a child) who 'suffocated accidentally in a hatters stove' in 1727.[320] The process of cleaning chimneys also claimed victims, often children. In 1672 a person in St Giles without Cripplegate was 'stiffled with soot', while in March 1735 in one of the wealthier parts of London's West End a boy 'suffocated in a chimney'.[321] In fact everyday domestic tasks could also pose unseen dangers

[316] *BofM* 18 March 1679 (St Olaves Southwark), 14 September 1680 (St Dunstan Stepney), 14 December 1680.
[317] *BofM* 21 October 1735 (St Mary Islington).
[318] HS19, p.44, *BofM* 22 September 1674; LMA P92/GEO/142 (18 September), *BofM* 17 September 1689 (St Georges); GL, Ms. 6419/14 (6 November), *BofM* 2 November 1714.
[319] *BofM* 11 May 1714 (St Mary Somerset); 16 March 1731 (St Giles without Cripplegate).
[320] *BofM* 7 September 1731; 4 April 1727 (Christ Church in Surrey).
[321] *BofM* 28 May 1672; 11 March 1735 (St James Westminster).

as one individual found to their cost in the early summer of 1705 when they 'suffocated accidentally by drying of linnen at the fire'.[322]

Enclosed spaces and noxious materials could combine to produce a toxic atmosphere that would be fatal to anyone who entered it. Such gaseous poisonings were reported throughout the period, for example in May 1660 a person in the parish of St Botolph without Aldgate was 'suffocated by a damp'.[323] A 'damp' was a toxic atmosphere containing methane usually produced by the rotting of organic matter. Such damps were often encountered in underground structures as was the case in the summer of 1684 when a person was 'suffocated by a damp in a well'; it is likely the individual concerned was engaged in digging, cleaning or repair.[324] People also succumbed to fumes generated by burning charcoal; in this case the odourless gas carbon monoxide can be identified as the responsible toxin. To give just one example, in November 1692 Richard Tatnall found himself incarcerated in the Marshalsea prison in Southwark, the weather being cold Tatnall attempted to warm himself by lighting a fire within his room. The burial register of St George the Martyr recorded the fatal consequences; 'Richard Tatnall … suffocated by a charcoal fire in his chamber.'[325]

The highly toxic nature of high concentrations of methane and carbon monoxide gases combined with their invisible and somewhat odourless nature inevitably lead to multiple fatalities. Such events resulted amongst those who shared sleeping space or cruelly took the lives of those attempting to rescue others. Just such a case might be judged to have occurred in St Giles without Cripplegate in the summer of 1690; two men, Thomas Bramwell, labourer, and Abraham Dixon, bricklayer, were going about the business of repairing a cess-pit when first one and then the other were 'accidentally suffocated'. The St Giles register records their interments on consecutive days in June of that year.[326] In what were probably very similar circumstances two individuals died after being 'suffocated by a damp in a well' at St Saviours in Southwark in 1679.[327] The *British Journal* newspaper provides a dramatic example of a rescuer being overcome by such fumes:

> Saturday morning 3 o'clock, a sudden and surprising accident happened at St Thomas's Hospital in Southwark, where 3 men being employed to empty a vault, and having almost finished their work, one of them dropped down suddenly from the ladder, a second helping him had the same fate, and a third tying a rope round his waist, as he was letting down call'd

[322] *BofM* 15 May 1705 (St Mary at Hill).
[323] *BofM* 22 May 1660.
[324] *BofM* 29 July 1684 (St Martin in the Fields).
[325] LMA P92/GEO/142 (30 November 1692), *BofM* 29 November 1692.
[326] GL, Ms.6419/11 (17 & 18 June 1690). The *BofM* for the week of 17 June 1690 records only one death, using the phrase 'accidentally smothered in a house of office', (this discrepancy was most likely a transcription error between the reporting parish clerk and the compilers of the relevant *Bill* at the Parish Clerks Company).
[327] *BofM* 5 August 1679.

> immediately for help, and being drawn up lay some time for dead, but is since recovered: one of the dead persons is Mr Sherman, one of the Beadles.[328]

Cess-pits were implicated in the remaining two multiple fatality events. In early 1703 two people were 'stiffled in a house of office' in St Martin in the Fields, while during the height of summer in 1706 a further double fatality occurred when two labourers suffocated while 'emptying a house of office' in the parish of St Giles in the Fields.[329]

As mentioned above charcoal burning could create an atmosphere laden with a lethal level of carbon monoxide. This is a silent killer that causes first drowsiness then unconsciousness hence multiple fatalities are frequently associated with this form of hazard. On the edge of the City in St Giles Cripplegate in March 1674 'Elizabeth Read & Jane Atkinson, both spinsters, suffocated by the fume of charcoal'.[330] Another charcoal fumes-related double fatality occurred during the winter of 1698-9 at St Dunstan Stepney.[331] Perhaps the worst tragedy of this type took place not within the confines of the city but onboard a ship moored in the Thames at Rotherhithe. Having 'stopt' all the holes and hatches of the ship to prevent rats getting on board the captain, a sailor and the ship's boy lit a charcoal stove against the cold. When discovered the following day they were assumed not to have fully extinguished the fire before retiring; the fumes took the lives of all three.[332]

During the period 1654–1735 twenty-five Londoners were recorded as accidentally 'hanged' or 'strangled'. While it is feasible to suffer such an accidental injury with fatal consequences the attribution of 'accidental' in these cases must be treated with caution. In an age when suicide was both illegal and culturally unacceptable there were substantial pressures on relatives, friends and sympathetic officials and jurors to conceal such actions. In addition the terms were used ambiguously; for example in April 1666 the register for St Mary Mounthaw in the City recorded that Thomas Cure died after he 'Fell into a tun of ale and was strangled' it also noted his burial at Islington. The associated *Bill of Mortality* reports the burial of a man at St Mary Islington having been '*drowned* in a brewers tun'.[333] Yet in 1716 the same term was used with very different meaning when Marsha Wallis, a spinster, was found by the coroner to have been a 'lunatic' and 'strangled herself'.[334]

These problems aside a few deaths by hanging or strangulation were clearly of note and certainly unusual if not conclusively 'accidental'. Between 1717 and 1730 three London children were found to have hanged themselves accidentally, sadly such events are entirely

[328] *British Journal* (1729), 11 July 1730; *BofM* 30 June 1730.
[329] *BofM* 30 March1703; *BofM* 13 August 1706.
[330] GL, Ms.419/9 (10 March 1674), *BofM* 10 March 1674.
[331] *BofM* 28 February 1699.
[332] *BofM* 20 November 1733; *Universal Spectator and Weekly Journal*, 24 November 1733.
[333] HS58, p.78; *BofM* 3 April 1666.
[334] GL, Ms.480/1 (6 March 1716, St John Hackney); *BofM* 6 March 1716.

plausible.[335] Notable adult strangulations included a man who 'accidentally strangled himself with a rope' in the parish of St Martin Ludgate, but was buried at Covent Garden.[336] On another occasion the City coroner decided that a person 'strangled with a leather thong', in March 1720, had died accidentally.[337] Finally, in a case from 1723 that displays the popular 'judicial' violence of the period, the perjured informer John Middleton died 'accidentally' when he was 'strangled in the pillory' at Charing Cross while attempting to avoid mud and stones thrown at him by an angry crowd.[338]

Seasonality

Asphyxiation appeared to have been influenced little by the changing seasons (Table 3.16). There was no obvious overall peak during the winter months although those deaths associated with charcoal fumes and smoke, for example, were found to have only taken place between the months of November and March. In a similar way those deaths associated with methane 'damps' were found to have occurred between the warmer months of April and August. Nonetheless the most straightforward explanation for the general lack of seasonality was the wide range of underlying causes of death associated with asphyxiation. Individuals could die by accidental strangulation, smothering in mud or blankets, inhaling poisonous fumes, or by simply choking on a piece of food at almost any time of the year.

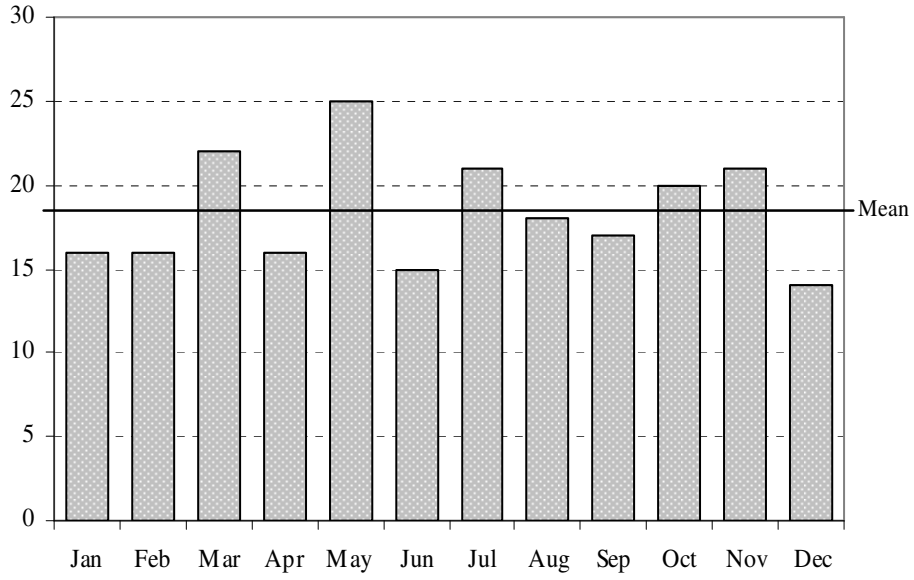

FIG. 3.16 Seasonality of asphyxiation fatalities in metropolitan London, 1654–1735 (Showing total fatalities per month)

Source: Weekly *Bills of Mortality*

[335] *BofM* 6 August 1717 (St Mary Rotherhithe), 30 June 1719 (St Botolph without Aldersgate), 21 April 1730 (St Mary Magdelane Bermondsey).

[336] *BofM* 26 July 1715.

[337] *BofM* 8 March 1720 (St Botolph without Bishopsgate).

[338] *BofM* 23 July 1723; *Daily Journal*, 26 July 1723; Beattie, *Crime and the courts*, pp.467–468, and Beattie, J.M., *Policing and punishment in London 1660–1750: urban crime and the limits of terror*, (Oxford, 2001), p.129.

The overall pattern, with no clear seasonal peaks or troughs, was one in which the mean number of deaths per calendar month was 18.42. The highest monthly incidence was in the month of May with twenty-five deaths, the lowest in December with fourteen. In general the incidence of this sort of fatality was low; statistically over the 907 months of the study period there was likely to have been no more than one such death every four months.

Geographical patterns

Given the broad variety of underlying causes of asphyxiation it might be supposed that there would be little or no appreciable pattern to the geography of such deaths. For most of the metropolis that was the case, however in some instances variations from the level of deaths that might be expected given the background population size are discernable (see Table 3.15). Two areas of the metropolis demonstrated increased levels of asphyxiations; the City without the Walls and Surrey within the Bills. In the first of those districts a number of deaths resulted from work-related incidents, such as being suffocated in a 'distillers vat'.[339] In those districts south of the Thames deaths were frequently associated with suffocation or smothering in open sewers, ditches, or the Thames-side mud (nine in total); clearly the low-lying open landscape having a significant bearing on the range of asphyxiation hazards present.

TABLE 3.15
Geographical distribution of asphyxiation fatalities in metropolitan London, 1654–1735

Metropolitan areas	Fatal asphyxiation		Estimated population
	Number	%	%
City within the Walls	25	11.3	16.6
City without the Walls	39	17.6	13.2
Westminster	4	1.8	4.4
West End	36[1]	16.3	18.8
Northern parishes	22	10.0	7.2
Eastern parishes	14	6.3	8.7
Eastern riverside parishes	27	12.2	13.0
Middlesex within the Bills	3	1.4	3.4
Surrey within the Bills	51	23.1	14.7
Total	221	100.0	100.0

Note: 1. Includes one incident reported as having occurred in the 'mud of the River of Thames' but with burial at St Martin in the Fields.

Source: Weekly *Bills of Mortality*

[339] *BofM* 16 March 1731 (St Giles without Cripplegate).

Section 3.11 Stabbed and 'wounded'

A number of Londoners died after coming into contact with sharp objects and thereby receiving fatal wounds. While the vast majority of these incidents involved swords a number of other implements, such as knifes, scissors, shears, pitchforks and even the long stems of clay tobacco pipes were also implicated. While stabbing was either explicitly stated, or was easily deduced given the object involved, the term 'wounded' was less easy to characterise. The *Bills* note a number of deaths caused by wounds, many related to stabbing events, others to a range of deliberate or accidental striking or crushing injuries. In addition some wounding fatalities may have been associated with deaths occasioned by secondary wounds, disease-related lesions, or injuries suffered at sea or at least away from the London area. Understanding the term 'wounded' within the *Bills* is further complicated by a lack of supporting information; prior to 1698 specific detail concerning the cause of fatal wounding was rarely given, while attribution to a parish of death or burial was almost never supplied.[340]

Many Londoners for reasons of status or security carried swords or daggers, or alternatively had easy access to such weapons. Intentionally violent acts may therefore be associated with a number of the cases that follow; they may represent deliberate killings or at least violently inspired wounding with fatal consequences. While it is impossible to be certain that some premeditated murders are not included within this group the *Bills* employ the more definitive term 'murdered' with a sufficient regularity to suggest that many, perhaps most, of these undefined stabbing fatalities were unintentional. Stabbing is recorded using the terms 'stabbed' or 'killed with a sword [etc.]'; sometimes 'accidental' is deliberately added.

While a minor penetrating wound to the limbs would be unlikely to cause imminent death — unless a major artery were severed — a serious stab wound to any part of the torso or head could result in internal trauma with fatal potential.[341] During the seventeenth and eighteenth centuries medical knowledge was such that although the nature of penetrating injury could be relatively well diagnosed — that is the degree and form of internal injury identified — taking remedial action was more challenging. Not the least of the problems associated with repairing, closing and dressing of such wounds was the possibility of infection. Thus incidences of delayed death from such infections means that a number of deaths derived from stabbing incidents were likely not reported to the Parish Clerks Company. An observation supported by the 1730 case of a Hackney coachman who,

[340] It would seem that during at least one particular moment in time use of the term 'wounded' in the *Bills* was contingent upon external factors; between 1655–1670 'stabbed' occurs only six times while 'wounded' occurs on thirty-one occasions. The main cluster of such wounding-related deaths falls in the period 1665–1668, the time of the Second Dutch War. It is perhaps significant that seven of those fatal woundings were recorded as having taken place 'at sea'.

[341] For popular remedies for minor wounds see Hawes, *Poore-mans plaster-box*, pp.1–5.

> On Sunday night … quarrelling with another person near Drury Lane, in the scuffle was thrown down on a piece of glass, which cut all the sinews of his arm; he went to a surgeon yesterday morning to have it dressed, but it having bled so violently before, he died in the surgeon's house.

The *Daily Courant*, published on the following Tuesday, was quick to report this episode however it would seem that the delay between injury and death, although short, was sufficient to prevent a report being submitted for inclusion within the relevant weekly *Bill*.[342]

The circumstances of stabbings and 'woundings'

Over the period 1654–1735 the *Bills* recorded 209 fatal stabbings and ninety deaths occasioned by wounds. Among these those caused by swords were the most frequent, being noted 139 times.[343] The next most significant category of sharp-edged instrument was knives, which caused the deaths of thirty-four Londoners.[344] Finally, ten individuals died after being stabbed with clay tobacco pipes.[345]

Most of the reports in the *Bills* related to deaths involving swords provide little additional detail; however in a very few cases the term 'accidental' was explicitly used. The *Bill* for Christmas week 1678, for example, includes the report of a person 'accidentally stabbed with a sword' in the Surrey parish of St Mary Newington.[346] This was an event that was repeated in April 1712 when an individual was 'accidentally killed with a sword' at St Margaret Lothbury.[347] Most sword-related deaths were however reported in a more ambiguous fashion, such as that of 'James Stevens, [of] Brownes Coffee House, [who was] killed with a sword'. His interment was recorded in the St Brides' burial register on 20 May 1687.[348] To give another typical example, 'Edward Carter [was] killed by a sword' in October of the same year.[349] In an event, which perhaps had more sinister overtones, a shoemaker called Edward Foord was 'killed with a sword behind the White Lyon in Islington' in July 1685.[350] Deaths could occur outside the area covered by the *Bills* yet with subsequent burial taking place within the metropolitan area. In April 1715 'Mr John Arthur was killed with a sword at Hadley in Middlesex'; his burial took place in the parish of St John Hackney and

[342] *Daily Courant*, 17 March 1730.

[343] The total of 139 comprised 133 deaths caused by a 'sword' (one of which was recorded as a wounding), five deaths caused by a 'rapier', and one by a 'semiter' [scimitar].

[344] Including one death recorded as a wounding.

[345] Including two deaths recorded as wounding.

[346] *BofM* 24 December 1678.

[347] *BofM* 22 April 1712.

[348] GL, Ms.6540/2; *BofM* 17 May 1687; OBP, 1 July 1687, Edward Pollard (ref. t16870701-9). Pollard was convicted of manslaughter following a drunken brawl over a game of dice.

[349] GL, Ms.6540/2 (19 October 1687, St Brides); *BofM*, 25 October 1687 (although the parish is given as the adjacent St Dunstan in the West); OBP, 7 December 1687, Lewis Ruckle [Buckle?] (ref. t16871207-11). Ruckle was found not guilty as he had been defending himself during an assault.

[350] HS19, p.110 (10 July 1685); possibly also *BofM* 7 July 1685 (St John Clerkenwell).

the parish clerk duly reported the casualty to the compilers of the *Bills*.[351] Of the eight duelling deaths reported by the *Bills* only one was associated explicitly with stabbing — presumably by a sword — which occurred during a confrontation in the Mews at Charing Cross. As a result 'John Smith from Grovesnor Street' received 'two mortal wounds in the belly' and was buried at St Katherine Cree on the 3 November 1726.[352]

Knives and daggers were also reported as lethal weapons. Overall, as noted above, such weapons caused the deaths of thirty-four Londoners. Some of those deaths were clearly the result of deliberately violent acts, others less so. One apparently intentional assault occurred in the summer of 1655 when, 'William Pinker [was] stabbed with a dagger at the Feathers Tavern in Fleet Street'.[353] Such violent deaths could occur in more domestic settings such the dwelling-come-alehouse in Ayliff Street Whitehcapel where, in November 1746, thirty-six year old Henry Boswell was 'stabbed [to death] by his wife' in their wash-house.[354] Other violent acts might be interpreted as a form of occupational hazard; in 1651 the parish clerk of St Mary Aldermanbury recorded the burial of an unknown man, 'a thief that was stabbed by the Lady Armin's man [and] who died in our street'.[355] Sharp bladed knives and tools could inflict lethal wounds in situations more clearly defined as occupational. The cloth working district of Aldersgate, for example, was the location for the death in 1677 of an individual who 'fell onto a pair of shears'.[356] In what may have been a similar occupational accident the very sharp blade of a leather-working knife may have been to blame for the 1689 death of 'William Rand, servant to William Stiles, cordwainer, accidentally killed with a knife'.[357] Another leather-working implement was implicated in the death at St Andrew Holborn during May 1681 of Phillip Avery, a shoemaker's servant, 'killed with a shoemaker's knife' during a scuffle with fellow servant, Alice Enterys.[358] Butchering animals could also result in unintentional injuries, in one case in December 1701 such an injury proved fatal when an individual in the parish of St Sepulchres without Newgate, a district adjacent to the

[351] GL, Ms.480/1, (20 April 1715); *BofM* 19 April 1715; OBP, 27 April 1715, Richard Hill (ref. t17150427-60). Hill was found guilty of manslaughter as the wound had been caused during a domestic argument which terminated in an inept struggle for the sword through a parlour window.

[352] *BofM* 1 November 1726; GL, Ms.7889/3; *Daily Post*, 31 October 1726; *Daily Journal* and *Parker's Penny Post*, 2 November 1726; *Evening Post* (1709), 3 November 1726 (in which the inquest jury were reported to have indicted for manslaughter although the killer, an Irishman named Warpole, seems not to have been brought to justice). For a thorough review of the duel in eighteenth century London see Shoemaker, *The London mob*, pp.177–214.

[353] GL, Ms.6540/1 (9 June 1655, St Brides); possibly *BofM* 5 June 1655, undefined 'wounded', no parish noted.

[354] LMA P93/MRY1/62 (4 November 1746); OBP, 16 January 1747, Anne Boswell (ref. t17470116-1). Anne was found guilty of murder and sentenced to death.

[355] HS61, p.143 (9 May 1651).

[356] *BofM* 19 June 1677 (St Anne Aldersgate).

[357] GL, Ms.6419/11 (St Giles Cripplegate, 24 April 1689); *BofM* 23 April 1689.

[358] *BofM* 3 May 1681; OBP, 20 May 1681, Alice Enterys (ref. t16810520-4). Enterys was found guilty of manslaughter.

butchering trade centres of both Smithfield and Newgate, was 'killed with a butchers knife'.[359]

Less clearly urban occupational activities could also result in stabbing-related deaths. In the parish of St Botolph without Aldersgate in May 1721 a person was 'accidentally killed with a pitchfork', an event possibly associated with stabling activity in one of the numerous coaching and carrying inns that were clustered within that district.[360] In a further incident well away from the built-up area twenty-two year old John Knapton, while working in the fields near Islington in the summer of 1743, suffered an accidental cut to his leg from a scythe. Though taken to the infirmary his wound became 'mortified', or gangrenous; he was buried on 26 June at St Mary Whitechapel.[361]

The third most significant item associated with stabbing was, perhaps surprisingly, the tobacco pipe. Such pipes were manufactured in fire-hardened clay and comprised a bowl with a very long narrow stem. Numerous contemporary images, together with osteo-archaeological evidence indicating long-term dental abrasion, attest to the habitual manner of smoking such pipes.[362] With a tobacco pipe firmly wedged in the mouth a fall or stumble could easily cause injury or even death. Such trauma may have resulted from the stem of the pipe puncturing the soft bones of the palate and so entering the skull; two examples from the *Bills* support this view. In October 1702, in Westminster, a woman died after a 'tobacco pipe struck accidentally into her brain'.[363] On another occasion during the following year a man in the parish of St Peter Paul's Wharf died after his tobacco pipe 'accidentally struck [him] in the throat'.[364] Smoking tobacco occurred across the social spectrum and was not confined to any particular life-cycle stage, accidental deaths associated with tobacco pipes followed suit. For example, in the parish of St Giles Cripplegate 'Hannah Harris[on], spinster, [was] killed with a tobacco pipe' in May 1719 having been accidentally stabbed with the stem of her father's pipe during an argument over money.[365] In September 1722, in the same parish, 'Elizabeth Pashaler, daughter of Richard Pashaler, [was] killed with a tobacco pipe'.[366] The observation that falls were associated with this variety of death is given weight by the *Bill* for 17 November 1730 which reports quite emphatically that a 'man [was] accidentally killed by a tobacco pipe after a fall'.[367]

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[359] *BofM* 23 December 1701.
[360] *BofM* 9 May 1721.
[361] LMA P93/MRY1/62.
[362] Brickley, M., and Miles, A., *The Cross Bones Burial Ground, Redcross Way Southwark London: archaeological excavations (1991–1998)*, (London, 1999), pp.34–35.
[363] *BofM* 13 October 1702 (St Margaret Westminster).
[364] *BofM* 30 March 1703.
[365] GL, Ms.6419/14 (22 May 1719); *BofM* 19 May 1719; OBP, 8 July 1719, Samuel Harrison (ref. t17190708-16). Harrison was charged with murder but found guilty of manslaughter.
[366] GL, Ms.6419/15, *BofM* 18 September 1722.
[367] *BofM* 17 November 1730 (St Dunstan Stepney).

Falling onto sharpened structures could also inflict life-threatening wounds. In March 1702 an unknown person was 'accidentally killed by a fall on a stake' in the riverside parish of St Paul Shadwell.[368] On another occasion an individual was 'accidentally killed by a fall onto the iron spikes of a shop window grate' in the Liberty of the Minories in August 1705.[369] In a similar accident 'a boy [was] kill'd by falling upon iron spikes from a lamp-post, which he climbed up to see Mother Needham stand in the pillory'.[370]

Seasonality

The incidence of stabbing and wounding throughout the London year demonstrated some seasonal variance. The mean monthly occurrence of such deaths was however particularly low at just 0.33, or approximately one death every three months across the study period. May was the month with the greatest number of stabbing and wounding-related deaths, thirty-one (10.4 per cent) in total. December demonstrated the lowest incidence with only eighteen (6.0 per cent) fatalities. There was a significant peak in the combined figures for such deaths between April and June, with a secondary peak in October and November, and an isolated tertiary peak in August (Fig. 3.17). The general trend would suggest that deaths associated with stabbing and wounding took place primarily during the summer and autumn months, however closer scrutiny of the particular trends for stabbings, woundings and deaths associated with swords provides some further clarification.

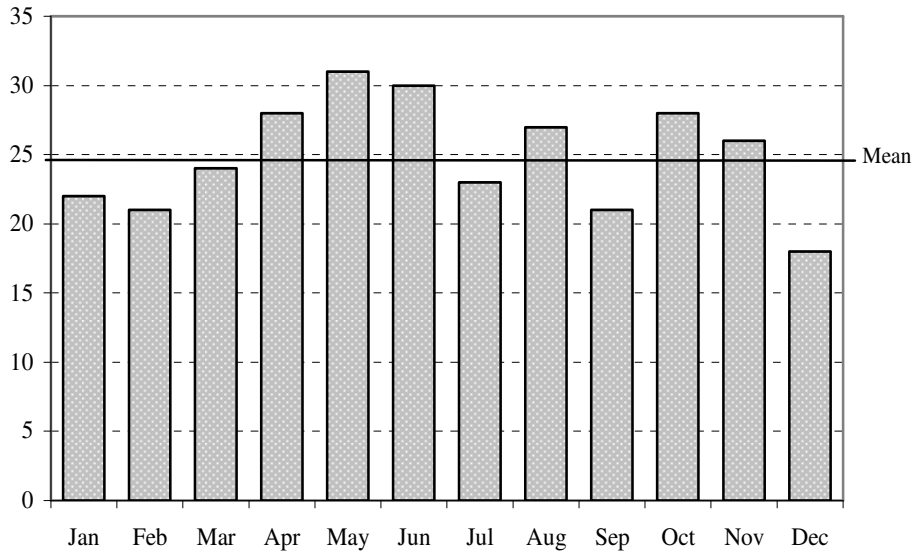

FIG. 3.17 Seasonality of stabbing and wounding fatalities in metropolitan London, 1654-1735 (Showing total fatalities per month)

Source: Weekly *Bills of Mortality*

[368] *BofM* 31 March 1702.
[369] *BofM* 7 August 1705 (Trinity in the Minories).
[370] *Gent's Mag*, April 1731; *Daily Journal*, 1 May 1731; *Daily Advertiser*, 5 May 1731; *Grub Street Journal*, 6 May 1731. (Mother Needham — the procuress featured in Hogarth's 'The Harlot's Progress' — died of natural causes on the 3 May only two days after her ordeal in the pillory).

As Table 3.16 demonstrates the peak season for stabbing fatalities was during the autumn months of October and November (22.5 per cent), with a noticeably lower incidence of such deaths occurring during the summer, principally between June and August (18.1 per cent). Deaths that resulted from wounding on the other hand peaked during the summer between the months of June and August (46.6 per cent), the lowest month of report was November with only two (2.2 per cent) such casualties. The disaggregation of these two descriptive agencies — stabbing and wounding — helps to explain the multiple peaks seen in Fig.3.17. The peak of wounding-related deaths during the summer might support a suggestion that such deaths related largely to military action (at least during the early part of the period) as the major campaigning activities tended to take place during those warmer, drier and, for naval warfare, calmer months.

The detailed trend with sword-related fatalities shows a clear peak in the autumn months of October and November (22.3 per cent), with a perhaps even more significant low during August and September (10.8 per cent). If such deaths were associated predominantly with those individuals who carried swords for status purposes — notably the gentry and aristocracy — then a decline during the summer months could be explained by seasonal residency patterns. The London 'season' took place between October and May, during the remaining part of the year those of sword-carrying status would in the main leave London retiring to their country estates and residences.

TABLE 3.16
Seasonality of stabbing and wounding fatalities by weapon type in metropolitan London, 1654–1735

Month	All stabbings		All woundings		Sword related deaths[1]	
	Number	%	Number	%	Number	%
January	16	7.7	6	6.7	12	8.6
February	17	8.1	4	4.4	10	7.2
March	20	9.6	4	4.4	14	10.1
April	19	9.1	9	10.0	13	9.4
May	23	11.0	8	8.9	15	10.8
June	13	6.2	17	18.8	10	7.2
July	13	6.2	10	11.1	10	7.2
August	12	5.7	15	16.7	7	5.0
September	16	7.7	5	5.6	8	5.8
October	23	11.0	5	5.6	15	10.8
November	24	11.5	2	2.2	16	11.5
December	13	6.2	5	5.6	9	6.4
Total	209	100.0	90	100.0	139	100.0

Note: 1. Sword-related deaths include those reported as having been caused by 'sword', 'rapier' or 'scimitar'.
Source: Weekly *Bills of Mortality*

Geographical patterns

There were clear geographical patterns to the incidence of stabbing-related deaths across the London metropolis. Nonetheless it should be noted that a significant proportion of the reports — 20.4 per cent or one in five — supplied no location, this was especially so in relation to 'woundings' (Table 3.17). This lack of locational data might again support an argument that a sizeable number of 'wounding' deaths related to military activity undertaken some distance from London, on the continent, or even at sea.

When compared with the population distribution certain areas were found to have a greatly increased level of stabbing fatality. In the combined West End and Westminster area such deaths were very nearly twice as high as might have been expected, at 43.7 per cent compared to the area's population share of 22.2 per cent. Most other areas saw a relatively low level of stabbing fatality, in particular the eastern parts of the metropolis exhibited a occurrence almost a third (2.9 per cent) of the areas population level (8.7 per cent). A similar pattern was evident in the less urban areas of London both near to the river and in the semi-rural parts of Middlesex within the Bills, where 19.7 per cent of such deaths occurred compared to a population share of 39.8 per cent; almost the complete reverse of the situation in the western half of the urban metropolis.

TABLE 3.17
Geographical distribution of stabbing and wounding fatalities in metropolitan London, 1654–1735

Metropolitan areas	All stabbings and woundings		Estimated Population	Sword related fatalities	
	Number	%	%	Number	%[1]
City within the Walls	24	10.1	16.6	12	50.0
City without the Walls	40	16.8	13.2	23	57.5
Westminster	18	7.6	4.4	13	72.2
West End	86	36.1	18.8	65	75.6
Northern parishes	23	9.7	7.2	11	47.8
Eastern parishes	7	2.9	8.7	1	14.3
Eastern riverside parishes	22	9.2	13.0	6	27.3
Middlesex within the Bills	2	0.9	3.4	1	50.0
Surrey within the Bills	16	6.7	14.7	6	37.5
Total	238[2]	100.0	100.0	138	[58.0]

Notes: 1. Sword-related fatalities as a percentage of all stabbing and wounding deaths reported for each area; 2. Sixty-one reports in this category were without locations (fifty-eight of which related to 'woundings').

Source: Weekly *Bills of Mortality*

The distribution of deaths associated with swords goes some way toward explaining this geographical imbalance. In the West End and Westminster the majority of stabbing fatalities were associated with swords (75.0 per cent), whereas to the east of the metropolis very few

of those deaths related to the use or misuse of swords (24.1 per cent). Such a difference is mirrored by the vastly differing social and economic circumstances of those two parts of London; the west rich, affluent and the home to numerous citizens of status; the east poor, impoverished and home to the 'mechanic' classes of London's work force. The identification of swords as the cause of most stabbing related deaths in the western part of the city is therefore explained broadly by the tendency for individuals of higher social status to possess or wear swords and that such individuals were resident in higher numbers in that part of the metropolis.

If this is so the question remains as to what implements caused death by stabbing in the eastern parts of the city. The answer is a selection of knives, of both domestic and occupational origin, together with a penknife, a hatchet, and tobacco pipes. Such implements are broadly suggestive of the lower part of the social scale and of the manufacturing and production activities concentrated within the area. Thus it is evident that although the degree of intent, or otherwise, which lay behind any given stabbing incident can not be deduced conclusively from the *Bills* the particular geography, season and implement concerned imply a form of sudden violent death that was significantly socially differentiated.

Section 3.12 Scalded

Londoners were scalded by hot and boiling liquids in a number of commonly occurring circumstances. Heating water in the domestic environment accounted for a number of fatal accidents of this sort, especially when children and infants were implicated. Across the industrial sites of the metropolis the boiling of liquids was a fundamental step in a number of manufacturing processes. Notable in this respect were the activities of brewers, distillers, dyers, tanners and others such as sugar-boilers and soap makers. In most instances exposure to the heated liquids was restricted to those engaged in the activity itself, yet the semi-public nature of many early modern workspaces further exposed family members, customers and passers-by to such hazards.[371]

The medical response to those who were scalded was similar to that offered to those who suffered burns. Once again minor scalds could be healed with a certain degree of success, if infection could be avoided. Major scalding injuries were not however treatable by early modern medicine and the best efforts of the London hospitals were rarely if ever successful in this area.

[371] See Spence, C., '"Accidentally killed by a cart": workplace, hazard, and risk in late seventeenth century London', *European Review of History*, 3.1 (1996), 9–26, for a discussion of hazard exposure in the early modern workspace.

When reported by the *Bills of Mortality* scalding incidents were frequently accompanied by useful descriptive information. Using such detail it is possible to breakdown London's scalding deaths by domestic and industrial categories. Scalding was probably only rarely an instantaneous form of death — as noted above in relation to burns secondary infection and associated trauma were of greater significance — consequently assigning the location of the incident as that stated by the *Bills* requires some caution. Many who died were likely to have done so in their homes or in hospitals potentially some distance from original site of scalding.

The circumstances of fatal scalding

Between 1654–1735 the *Bills* reported 154 deaths associated with scalding. These ranged from simple incidents such as the individual who died in January 1712 after being 'scalded in a tub of water' at St Olave Southwark to the more dramatic death of a distillery worker who was 'accidentally scalded by a fall into a distillers vat' at St Sepulchres in 1716.[372] While eighty-seven of the reports gave no further information, and were likely to have been domestic incidents, the remaining sixty-seven indicate the circumstances of the event.

Some of the descriptive detail does indicate domestic settings. In May 1676 an unknown person died in the parish of St Martin-in-the-Fields having been 'scalded with milk'; possibly a child or servant.[373] Burial registers provide evidence to support such an interpretation. In March 1747 'Thomas Walters, a poor child from Buckley Street [in Whitechapel, aged] 5' was buried after being scalded to death.[374] While the *Bill of Mortality* in January 1674 records simply that an unknown person died by being 'scalded in a tub of suds' an entry in the burial register of St Martin Vintry supplies complimentary detail stating that 'Mr William Rounds daughter [was] accidentally scalded and buried in the tabernacle 12 January 1674'.[375] Most descriptive information within the *Bills* or burial registers tends however to indicate work-related contexts.

Brewery workers appeared to be most at risk of dying in a scalding incident. Brewers' servants were often exposed to the risk of drowning, particularly when they entered large brewing vessels to manually stir the mash, however they were additionally at risk of being scalded to death in any associated accident. Carrying out such actions on a day-to-day basis may have generated a level of complacency among workers that resulted in the mistaken immersion in vessels containing heated, as opposed to cooled, liquids. Alternatively accidental falls, possibly abetted by the consumption of alcohol, may have plunged workers into mash-tun or copper. Finally the catastrophic failure of taps and pipe-work seems also to

[372] *BofM* 1 January 1712, 16 October 1716.
[373] *BofM* 9 May 1676.
[374] LMA P93/MRY1/62.
[375] *BofM* 13 January 1674; GL, Ms.5152.

have been responsible for occasionally bringing workers into contact with heated liquids. Between 1654 and 1735 the *Bills* record forty-nine brewery workers scalded to death in a variety of mash-tuns, coppers and kettles. For example, in the parish of St Giles Cripplegate during the winter of 1687 'John Davis, brewers servant, [was] scalded accidentally in a mash tun'.[376] In a further incident in the same parish during September 1693 'Richard Lewis, brewers servant, [was] killed by falling into a tub of scalding water'.[377]

Workers in other trades were exposed to heated liquids and consequently to the dangers of suffering a fatal scald. Dyers used large quantities of heated water in their manufacturing processes. Though dyers servants and apprentices would not actively immerse themselves in the liquids of their calling in the manner of brewery workers an accidental slip while stirring or removing quantities of heavy water-sodden cloth could be just as disastrous. To give an example, in 1677 at St Giles Cripplegate 'James Newman, servant to John Battin, dyer, [was] scalded accident[ly] falling in a dyers copper'.[378] In the City parish of St Martin Vintry a similar event was recorded in March 1714 when an individual was 'scalded to death in a dyers copper', and was buried at St Olave Silver Street.[379] It is likely that minor scalds frequently occurred to those engaged in similar activities as an apprentice found to his cost in 1645 when, during a workplace accident, his legs were badly scalded. The youth's master contested a subsequent legal action by implying that such hazards were a usual part of the dyer's work.[380] Some other trades used heated liquids in their activities as noted by the register of St Laurence Poutney in July 1734 which records that 'John Peers, a youth and son of Mr William Peers, a hatter, was scalded accidentally in his father's copper'.[381]

Seasonality

The occurrence of scalding incidents might not be thought to have been dependent upon the season of the year; however, in the domestic context winter may well have encouraged an increase in the preparation of hot food and drink. Of course a counter-argument lies in the probable increase in laundry activity during those months of the year when the weather was warm and dry. In fact when the incidence of scalding is reviewed there can be seen to be little evidence of any seasonal trend (Fig. 3.18). The average frequency of scalding deaths over the study period was generally low at 0.17 per month.

[376] *BofM* 29 November 1687; GL, Ms.6419/10 (4 December 1687).
[377] *BofM* 19 September 1693; GL, Ms.6419/11.
[378] *BofM* 163 November 1714; GL, Ms.6419/9.
[379] *BofM* 16 March 1714.
[380] Pelling, M., 'Apprenticeship, health and social cohesion in early modern London', *History Workshop Journal*, 37 (1994), pp.47–48.
[381] GL, Ms.7670.

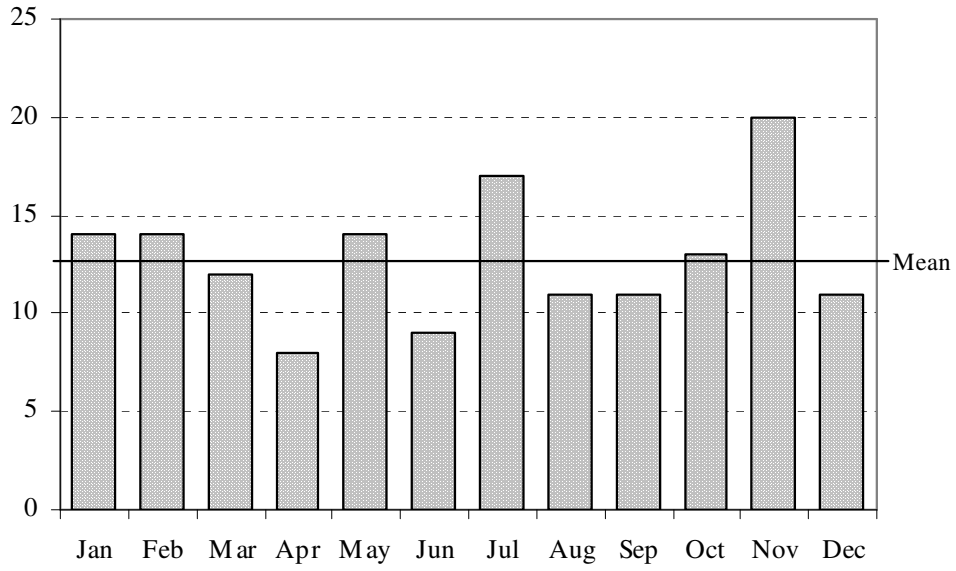

FIG. 3.18 Seasonality of fatal scalding in metropolitan London, 1654–1735
(Showing total fatalities per month)

Source: Weekly *Bills of Mortality*

The month demonstrating the highest incidence of scalding was November, which reported twenty deaths. April and June demonstrated the lowest occurrence, with figures of eight and nine scaldings respectively. There is however no significant evidence for particular seasonality with this form of accident. Indeed even brewing-related fatalities were spread relatively evenly throughout the year despite the inherent seasonality in the early modern brewing trade, especially with regard to the traditional summer 'rest' period.

Geographical patterns

Scalding occurred in both homes and workspaces consequently given the nature of the early modern urban environment there might be expected to be little in the way of geographical variation. Yet when compared with the distribution of population across the metropolis some clustering is revealed (see Table 3.18). The areas to the north of the City demonstrated the greatest intensity of scalding fatalities. The City without the Walls and the northern parishes both had occurrences of scalding almost twice the level that might have been expected, at 20.9 and 13.1 per cent respectively. The northern extents also demonstrated increased incidents associated with manufacturing activities, especially so in the City without the Walls where 43.8 per cent of all fatal scalding was of that type. It is significant that this part of the metropolis was noted for the presence of numerous proto-industrial breweries and distilleries.[382] The burial register of St Giles emphasises this point with eleven entries

[382] Mathias, P., *The brewing industry in England 1700–1830* (Cambridge, 1959), pp.258–264.

recording the fatal scalding of named brewers' servants between January 1657 and March 1702.[383]

TABLE 3.18
Geographical distribution of fatal scalding in metropolitan London, 1654–1735

Metropolitan areas	Fatal scalding		Estimated Population	Manufacturing associated	
	Number	%	%	Number	%[1]
City within the Walls	18	11.8	16.6	10	55.6
City without the Walls	32	20.9	13.2	14	43.8
Westminster	9	5.9	4.4	4	44.4
West End	28	18.3	18.8	3	10.7
Northern parishes	20	13.1	7.2	6	30.0
Eastern parishes	11	7.1	8.7	5	45.5
Eastern riverside parishes	10	6.5	13.0	6	60.0
Middlesex within the Bills	1	0.7	3.4	1	100.0
Surrey within the Bills	24	15.7	14.7	12	50.0
Total	153[2]	100.0	100.0	61	[39.9]

Notes: 1. Manufacturing-related scalding as a percentage of all scalding reported for each area; 2. One report in this category gave no location.

Source: Weekly *Bills of Mortality*

The City within the Walls had a somewhat lower level of scalding deaths, at 11.8 per cent, than might have been expected. This may reflect the more orderly character of City households and the less intensive character of manufacturing activities within the area; however the proportion of scalding within the City that was work-related was one of the highest at 55.6 per cent. While the premises of most City manufacturers were not as imposing as some of their extramural counterparts their activities clearly placed themselves and their workers at an increased risk of injury or death. Across London as a whole manufacturing-related deaths accounted for at least 39.9 per cent of all scalding thus the occupational character of this type of injury was perhaps more significant than might have been supposed initially.

Section 3.13 Other causes of sudden violent death

A small number of Londoners suffered a range of other causes of death that can be described as relatively sudden or violent and which certainly involved elements of trauma. The group can be separated into six sub-categories based upon the agency of death or form of report. In total 579 Londoners suffered deaths of this sort, such a figure would make this group the

[383] GL, Ms.6419/5, 6, 7, 8, 9, 10, 11, & 13.

seventh most significant form of sudden violent death, however taken separately none of the sub-categories amounted to more than one per cent of the whole *Bills of Mortality* sample.

In simple numeric terms the largest sub-category represented those who had been shot; but as was the case with stabbing such deaths were often not accidental. In particular it is difficult to differentiate intentional shootings from unintentional within the reports printed in the *Bills*. Nonetheless when reviewed carefully the 256 shootings can be divided between 182 ambiguous deaths and seventy-four shootings stated explicitly as accidental. The next largest sub-category is those who died through traumatic injury, most often broken legs; 118 individuals were reported to have died as a result of such incidents. Then comes a related form of traumatic death noted by contemporaries as 'bruising' or 'bruised', such terms likely to be describing the severe internal injuries that took the lives of 114 Londoners. The final three sub-categories represent two forms of sudden violent death and a specific form of reporting that developed during the early eighteenth century. During the period forty-eight individuals were reported to have died of injuries received following explosions. A further thirty-two people died through poisoning, a proportion of which may represent concealed suicides. Finally from 1700 onwards the *Bills* begin to use the terms 'misfortune' and 'misadventure'; sixteen such cases appear with no further elaboration regarding the cause of death.

Circumstances of accidental deaths by various minor causes

As noted above a reasonably large number of, apparently non-murderous, shooting related deaths occurred (256) however those that were clearly identified as accidental made up less than a third of that number at seventy-four. It is difficult to clearly assign shooting-related events to the ranks of the intentional or unintentional, yet in a number of cases the accidental nature of the shooting is obvious. In November 1657 a person died when they were 'accidentally shot with a musket going off unawares' in the parish of St Clements Danes.[384] While in 1689 at Aldgate 'Thomas Greene, servant at the Pye Tavern, [was] shot accidentally'.[385] That death and the two that follow might indicate that servants were sometimes required to handle firearms that they had perhaps little or no experience of using: 'Thomas Holbrooke, coachman to Widow Blundell's at Hampstead, there accidentally shot by himself and buried per Coroners Warrant', his burial took place at St John Hackney on 20

[384] *BofM* 24 November 1657.

[385] GL, Ms.9232/1 (St Botolph Aldgate, 11 May 1689); *BofM* 7 May 1689 ('killed with a gun'); OBP, 16 May 1689, Ellis Skynner (ref. t16890516-14). Skynner, a gunsmith, claimed to have been repairing the musket, possibly brought to him by Greene, but did not know it was loaded. He was acquitted of murder.

June 1728.[386] In a further example 'Mr Whitworth's maid, who say her name was Jones, [was] killed accidentally with a pistol' in the parish of St George the Martyr in 1716.[387]

London was in a state of chaos when another woman, 'Jane Wheatley [was] shot by accident', the register of St Margaret Westminster notes her burial on 9 September 1666; at which time the ashes of the City were still smouldering from the Great Fire.[388] Was Jane perhaps an unlucky victim of the panicked removal of goods, including weapons, from the City to the safety of Westminster? The *Bills* provide no further evidence on this particular case as at that moment in time they were not being printed, they do however provide evidence to suggest the recreational use of guns — especially bird or fowling pieces — was a cause of several deaths at other times. In 1704 in the parish of St Mary Whitechapel a person was killed when they were 'accidentally shot with a bullet from a fowling piece', on another occasion a man 'accidentally shot himself with a birding piece' at St Mary Lambeth.[389]

Those who handled weapons in order to earn a living were inevitably exposed to gun-related hazards as the *Bills* and London's parochial registers confirm. At St Margaret Westminster in 1673 'Thomas Ratleiffe, [was] shot by accident, a soldier', while in early 1677 'Mr John Mills, a trooper, shot himself accidentally' with a pistol in the parish of St George the Martyr in Southwark.[390] The *Bills* combine with the London newspapers to provide a third example, when in the summer of 1716 Corporal Mace of the 1st Regiment of Guards was 'accidentally shot in the camp at Hide-Park'.[391] Sailors also suffered gun-related injuries; the *Bills* note some individuals who were shot onboard ships or 'on the Thames' before being brought ashore for burial.[392]

Others, who had law enforcement duties, were associated with firearms either used by them or against them, and it is little surprise to find such people listed among the dead. In 1675, for example, 'John Browne, bellman, [was] shot with a pistol' in the parish of St Giles Cripplegate.[393] In what was a significant shooting incident two, rather elderly, men were reported to have been killed in St James Clerkenwell in 1742; the parochial register notes the burial on 8 April of 'Richard Cox, shot in the Watch House: Aged 75', while 'Isaac Crawley, shot by smugglers: Aged 66' was interred on the 14 April.[394] It appears both were watchmen. Cox died when a gang of smugglers attempted to retrieve several sacks of tea that had been

[386] GL, Ms.480/1.
[387] LMA P92/GEO/143 (2 October 1716), *BofM* 2 October 1716 ('accidentally killed by a pistol').
[388] HS89, p.3.
[389] *BofM* 10 October 1704; 1 December 1691.
[390] HS89, p.60 (24 June 1673), *BofM* 24 June 1673; LMA P92/GEO/141 (2 February 1677), *BofM* 30 January 1677.
[391] *BofM* 28 August 1716 (St Martin in the Fields).
[392] *BofM* 6 March 1655 ('accidentally shot, out of a ship', St Gabriel Fenchurch Street); 28 October 1673 ('accidentally shot on the Thames', St Katherine by the Tower).
[393] GL, Ms.6419/9 (4 March 1675), *BofM* 2 March 1675.
[394] HS20, p.216; HS20, p.217.

seized and held in the Clerkenwell Watch House. In an attempt to break in they shot through the door killing Cox incidentally. Crawley was shot, supposedly by the same men, later that day while patrolling with the parish constable. He was taken to St Bartholomew's Hospital where his wounded arm was amputated, subsequently dying. In the confusion, and probable hysteria, that followed the constable accused John Bolton a Custom House officer of killing Crawley, but he was later acquitted.[395]

TABLE 3.19
Weapons implicated in shooting-related fatalities in metropolitan London, 1654–1735

Weapon	All fatalities		Accident-related	
	Number	%	Number	%[1]
Pistol	77	46.4	22	28.6
Musket	39	23.5	7	18.0
Gun[2]	33	19.9	12	36.4
Fowling-piece	10	6.0	3	30.0
Blunderbus	4	2.4	0	-
Arrow	3	1.8	2	66.7
Total	166	100.0	46	[27.7]

Note: 1. Percentage of total number that was 'accident-related' within each weapon category. 2. Includes one firearm referred to as a 'carbine'.
Source: Weekly *Bills of Mortality*

A variety of weapons were implicated in the reported deaths: in all 166 (91.2 per cent) of the 182 shootings recorded the type of weapon. Most frequently noted was a pistol, used in seventy-seven cases (46.4 per cent), twenty-two of which were said to have been accidental (see table 3.19). The next most significant weapon was the musket, with thirty-nine cases (23.5 per cent) reported. The laborious manner in which muskets had to be loaded and fired undoubtedly explaining the low proportion of accidental shootings assigned to the weapon: just seven. Generally accidental shootings seem to account for a third of all fatal incidents; with the exception of muskets. Conversely fatalities caused by arrows shot from bows, although rare, were almost all assigned as accidents. For example in the summer of 1714 'James Piggott, weaver, [was accidentally] killed by an arrow shot from a bow' in the parish of St Giles Cripplegate.[396] Given the technology of the bow and arrow and its outmoded use as a weapon there is little surprise that such incidents were usually stated as accidental.

The *Bills* made particular mention of those who suffered the traumatic injury of broken bones. Such incidents could prove fatal as a result of shock, blood loss or post-trauma infection. Nevertheless, there was an extensive knowledge of 'bone-setting' techniques amongst surgeons, barber-surgeons and other informal practitioners, and many people

[395] *Champion or Evening Advertiser* 6 April 1742; *London Evening Post* 11 April 1742; OBP, 28 April 1742, John Bolton, (ref. t17420428-46).
[396] GL, Ms.6419/14 (24 May 1714), *BofM* 18 May 1714.

suffered and survived even quite serious fractures.[397] It is undoubtedly the case that many of accident events already discussed under the headings of falls, blows, vehicles and animals involved broken bones; the deaths discussed here however were reported simply in terms of the trauma itself with no reference to the cause. One result of this approach was the omission of location information in most cases; only twenty-one of the 118 reports included a parochial reference.

The most frequently cited site of trauma was the leg; ninety-two cases of death following the breaking of legs were reported. It is probable that severe trauma associated with broken femurs were responsible for many of these deaths, although only six cases specifically referred to a 'broken thigh'. There were relatively few references to broken limbs amongst the parochial burial registers, however those that were are of interest. In a straightforward example the register of St John Wapping noted in July 1738 that 'John Colier [of] Neightengal [Nightingale] Lane [died of a] Broken thigh'.[398] Other entries shed some light on the circumstantial origins of such injuries. The burial registers of St Giles Cripplegate routinely provide occupational attributions; in the following two examples the occupation of labourer indicates an exposure to physical activities that may have increased the risk of broken bones. In January 1672 the registers note the burial of 'James Hatley, labourer, broken leg', while in May 1718 they note a similar example, 'John Tipper, labourer, broken leg'.[399]

One radical method of dealing with a badly broken limb was by amputation. The *Bills* note three deaths explicitly related to the 'cutting off' of a leg. The majority of such operations would have taken place within one of London's hospitals, such as that noted in 1684 in the register for the parish of Allhallows Bread Street; 'John Boyce, son of Boyce, deceased; he was brought from the Lame hospital; he had his leg cut off.'[400] In another instance an individual was returned to St John Hackney for burial in September 1731 after dying at St Thomas's Hospital, then located in Southwark; 'Rose Feasant, a charity school girl who died in St Thomas's hospital where her leg was cut off.'[401] There is nothing of course to suggest that these cases involved a broken leg but a further example from the same

[397] For example; among the late eighteenth century 'crypt-sample' of 387 interments excavated at Christ Church Spitalfields nine percent of the males and five per cent of the females exhibited healed fractures, though many of these were minor rib injuries. Cox, M., *Life and death in Spitalfields, 1700 to 1850* (York, 1996), pp.81–82.

[398] LMA P93/JN2/24 (24 July 1738).

[399] GL, Ms.6419/8 (26 January 1672), also either the *BofM* for 23 January 1672 ('broken leg') or that of 30 January 1672 ('broken thigh') neither states location; GL, Ms.6419/14 (11 May 1718), also *BofM* 6 May 1718, location not given.

[400] HS43, p.208 (23 October 1684), also *BofM* 21 October 1684, 'broken leg' but no location.

[401] GL, Ms.480/1 (11 September 1720).

parish does, in March 1731 the burial of 'Henry Hunter, Gent., (his broken leg cut off)' was recorded.[402]

FIG. 3.19 *The industrious 'prentice Lord Mayor of London* by William Hogarth (*Industry and idleness*, plate 12, 1747). The image shows the riotous circumstances which often accompanied the Lord Mayor's procession as it passed along Cheapside, and which in 1727 resulted in a young Londoner being 'pressed to death in the crowd'.

Source: British Museum (© Trustees of the British Museum)

Similar injuries reported within the *Bills* include broken skulls, necks and backs. Once again many of those who died of such injuries were likely to have been reported through a association with the primary agency of death such as falls or blows. To give an example of such a correlation the burial register for the parish of St Margaret Westminster notes that 'Walter Boulton, Broke his neck' and was buried on 21 September 1670; the *Bills* however fail to mention this particular injury but do report a person 'killed by the fall of a scaffold' in the same parish at the same time.[403] Broken skulls and necks comprised the second largest group of reported trauma injuries, twelve in total. The burial register of St Mary Whitechapel in 1744 recounts the unusual way in which one Londoner acquired their fatal head injury; 'Richard Deane, a man from the Mount, who being in liquor tumbled down it [aged] 32 – fractured skull.'[404] In fact the Whitechapel registers contain a noticeably large number of

[402] GL, Ms.480/1 (16 March 1731), also *BofM* 16 March 1731, simply records 'broken thigh' though gives no location.

[403] HS89, p.37; *BofM* 20 September 1670.

[404] LMA P93/MRY1/62 (17 July 1744). Interestingly the *London Evening Post* printed the following report on the same day, Tuesday 17 July 1744, 'On Sunday last two young women running

skull-injury related deaths; between 1744–1747 seventeen such fatalities were recorded, ten of which were said to have come from the 'Infirmary'.[405] The London Infirmary, founded in 1740, was the immediate precursor of the London Hospital and, from 1741–1757, was located in Prescott Street in the south-east of the parish.[406] A variety of other fatal injuries were noted by the *Bills*; including a man who in October 1725 died, perhaps surprisingly, from the 'blow of a splinter in his eye' and was buried in St Helen Bishopsgate and another who died after the 'drawing of a tooth' at St Mary Lambeth in spring 1730.[407]

Others were reported to have died as a result of receiving multiple injuries. In what was probably an occupational accident the *Bills* report a man 'crushed by a malt-mill at a brewhouse' in St Giles Cripplegate in November 1725.[408] On occasion however the more accessible environment of London's busy streets served as the theatre of death, for example a child was 'pressed to death in the crowd in Cheapside' during the Lord Mayor's Procession in 1727 (see Fig.3.19).[409] A similar incident occurred at St Martin in the Fields during March 1684 when at least five people were 'prest and trod to death' in a melee for tickets to be touched for the 'king's evil'.[410] London's spectacles often presented such hazards as occurred during the summer of 1725 when 'John Bland from New Stairs [in Wapping, was] prest to death by the crowd when the pirates were executed'.[411]

Crushing fatalities were also noted in another more particular circumstance associated with the River Thames where the movement of closely moored vessels presented a serious hazard. For example in the decade of the 1660s two unnamed individuals died after being 'bruised between two ships', while John Middleton of St Margaret Westminster was 'bruised between a hoy and a barge' in 1666.[412] Finally, a man was 'killed between two ships at

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down that part of the Mount at Whitechapel which is very steep, they both fell, one broke her neck, and died instantly, the other broke an arm, and was otherwise much bruis'd'.

[405] LMA P93/MRY1/62: 7 August, 22 October, 29 November 1745; 11 August, 4 September, 10 December 1746; 19 May, 14 June, 14 July, 17 September 1747. (The same source notes only eight others as 'from the Infirmary' during the same period; their injuries ranged from concussion to gunshot wounds).

[406] Weinreb and Hibbert, *London encyclopaedia*, pp.488–489.

[407] *BofM* 19 October 1725, 17 March 1730.

[408] *BofM* 23 November 1725.

[409] *BofM* 31 October 1727. The Lord Mayor's Feast took place on 29 October and would have been especially busy as it featured the first visit to the City by the new king George II and Queen Caroline whose coronation had taken place on 11 October. The churchwardens of All Hallows Honey Lane noted a payment of 16s. on 8 November 1727 'By charges for a child that was killed on the Lord Mayors day', GL, Ms.8638.

[410] *BofM* 25 March 1684; *Evelyn*, 28 March 1684, 'There was so great a concourse of people with their children to be touched for the Evil that six or seven were crushed to death by pressing at the chirurgeon's door for tickets.'

[411] *BofM* 8 June 1725; LMA, P93/JN2/24 (St John Wapping, 13 June 1725). Also see White, M., '"Rogues of the meaner sort"? Old Bailey executions and the crowd in the early nineteenth century', *London Journal*, 33.2 (2008), 135–153, for discussion of crowd deaths in the metropolis.

[412] *BofM* 6 December 1664, 2 April 1667; *BofM* 10 April 1666, HS89, p.1 (14 April 1666).

Ratcliffe' during the winter of 1728.[413] The word most often used by the *Bills* to describe such injuries was 'bruised'; a term that occurs 114 times between 1654–1735. A fairly comfortable interpretation of the term is that it was frequently employed to indicate a death that occurred sometime after the trauma event — the phrase 'mortally bruised' supporting such a view — unlike 'pressed' which seems to imply a more instantaneous death.[414] One death of this sort was elaborated upon by Richard Smyth in his *Obituary*, in this case there was a delay of seven days between the event that caused the 'bruising' and the victims death:

> 21 July: Meacham [Machell], sexton of St Giles Cripplegate, died this morning by a fall (on Thursday July 14th) from a wall by the Windmills in Moorefields into a ditch beaneath, from whence he, lying a sleep, fell down, and was deadly bruised; buried Friday 22nd.[415]

It is clear from the descriptions within the *Bills* that those who were 'bruised' suffered a variety of wounds from head to internal injuries sustained in an equally wide range of circumstances.

In some cases the anatomical location of the 'bruising' was more specific, for example; in 1720 a man was 'bruised in his head by a fall in a crane' at St Dunstan in the East, in another incident in March 1728 a person was 'bruised in the stomach' at St Dunstan Stepney.[416] Some entries in the *Bills* provide information that explains more clearly how the fatal bruising occured. In September 1716 in the riverside parish of St John Wapping a person was reported to have died having been 'bruised by a fall from the fore-yard of a ship', the parish burial register names this individual as 'Richard Hull … from Wapping … mortally bruised by the accidental falling off the fore yard of a ship.'[417] On other occasions the object which caused injury could be described; in August 1704 a person died when they were 'bruised by a bale of linnen cloth (so reported in the Coroners Warrant)' in the parish of St Mary at Hill, while in September 1729 another was 'bruised by a bar of iron at the Mint in the Tower', and later buried at St Giles Cripplegate.[418] Finally the rowdiness of early modern sport was attested to in 1674 when a man or boy was fatally 'bruised at football' and was buried at St Mary in the Savoy.[419]

Firearms in the early modern period required a ready supply of gunpowder hence a number of Londoners were engaged in the manufacturing and supply of the volatile compound. This was a high risk activity and the *Bills* indicate that at least forty-eight

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[413] *BofM*, 5 November 1728.

[414] For example; *BofM* 11 November 1712, 'mortally bruised on the head by the fall of a stone', in the parish of St Benet Sherehog and buried at St Andrew Holborn'.

[415] *Smyth*, p.87; *BofM* 19 July 1670; GL, Ms.6419/8 (burial register, '22 July 1670: Leonard Machell, carpenter & sexton of this parish, bruised').

[416] *BofM* 9 August 1720, 19 March 1728.

[417] *BofM* 18 September 1716; LMA P93/JN2/24 (22 September 1716).

[418] *BofM* 8 August 1704, 30 September 1729.

[419] *BofM* 17 February 1674.

individuals died as a result of explosions.[420] These ranged from individual accidents to multiple deaths associated with major explosions: there were eight such events between 1664–1729, resulting in nineteen fatalities. One of the most significant occurred just before Christmas 1666 when three were 'blown up with gun powder' at St Mary Whitechapel. In January 1715 another three people were killed by a massive explosion and subsequent fire in a firework-makers shop near Thames Street in St Dunstan in the East.[421] A number of lesser explosions also proved lethal. On 21 February 1666 Richard Smyth noted the death of 'My cozen Coleman's brother, a grocer at ye corner house in Coleman Street, next Beech Lane, blown up with gunpowder, by a sparke of fire falling into a gunpowder barrel from a pipe of tobacco.'[422] On other occasions the use of gunpowder to demolish buildings seems to have ended badly for example in July 1673 a person was 'killed blowing up a house in Wapping'.[423] Another incident occurred at Wapping in 1711 when 'Patrick Mackneal, [was] accidentally killed by the blowing up of gun powder', this time onboard a ship on the Thames.[424] Indeed a number of explosions had maritime associations; in 1681, for example, a person 'blown up in a ship' was buried at St Mary Rotherhithe.[425] Gunpowder was an even more volatile material in production than it was in storage or use; the *Bills* reported two cases of explosions at powder-mills. In 1672 a person was 'blown up at a powder mill' in the parish of St John Hackney, while in the summer of 1704 another was killed by the 'blowing up of a powdermill at Streatham', they were buried at the City church of St Swithins.[426]

The final cause of death to demand individual consideration is that of poisoning. Between 1654–1735 the *Bills* record the accidental deaths by poisoning of thirty-two people.[427] Infants and children were at a particularly risk of unknowingly ingesting poisonous substances; at St Martin in the Fields during 1655 for example a 'child poisoned itself', while in 1674 'Abraham Blackbury, an infant [was] poisoned' and buried at Allhallows the Great.[428] Mental age could be just as significant as physical age when it came to poisons, as demonstrated by the burial register of St Giles Cripplegate: on 12 November 1656 the burial took place of 'Jane Fudge, simple woman, coroners inquest, poisoned by the mistake of a roote'.[429] Others made more straightforward errors yet with similar fatal consequences; in

[420] Also see above section 3.9, for a discussion of those 'burnt' as possible victims of explosions.
[421] *BofM* 25 January 1715, also see above regarding burning fatalities.
[422] *Smyth*, p.71. Smyth seems to have made a mistake in allocating this event to 'Coleman' Street, given the location in St Giles Cripplegate this was probably either Red Cross or White Cross Street; *BofM* 20 February 1666; GL, Ms.6419/7 (burial register, '22 February 1666: Robert Coleman, grocer, blown up with gun powder in his dwelling house by accident').
[423] *BofM* 1 July 1673.
[424] LMA P93/JN2/24 (8 March 1711), *BofM* 6 March 1711 (St John Wapping).
[425] *BofM* 11 October 1681.
[426] *BofM* 12 March 1672, 18 July 1704.
[427] Also note that the *BofM* record 139 suicidal poisonings, 6.1 per cent of all suicides.
[428] *BofM* 25 September 1655; GL, Ms.5159 (30 December 1674).
[429] GL, Ms. 6419/5.

1680 ‘George Gill, a servant, poisoned himself by mistake with balls of ratsbane’ in the parish of St George the Martyr.[430] Finally, in a somewhat more dramatic event in December 1717 four weaver’s apprentices were poisoned at Stepney. They were reported to have been advised, either by an ‘old woman’ or one of their sisters, to use a purgative herbal preparation of gamboge to treat a case of the ‘itch’. Although gamboge can be highly toxic a sample of the preparation used by the apprentices was conveyed to the Royal College of Physicians who identified it as yellow arsenic.[431]

On 3 September 1700 the *Bills* use the phrase ‘died by misfortune’ for the first time, by 1735 the term had been used to describe sixteen deaths. In the first eleven cases, the phrase was accompanied by the comment ‘(so reported in the Coroners Warrant)’; after June 1709 there was no mention of such warrants. Nevertheless an entry in the St John Wapping burial register suggests that the term ‘misfortune’ when reported in the *Bills* continued to derive from coroner’s warrants: on 24 May 1714 the burial was recorded of ‘John Leame, dead by misfortune so reported in the Coroners warrant, from King Edward Street’; the relevant *Bill* simply states ‘died of misfortune’.[432] That this form of report was a direct transcription of an inquest verdict noted in a warrant is perhaps confirmed by the use of the slightly different phrase of ‘misadventure’ in two cases during 1704 and 1705; significantly these were the only two cases to be returned by the Westminster coroner.[433] There are some earlier uses of the term ‘misfortune’ found within the London burial registers, however in all cases before 1700 a further cause of death is indicated; for example at St John Clerkenwell in 1658 ‘Thomas White drowned by misfortune’.[434]

Seasonality

Given the diverse nature of the causes of death within this section it is necessary to discuss the seasonal occurrence of each type separately; also for this purpose only those categories reporting over 100 deaths have been considered. When the occurrence of such deaths is analysed across the calendar year however there appears little evidence for any significant patterns (see Table 3.20). Least clear is the data for those suffering broken bones and other related injuries; three peaks are apparent if contrasted with the 9.8 deaths per month that would be expected if the events were equally distributed across the calendar. These were March–April (23.7 per cent), July–August (17.8 per cent) and November–December (20.3 per cent). The period with the lowest occurrence of such deaths was May–June (9.4 per cent).

[430] LMA P92/GEO/141 (2 April 1680), *BofM* 30 March 1680.

[431] *BofM* 17 December 1717; *Weekly Packet* 14 December 1717; *Weekly Journal* 21 December 1717; *Weekly Journal or Saturday’s Post*, 21 December 1717; Tournefort, J.P. de, *Materia medica; or, a description of simple medicines generally us’d in physick*, (London, 1716), pp.87–88.

[432] LMA P93/JN2/24, *BofM* 18 May 1714 (St John Wapping).

[433] *BofM* 2 May 1704 (St Martin in the Fields), 17 April 1705 (St Margaret Westminster).

[434] HS17, p.324 (29 November 1658).

The distribution of bruising-related deaths across the year shows a similar lack of significance: peaks were seen again in March–April (24.6 per cent), but also in June–July (23.7 per cent) and in September (10.5 per cent). Noticeably each of those peaks were interposed by months when very few bruising deaths occurred. When considered together both forms of injury-related fatality seem to have been slightly more prevalent during the spring; a time of increased outdoor activity and changeable weather. It is not possible, however, to say anything more certain about seasonality in this case.

Table 3.20
Seasonality of deaths caused by injury, bruising or firearms in metropolitan London, 1654–1735

Month	Injured		Bruised		Shot	
	Number	%	Number	%	Number	%
January	8	6.8	9	7.9	35	13.7
February	9	7.6	9	7.9	16	6.3
March	13	11.0	17	14.9	20	7.9
April	15	12.7	11	9.7	18	7.0
May	6	5.1	6	5.3	18	7.0
June	5	4.3	13	11.4	21	8.2
July	10	8.5	14	12.3	18	7.0
August	11	9.3	3	2.6	17	6.6
September	8	6.8	12	10.5	22	8.6
October	9	7.6	8	7.0	28	10.9
November	13	11.0	9	7.9	18	7.0
December	11	9.3	3	2.6	25	9.8
Total	118	100.0	114	100.0	256	100.0

Source: Weekly *Bills of Mortality*

Shooting deaths on the other hand do perhaps indicate a certain pattern of seasonality; however overall there is still a strong equity within their distribution across the calendar year. A general increase in deaths seems to be observable between September and January (allowing for a 'normal' month in November), those five winter months account for exactly half of all shooting fatalities.[435] Perhaps surprisingly this period is delimited by two months with the lowest occurrence of shooting deaths: February (6.3 per cent) and August (6.6 per cent). While it is difficult to fully explain this seasonal pattern some factors can be considered. It is possible that more frequent use was made of firearms for personal security during the winter months, there is also a concentration of deaths associated with 'fowling pieces' during the Autumn period, finally the fewer numbers resident in London during the late summer may have reduced the population at risk.

[435] Note however that at least nine of the January deaths date to 1661 the time of Thomas Venner's Fifth Monarchist insurrection on the streets of London.

Geographical patterns

Again in order to understand any geographical patterns in this collective group each category of cause of death needs separate consideration. In this case however only two categories are suitable for analysis, as the reports for those who suffered broken bones and related trauma injuries rarely recorded locations. The distribution for those who died from bruising indicated a significant increase of such events in the eastern riverside parishes (see Table 3.21). The area accounting for 24.7 per cent of all such deaths, yet only housing 13.0 per cent of the metropolitan population. It is likely that the poor labouring community that inhabited the area were exposed to increased occupational risk; indeed eight of these deaths had clear maritime occupational associations. A somewhat similar community occupied parts of the City without the Walls and here too the incidence of bruising-related deaths (21.3 per cent) was higher than the area's share of population. The areas to demonstrate the least frequent occurrence of such deaths were the northern and eastern parishes (4.6 per cent) compared to their population share of 15.9 per cent, perhaps reflecting forms of occupational activity with lower risk.

Table 3.21
Geographical distribution of fatalities caused by bruising or firearms in metropolitan London, 1654–1735

Metropolitan areas	Bruised		Shot		Estimated population
	Number	%	Number	%	%
City within the Walls	18	20.2	37	14.7	16.6
City without the Walls	19	21.3	36	14.3	13.2
Westminster	3	3.4	12	4.8	4.4
West End	9	10.1	58	23.0	18.8
Northern parishes	2	2.3	19	7.4	7.2
Eastern parishes	2	2.3	9	3.6	8.7
Eastern riverside parishes	22	24.7	32	12.7	13.0
Middlesex within the Bills	1	1.1	13	5.2	3.4
Surrey within the Bills	13	14.6	36	14.3	14.7
Total	89[1]	100.0	252[2]	100.0	100.0

Note: 1. Twenty-five reports in this category gave no location. 2. Four reports in this category gave no location.
Source: Weekly *Bills of Mortality*

The distribution of shooting-related deaths compared more equitably with the distribution of London's population. The only area to exhibit a significantly higher than expected number of fatal shootings was the West End where 58 deaths occurred (23.0 per cent). There are two possible explanations that might account for this increase: the first mirrors the social stratification explanation for stabbing-related deaths in the West End, in

this case however the pistol replaced the sword as the weapon of choice.[436] In the West End eighteen or 31.0 per cent of shootings involved pistols, whereas in the eastern riverside parishes pistols were reported in only 6 cases (18.8 per cent). The relative ease with which citizens resident in the western part of the city could access, and use, pistols may account for at least some of this increased occurrence. Although it should be noted that the area exhibiting the highest proportion of pistol-related shootings was actually the City without the Walls where sixteen cases occurred (44.4 per cent). The second explanation partly inverts the social stratification argument by considering the increase in shooting-related deaths in the western parts of the city as reflecting occupational activity; that is the increased presence of soldiers. The area with the lowest instance of deaths by shooting was the eastern parishes where only nine (3.6 per cent) such deaths were reported. It is possible that the poorer and more rural nature of the area contributed to lower levels of gun ownership and use.

Section 3.14 Sudden violent death over time

It is possible to consider the relationship between sudden violent death events and time in two principal ways, first with reference to yearly seasonality and second by exploring trends across the entire period of the study between 1654–1735. Seasonal variation in the incidence of murders and suicides has already been discussed and compared with the overall pattern for all other sudden violent deaths (see above section 3.1). Similarly as each type or category of accidental death has been discussed above a consideration has been given its specific seasonality. Taking a broader view of the serial data drawn from the *Bills of Mortality* it is possible to delineate some general trends across the late-seventeenth and early-eighteenth centuries. Whilst the data on murder and suicide show specific trends but provide insufficient information to further unpick the detail (see section 3.1) the data on accidental and undefined deaths present possibilities for a finer-grained analysis. It is clear that the general trend between 1665–1734 (the period for which the most complete continuous run of weekly *Bills* survive) shows an initial increase followed around 1690 by a slight decline leading to a period of general stability — fluctuating at approximately 150 fatalities per annum — until around 1715 when the trend is once again upwards (see Fig 3.20). It is most likely that this general trend is in part a reflection of changes in the metropolitan population, however particular categories of accidental death show more specific trends.

[436] See above, section 3.10, for a discussion of the geography of stabbing-related deaths.

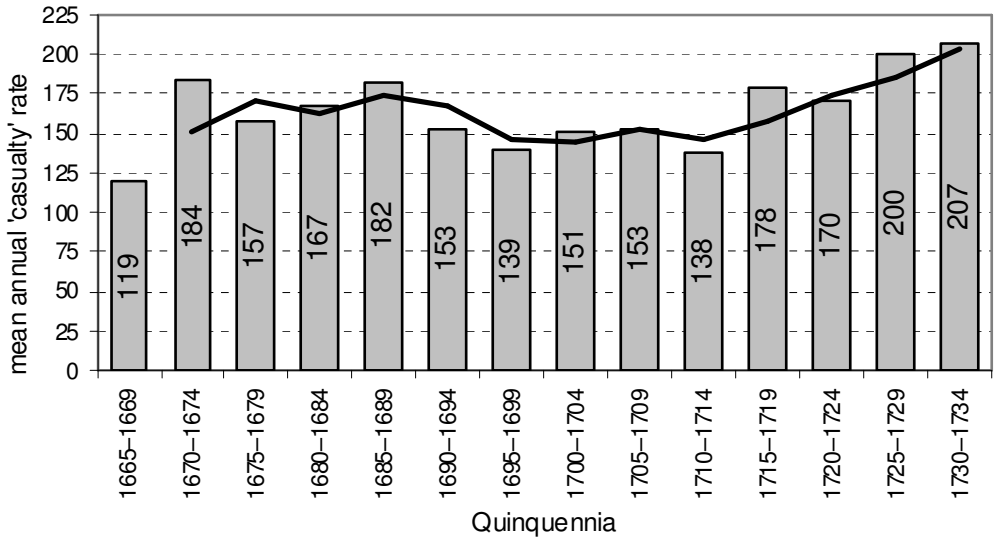

FIG. 3.20 Mean annual number of accidental and undefined 'casualties' in metropolitan London, 1665–1734, by quinquennia; also showing ten-year moving average

Note: Each quinquennium was calculated from January of the first year to December of the last year

Source: Weekly *Bills of Mortality*

The most numerous category of sudden violent death was drowning. When the overall occurrence of drowning is plotted across the eighty years of the study a trend similar to the overall 'casualty' figures is apparent (see Fig. 3.21). Ignoring the peak in 1673 — a result of the Westminster Horseferry disaster — it is possible to see a relatively steep increase in drowning-related deaths from the 1660s through to around 1680. A period of decline and stability then follows, but notably the decline predates the similar decline seen in the more general figures by some five to ten years starting as it does in the early 1680s. The steadier rate of between fifty and sixty drownings per annum is maintained until about 1717 when the annual frequency begins to increase, an effect most clearly seen in the path of the 10-year moving average shown in Fig. 3.21. There may be a number of explanations for this trend however two in particular would seem to have potential significance. The fluctuations in the economic activity of the port of London might be expected to impact directly on the numbers employed in river-related work, and hence increase the population at risk, while the victims of naval warfare may also have found their way into the data during times of conflict.

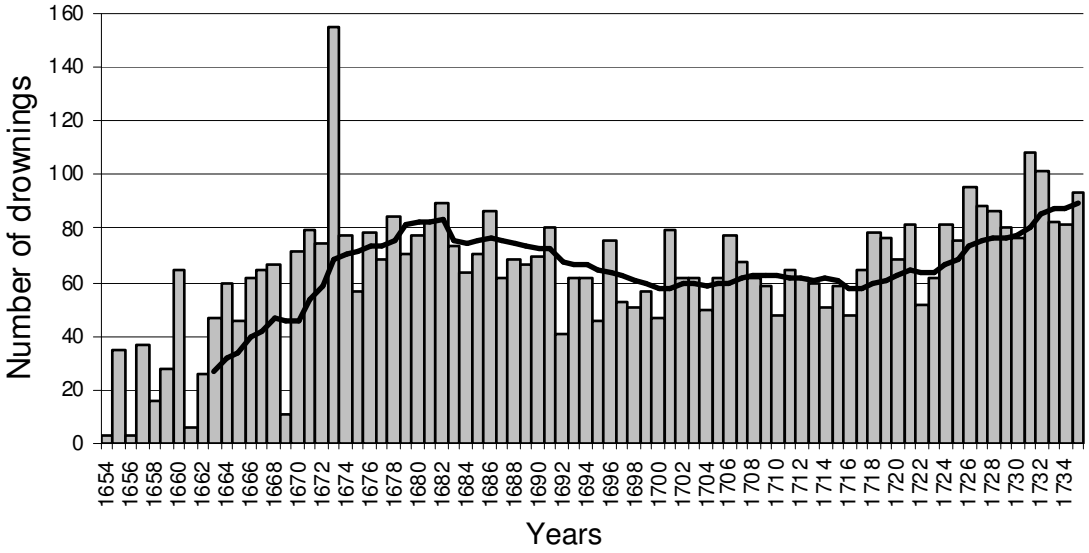

FIG. 3.21 Annual totals of undefined and accidental drowning in metropolitan London between 1654 and 1735; also showing ten-year moving average.

Source: Weekly *Bills of Mortality*

In order to test the foregoing hypotheses Fig. 3.22 shows those periods of English warfare that occurred during 1654–1735 and potential increases in the activity of the port as indicated by peaks in overseas trade. Periods of conflict do not appear to have had a significant affect upon the incidence of drowning as recorded in the *Bills* (excepting the Westminster Horseferry disaster) however there does appear some correlation between the occurrence of drowning and the cyclical peaks of overseas trade, presumed to have been accompanied by an intensification of port activity. In particular the general period of growth in trade from the mid 1670s through to the late 1680s clearly spans a peak in drowning. Other peaks are not so well correlated but increased trade during 1706–1708, 1710–1712 and 1716–1718 generally coincide with years of high incidence of drowning. The recurring peaks in overseas trade from 1722 onwards point to a more sustained period of economic growth, a trend mirrored by an upward trend in the rate of drowning during the 1720s and which is particularly well demonstrated by the path of the ten-year moving average. It should be noted that this increase came at a time when London's population growth was in stagnation.[437]

[437] Schwarz, *Age of industrialization*, pp.125–128.

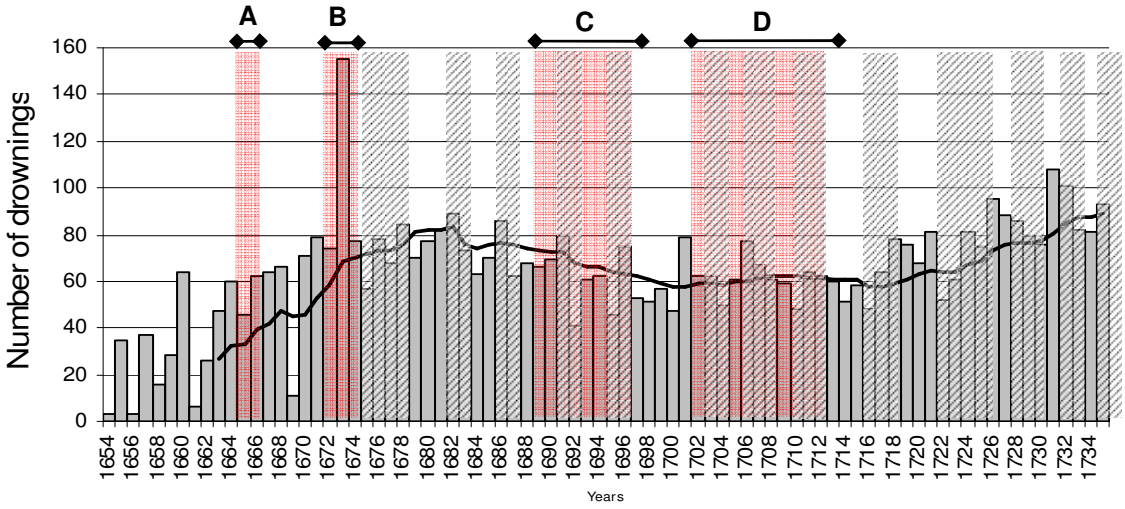

FIG. 3.22 Annual totals of undefined and accidental drowning in metropolitan London between 1654 and 1735; also showing ten-year moving average. The figure additionally shows periods of warfare (red) and peaks in English overseas trade (hatched).

Notes: A= Second Anglo-Dutch War (1665–1667); B =Third Anglo-Dutch War (1672–1674); C = Nine Years War (1689–1697); D = War of the Spanish Succession (1702–1713).

Source: Weekly *BofM;* Hoppit, J., *A land of liberty? England 1689–1727* (Oxford, 2000), pp.318–319; Jones, D.W., *War and economy in the age of William III and Marlborough* (Oxford, 1988), pp.127–136, also tables 5.2, 8.1, and figure 5.1.

A further category of sudden violent death that occurred in relatively large numbers was falling. When looked at across the period the annual rate for such fatalities demonstrates a similar, though not identical, trend to that of drowning (see Fig. 3.23). An initial steep rise commences in the mid-1660s, reaching a significant peak in 1682. The ten-year moving average clearly indicates a decline in the rate from 1690 and then a steady occurrence — averaging around 17 per year — until about 1720 when the rate climbs slowly. A relatively straightforward interpretation of these figures can be made by reference to the post-Great Fire rebuilding programme, assuming a significant proportion of falling fatalities were construction-related. While the initial increase from the late 1660s to the mid 1670s seems to reflect the residential and commercial building phase the more erratic continuation — from the mid-1670s through to the late 1680s — is likely to relate to the relatively more hazardous work of constructing churches, public buildings and St Paul's cathedral.[438] Although work on the cathedral continued to 1710 in most other parts of the City activity associated with the rebuilding had ceased by the 1690s.[439]

[438] A proclamation of April 1673 ordering the removal of temporary 'sheds, shops and other buildings' from Smithfield, Moorfields and other open spaces by September 1674 implies that most residential and commercial properties had by that date been rebuilt; CLRO, COL/SJ/27/372. Similarly the work of the Great Fire building surveyors, Robert Hooke and John Oliver, had been reduced by 1675 to little more than reporting on a handful of vacant lots; Jones, P.E., and Reddaway, T.F. (eds.), *The survey of building sites in the City of London after the Great Fire*, vol.1 (1967), pp. xxi–xxii.

[439] Reddaway, T.F., *The rebuilding of London after the Great Fire*, (London, 1940), pp.279–280; Porter, S., *The Great Fire of London*, (Stroud, 1996), pp.127–151.

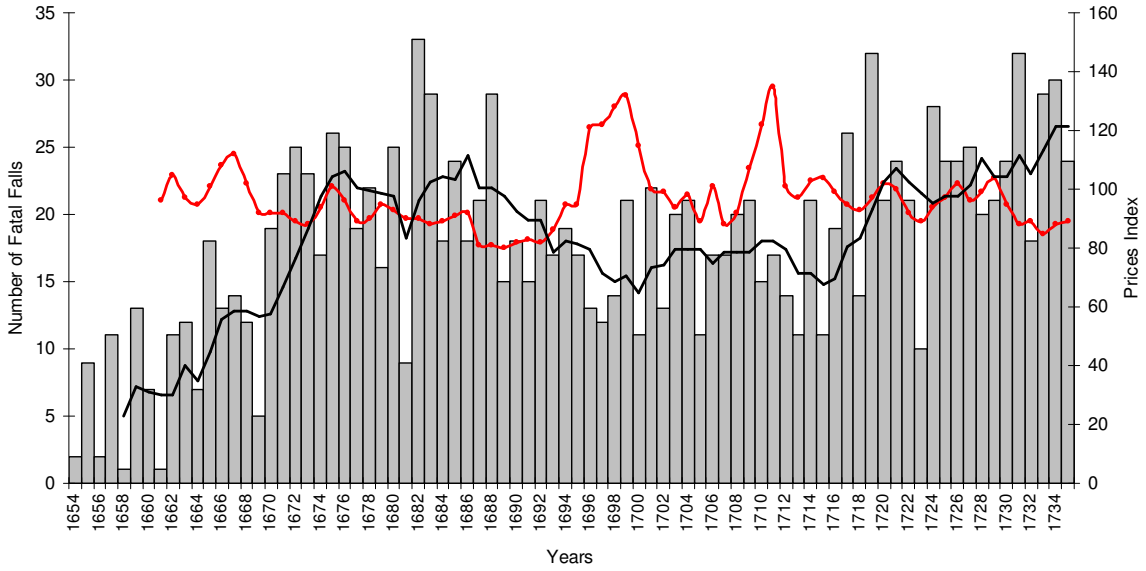

FIG. 3.23 Annual totals of fatal falls in metropolitan London between 1654–1735; also showing five-year moving average and price index for consumer goods (shown in red)

Source: Weekly *Bills of Mortality*; Schumpeter, E.B., 'English prices and public finance 1660-1822', *The Review of Economics and Statistics*, 20.1 (1938), pp.34–35

There was a significant reduction in the number of falling fatalities between 1689 and 1715. It is likely that this reflected not only the ending of the intensive post-Great Fire reconstruction activity but also a general decline in economic conditions. Figure 3.23 also demonstrates the inverse relationship between the number of fatal falls and economic conditions as indicated by the proxy index of consumer goods prices.[440] Although small fluctuations in the prices index cannot be directly linked to fatality rates the more general movements can; the economic downturn from 1694 to 1713 — represented by a dramatic rise in prices — is inversely mirrored by decline in the incidence of falling fatalities. This was likely to have resulted from a reduction in the population at risk through the removal of opportunities to work, in both the building trades and commerce. The return in the 1720s to levels of fatality comparable to the peak of the 1680s may be explained variously by the expansion of the Western suburbs, the renewal of aging property elsewhere in the metropolis and also more stable economic conditions.

[440] For a detailed account of consumer prices and wages during this period, and their correlation with social actions, see variously; Beattie, *Crime and the courts,* pp.202–212; Gilboy, E.W., 'The cost of living and real wages in eighteenth century England', *The Review of Economics and Statistics*, 18.3 (1936), 134–143; Schumpeter, E.B., 'English prices and public finance 1660-1822', *The Review of Economics and Statistics*, 20.1 (1938), 21–37; Phelps-Brown, E.H., and Hopkins S.V., 'Seven centuries of the prices of consumables, compared with builders' wage-rates', *Economica*, 23.92 (1956), 296–314; Phelps-Brown, E.H., and Hopkins S.V., 'Wage-rates and prices: evidence for population pressure in the sixteenth century', *Economica*, 24.96 (1957), 289–306; and Woodward, *Men at work*, pp.169–208.

It is also possible to consider data for those deaths that occurred in land-transport related activities (those involving vehicles or horses), see Fig. 3.24. Focusing on the five-year moving average there is a steady increase in the number of fatalities from the early 1660s followed by an erratic decline during the period of the Great Fire rebuilding. The numbers then rise again to a peak around 1680, this is followed by another erratic decline through to 1700. The eighteenth century commences with a significant rise in the number of land transport fatalities peaking around 1705 and then falling to a low some ten years later. Finally there is a rise to a somewhat more stable pattern during the 1720s and through to the end of the data-series in 1735. It is apparent that aside from the period of the post-Great Fire rebuilding the trend for land transport fatalities is the clear inverse to that of the price index. This is particularly noticeable during the late 1690s, between 1708–1716, and in the early 1730s. Poor economic conditions and a decline in commercial activity resulted inevitably in a reduction in transport activity and more generally upon the movement of people thus reducing the population at risk of transport-related accidents. That the opposite effect was also experienced is clear, however this does not entirely explain the very dramatic rise in transport-related fatalities after 1700. One factor which could help to account for this rise may have been an intensification of military transport activity arising from the capital's response to the war of the Spanish succession commencing as it did in 1702.

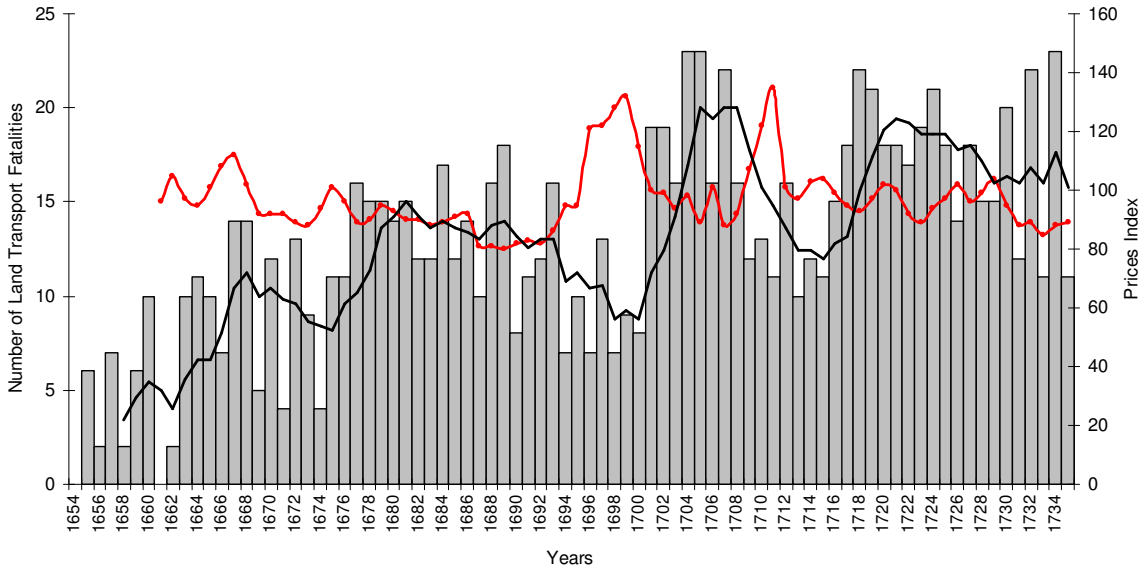

FIG. 3.24 Annual totals of land transport fatalities in metropolitan London between 1654–1735; also showing five-year moving average and price index for consumer goods (shown in red)

Source: Weekly *Bills of Mortality*; Schumpeter, 'English prices and public finance', pp.34–35

The annual numbers of fatalities that resulted from other causes or agencies of sudden violent death did not occur in sufficient numbers to allow any meaningful analysis of time series data. Nonetheless, as the above examples demonstrate, trends in certain types of sudden violent death appear to have been influenced by a variety of external agencies including changes in levels of metropolitan population, responses to large-scale events in the built-environment, such the Great Fire, wars and longer-term economic fluctuations. Such factors would in turn alter the level of exposure to risk experienced by individuals and as a consequence result in either an increase or decrease in accident events.

Chapter 4 Responding to accident events

Section 4.1 Social and medical response to accident events

As previously noted for every fatal accident there were many more that remained non-fatal. Discovering evidence for such incidents in the historical record is difficult as few of these injuries were recorded and very rarely in anything approaching a systematic way. Nonetheless by exploring a variety of sources it is possible to get a broad sense of the approaches taken within the metropolis to those injured in accident events.

While the vast majority of injuries in the workplace were rarely recorded those that occurred in public spaces, in streets and markets or on the rivers and roads, were sometimes inscribed within the documents of the day; these ranged from churchwardens accounts, through newspaper reports to hospital records. Information on work-related incidents appear occasionally when linked to litigation, whether pursued through company courts or the formal processes of the law, but also in various petitions for support.

Social response to accident events

At the highest level the parochial system was employed by the state to elicit charitable giving to relieve the victims of catastrophe. In particular there was widespread use of 'briefs', which were authorisations for collections to be made during parish services and granted by petitions to either crown or parliament. During the seventeenth century briefs, or letters patent, were used routinely to provide those in distress with a means to obtain financial relief. The majority of distress briefs with a domestic focus related to urban fires; although floods or 'inundations' are also a frequent subject. Nonetheless by the later part of the century the proliferation of such briefs was beginning to tax the capacity, and willingness, of parishioners to contribute. Samuel Pepys expressed such an opinion in 1661 stating 'To church, where we observe the trade of briefs is come now up to so constant a course every Sunday that we resolve to give no more to them.'[1]

At the beginning of the eighteenth century there was a major re-organisation of the practice following a fraudulent episode associated with a fire in Derby Court Westminster in 1697.[2] The 1705 'Act for the better collecting charity-money on briefs by letters patent, and preventing abuses in relation to such charities' was designed to regulate the process and prevent further fraud.[3] The use of briefs for fire distress in London tended to focus on major events with multiple casualties, especially as the gradual spread of fire insurance during the period came to replace the need for individual householders to seek redress through this

[1] *Pepys*, 30 June 1661.
[2] Walford, C, 'Kings' briefs: their purposes and history', *TRHS*, 10 (1882), pp.30–35.
[3] 4 Anne c.25.

route. A situation illustrated by announcements placed in the *London Gazette* in January 1715 requesting that,

> The directors of the Hand in Hand Fire Office desire all persons whose houses are burnt down, or damaged by the late fire in Thames Street, to give speedy notice thereof at the office on Snow Hill that reparation may be made, and their several demands satisfied. N.B. Bring your policies or numbers with you.

and

> All persons insured in the Sun Fire Office, London, who have had damage by the late dreadful fire in Thames Street, are desired to bring their claims to the company's office in Threadneedle Street behind the Royal Exchange, in order to receive full satisfaction.[4]

The notion of providing casual charitable relief through the parish was extended to injured individuals who were known parishioners — or strangers who were able to present a personal brief, or story, sufficient to elicit alms from churchwardens.[5] Once again many who suffered fire-related distress fell into this category, for example in the summer of 1683 the vestrymen of St Dunstan in the West were minded that,

> upon reading the petition of Widd Bassingdine, whose husband was killed at the fire at the Queens Head taverne in Fleet Street. It was ordered that the collectors for the Poor for the time being, should pay her two shillings @ week, for the nursing one of her children.[6]

Such charitable giving was sometimes linked to less charitable objectives; in 1655 the churchwardens of St Botolph Bishopsgate keen to avoid a future settlement claim 'Paid to Mary Chuney who lost her husband at the fire in Threadneedle Street being great with child to carry her into the country there to be delivered ... 10s.'[7]

In some cases churchwardens were informally petitioned for alms by distressed strangers from outside the parish. Most obvious among this group would be discharged or maimed soldiers and sailors. In 1715 the churchwardens of St John Zachary 'Gave to 13 ship wract men with a pass, 2s. 6., [and] a sick disbanded soldier, 1s.'[8] But many civilians also benefited from such opportunities, for example a 'poor woman with child her husband wounded by a fall' who approached the churchwardens of Allhallows the Great during the winter of 1677 was given one shilling.[9] In 1690 the churchwardens of Allhallows London Wall granted 'a poor man burnt by fire' sixpence.[10] Eighteen years later officers of the same

[4] The *London Gazette*, 15 & 18 January 1715; there were further announcements in the *Daily Courant* for policy holders of the Friendly Society (18 January 1715) and the Union Fire Office (19 January 1715). Also see above section 3.9 regarding the fire itself.

[5] For an example of the way a London parish dealt with the stranger poor, see Wear, A., 'Caring for the sick poor in St Bartholomew's Exchange: 1580–1676', *Medical History*, Sup.11 (1991), pp.52–53.

[6] GL, Ms.3016.2 (25 July 1683); her husband's death was probably that reported in *BofM* 24 July 1683.

[7] GL, Ms.4524/2 (16 July 1655).

[8] McMurray, *The records of two city parishes*, p.404.

[9] GL, Ms.818/1 (1 December 1677).

[10] GL, Ms.5090/3 (23 April 1690).

parish offered a shilling to 'a poor woman undone by fire in the Strand'; interestingly her individual application was received at the same time as a formal brief for the same fire to which the parish contributed £3 12s 6d.[11]

By the eighteenth century more direct efforts were being made to raise funds in the wake of disastrous events. Following the major fire that occurred in April 1730 at the corner of Fetter Lane and Fleet Street, and which claimed the lives of a number of firemen, a collection was announced in the *Weekly Journal*:

> Mr Overall having been desired to continue for some time longer to receive the charitable contributions of well disposed persons, towards the relief of the poor distressed families of those firemen who were killed at the late fire in Fleet Street; and having received several sums of money from gentlemen and ladies for those purposes, he is determined to continue receiving such charities as shall be sent him until Thursday the 16th of this instant, at his house in Bartholomew Close in Smithfield; and then will distribute the same.

In an interesting display of corporate obligation the same newspaper was able to report the following Thursday 'We hear the managers of the Sun Fire Office did last Thursday order thirty guineas to be distributed among the families of the late unhappy firemen.'[12] In another case of secular charity *The Daily Courant* reported on 8 April 1730,

> On Monday night, Captain Rufdon, Commander of the Westminster Fuzileers, made a collection among his company for John Loe, a Corporal in Colonel Parson's Company in the 2nd Regiment of Foot-Guards, who had the misfortune of having his leg shattered to pieces the same evening in Tothill Fields, by discharging of one of the pieces of their cannon; which collection amounted to £5. The said John Loe was that evening carry'd to St Bartholomew's Hospital, and yesterday morning his leg was cut off just above the knee.

These particular responses seem indicative of a rebalancing action through the development of a more secular method of charitable giving as support for the traditional system of briefs began to wane. The use of the medium of the metropolitan newspaper, as opposed to the pulpit, to elicit and recognise such giving is also of significance.[13]

Nevertheless during the period under study it was parochial resources that parishioners would turn to routinely when they found themselves in physical or financial difficulty following personal injury. Such largesse was often employed to refund the costs of medical care or nursing, especially for parish pensioners. For example in 1673 in St Dunstan in the West an injured parishioner approached the vestry for support, the minutes of their meeting record that,

> Upon reading the Petition of Widow Thorne one of the pentioners having by accident broke her arm and desiring something towards the payment and satisfaction of her Chirurgion. It was

[11] GL, Ms.5090/3 (30 May 1708).

[12] *Weekly Journal* 11 & 16 April 1730. Also see above section 3.9 regarding the fire itself.

[13] For a brief comment on the use of advertisements for, mainly private, charitable purposes in the later eighteenth century see, Ben-Amos, I.K., *The culture of giving informal support and gift-exchange in early modern England*, (Cambridge, 2008), p.333.

> ordered that Mr Kempe [senior member of the vestry] give her five shillings to relieve her in this her extremity.[14]

In a similar response the churchwardens of St Botolph Bishopsgate made a short series of payments in 1657 for medical care:

> Paid to Goodwife Willey when her husband broke his arm ... 5s.
> Paid her more ... 5s.
> Paid her more ... 10s.
> All which was to pay the surgeon.[15]

Churchwardens were often cautious in making such payments, careful not to expose the parish to open ended costs; it is debatable whether such applications were initiated by the injured themselves or made with the encouragement of their surgeons.[16] Whatever the source of the demands some individuals were clearly perceived as potential liabilities as demonstrated by a comment that John Darby, churchwarden of St Bartholomew the Great, appended to a note of a payment made to an injured inhabitant in 1698:

> Paid the surgeon that set Mr Taylor's knee 20s., and sent him at the same time 20s. to keep him and his nurse.
> This will be the last. Darby ... £2[17]

In a more extended example support for Mary Sperrin who broke her arm in St Dunstan in the West in December 1691 dragged on for just over three months and encompassed nine separate payments ranging from sixpence to two shillings. The payments only ceasing when Mary was dispatched to her home town of Bristol, although even this was at a cost as the parish accounts show:

> 6 April – Paid to Sir William Turner's C[ler]k for a pass warrant for Mary Sperrin to send her to Bristol with her broken arm ... 2s. 6d.
> More to the Lord Mayor's C[ler]k for procuring my Lord Mayors hand to the pass and spent at the same time ... 2s.[18]

Accidents in public places provide further evidence for the approach adopted by petty authority toward the injured whether identified as their own parishioners or perhaps more commonly as strangers. In most cases such casualties required immediate assistance prior to any consideration of ongoing relief. Here too churchwardens were requested to foot the bill if individuals were unable through poverty or physical incapacity; although attempts were often made to recover such expenditure from strangers or their families. The first response in most incidents was to summon a surgeon or transport the individual to a nearby hospital. For example in 1668 John Sinclere, a surgeon, was paid five shillings by the churchwardens of St Margaret Westminster 'for his readiness and care in curing the arm of one Walter Best, a

[14] GL Ms.3016.2 (27 February 1673).
[15] GL, Ms.4524/2 (9 May 1657).
[16] Also see, Wear, 'The sick poor', pp.50–52.
[17] GL, Ms.3989/1 (9 February 1698).
[18] GL, Ms.2968/6 (30 December 1691 to 6 April 1692).

poor man of this parish, whose hand was cut off by a soldier'.[19] In a similar case the churchwardens of St Magnus Martyr called upon Mr Richard Davies to 'cure Mr Emres maid who lost her hand by the crushing of a cart' for which service he charged one pound.[20] In the spring of 1685 the churchwardens of St Dunstan in the West had to deal with Captain Tim Wright who was the victim of a street accident. They spent money on 'setting and dressing his [broken] leg, for necessaries for him, for watching with him and tending, and charges of burying him.'[21]

Fig. 4.1 Coloured aquatint showing two men [porters?] conveying a sick woman to a hospital, 1812

Source: Wellcome Images; © Wellcome Trust

Sometimes it was enough to simply move such victims out of the parish. When dealing with the victim of a traffic accident at St Botolph Billingsgate the churchwardens were happy to pay two shillings for '2 porters to carry a poor man to Walworth whose leg was broke by a cart near Mr Stent's door' (see Fig.4.1). Keen to recoup their outlay they set about searching for the responsible carman, the next entry in the accounts noting 'Gave at times to his wife,

[19] Vestry Minutes (7 May 1668); Smith, *Westminster records*, p.188.
[20] GL, Ms.1179/1 (12 June 1674).
[21] GL Ms.2968/6 (3 July 1685).

til we could find out the carman ... 15s. 6d.'[22] At other times the responsible person was more easily discovered; in 1735 the churchwardens of St Magnus Martyr paid 'for a coach & taking care of James Edgeley a poor man who fell down Mr Gray's cellar ... 4s. 6d.'[23]

As noted in the previous examples parochial authorities often arranged the conveyance of accident victims to one of the city's hospitals; hospitals in London did not maintain their own transport for such purposes until the second half of the eighteenth century.[24] Once at the hospital they would petition for admission and then further support the individual during their stay. An example from the churchwardens' accounts of St Brides in 1698 sets out the ongoing cost of medical care, or at least the nursing that would support it, when the injured successfully gained admission:

> 21 June – Paid the Beadles their charges carrying Elizabeth(sic) Young that broke her arm to the hospital, porteridge and drinking money 2s.
> To the Beadle of the hospital one shilling.
>
> 21 September – Paid Henwood [parish staffman] to buy a shift for Margaret Young lying in the hospital for the cure of her broken arm ... 1s. 6d.
>
> 4 October – Paid Henwood by order of Mr. Willson to buy a petticoat for Margaret Young lest they turn her out of the hospital ... 3s.
>
> 22 October – Paid the nurse at the hospital for Margaret Young ... 1s.[25]

In what would seem to have been a well practiced response the churchwardens of St Magnus Martyr dealt with a casualty on London Bridge in 1735 by spending two shillings to 'carry a poor woman that was run over to St Thomas's Hospital'.[26] The scenario was repeated some six months later when they 'Paid Richard Ward [sexton] to get Anne Tully into the Hospital having broke her leg on the Bridge ... 5s.'[27] Boulton found evidence for a similar approach to the care of the hurt but in this case directing the injured to parish nurses rather than hospitals. As he states 'The cost of carrying paupers to parish nurses in sedan chairs ('chair hire') or coaches also appears [in parish accounts], as it does in the nurses bills, and once an overseer listed a charge of *18d.* for "sending a poor woman who broke her Legg to Nurse Anderson's and to a Messenger acquainting me thereof and going to the Surgeon"'.[28]

Those injured in work-related environments had access to additional or alternative means of support often relying directly on the generosity of their employer or master. In August 1661 John Evelyn's afternoon at church was cut short when he,

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[22] GL, Ms.942/2 (1 January 1714).

[23] GL, Ms.1179/2 (1 May 1735).

[24] The minutes of the Middlesex Hospital board show the purchase of a 'chair and horse' to carry patients 'in case of accidents' in October 1777, its use was at the patient's expense unless they could prove poverty; Hart, H.W., 'The conveyance of patients to and from hospital, 1720–1850', *Medical History* 22 (1978), pp.400–401.

[25] GL, Ms.6552/2; see also LMA H.1/ST/B9.

[26] GL, Ms.1179/2 (17 November 1735); a further payment made on 24 November 'for linnen and things for Elizabeth Quarterman in St Thomas's Hospital ... 8s.' is likely to refer to this individual.

[27] GL, Ms.1179/2 (27 April 1736).

[28] Boulton, *The parish nurse*, p.138 (WAC F459A/459).

> was called out, one of my horses having struck my coachman so as he remained as dead for a while; I caused him to be let blood, & laying a Cere-cloth [a wax impregnated cloth used as a plaster in surgery] to his breast (much bruised) & so after a week he recovered.

There is little reason to doubt that the medical costs arising from this incident were borne by Evelyn.[29] Employers were not however always supportive of those in their service. London's parochial accounts include instances of maids in particular turning to the parish for support when injured, perhaps because their masters consigned them as unfit for service and therefore declined to support them. Such as 'Mr Emres maid' mentioned earlier whose hand was crushed, and also Thomas Hutchin's maid, Mary Bawcutt, whose back was broken, and whose medical bills were settled by St Magnus Martyr parish.[30] Where the parish itself was the employer supporting the injured and their families was more readily undertaken. When, during the post-Great Fire rebuilding of the church of St Bartholomew-by-the-Exchange in 1677, a man 'was hurt at church work' the parish readily granted 8s. 6.d to his wife.[31]

Those free of the craft or livery companies of London had more routine sources of support in the case of accidental injury. Such companies maintained charitable functions often allowing their wardens or masters to draw upon the company resources in a discretionary manner to support medical care and for more general relief. The Watermen's Company for example had a particular system for raising such funds. From at least 1699 they operated the 'Sunday ferrymen' who 'worked for the relief of poor, aged, decayed and maimed members of the Company'; they themselves were allocated the work partly on the basis that they had at least two children to support. The Company appropriated up to a fifth of the Sunday ferrymen's income for charitable purposes.[32] Yet when presented with petitioning watermen the Company did not always opt for a cash payment, for example in 1708 the Court of Assistants 'Ordered that John Aswell should be allowed a boy to work with his servant John Mayfield he having lost his arm'. At other times a cash payment must have been a more appropriate response, perhaps to refund medical expenses, as may have been the case when the rulers 'Ordered that [...] Cuthbert Conyers a Sunday ferryman who lately broke his arm in that service [...] be paid ten shillings [...] by the clerk of this company to be placed to the account of Sunday ferrys'.[33] The funds of the Company were, like many other such bodies, more routinely offered to pensioners and widows, a proportion of whom

[29] *Evelyn*, 18 August 1661.

[30] GL, Ms.1179/1 (12 June 1674); GL, Ms.1179/1 (1 August 1724: '[…] to September 24 … 9s. 6d.; A large strengthening plaister for her back … 1s. 6d.; Mary Bawcutt more by order of the vestry October 3 ... £1.').

[31] Freshfield, E., *The account books of the Parish of St Bartholomew Exchange in the City of London, 1596-1698*, (London, 1895), p.205.

[32] Humpherus, H., *History and origins of the Company of Watermen and Lightermen of the River Thames*, (London, 1859), vol.2, pp.11–12 & 43. The system was based upon that developed during the sixteenth century by the 'Society of Poor Watermen of [St Margaret's] Westminster', pp.12–13.

[33] GL, Ms.6287/1 (8 October 1708); GL Ms.6287/2 (6 November 1707).

were likely to have lost their husbands through drowning incidents. The Company Cash Book shows regular payments of this sort, such as that paid in August 1718 to 'Widow Pitts of St Olaves by order of the rulers for charity .... 5s'.[34]

Metropolitan London at this period was home to a number of substantial undertakings employing large numbers of labourers and craftsmen, such as dockyards and major public works. These sites developed complex systems of governance which included means of support and relief for those injured, or killed, in their employment. A good example is to be found in the administration established for the rebuilding of St Paul's cathedral after the Great Fire. A number of labourers, masons and others engaged in this and other of Wren's works had the misfortune to suffer injury or death in the course of their daily activities. In a typical example from June 1672 the clerk of the works, John Tillison, was reimbursed for money he had 'paid to Chyrurgeon for care of a man's head wounded by breaking of tackle rope & fall of Ram – a guinea piece'.[35] The ram was a large battering ram Wren employed in the demolition process of the old St Pauls after he was prevented from using gunpowder. Later that year a further payment of £2 10s was made to the 'Chyrurgeon [to] Bleed & cure Daniel Hill, labourer, who fell from a pinnacle on South side of church.' It was clearly money well spent as Hill reappears in the works accounts labouring on the removal of foundations at St Paul's during 1674 and 1675.[36]

While demolition work was inherently dangerous even the more decorative and finishing activities could result in injury. On the 28 June 1717 the commissioners for rebuilding St Paul's met in the chapter house and 'Ordered, That the sum of fifty shillings, or three pounds, be given to a poor boy belonging to the Plasterers of the church, who fell a great way from the Cupola, & was very much hurt thereby.'[37] The following spring even as the building neared completion the commissioners were again forced to consider the costs of ill-health amongst their workforce. The weather the previous summer had been good but this itself brought problems and they were obliged to order,

> that the sum of £5 be paid to 2 men belonging to the plumber, who were employed in repairing and soldering the leads of the dome for 14 weeks, viz, between the 15th July 1717 and 9th of Nov. following for an addition of 3s per week to their usual wages in consideration of the sickness they suffered in the very hot weather by working so high, and that the same be paid them in proportion to the time they were severally sick.[38]

A proportion of the monies paid out to sick and injured labourers was drawn from that collected from visitors to the cathedral who contributed 'at the stairfoot door' before

[34] GL, Ms. 6282/2.
[35] *WSV*, XVI, p.199.
[36] *WSV*, XVI, p.200 (July–September 1672); XVI, p.206; XIII, p.70 & 75.
[37] *WSV*, XVI, p.129.
[38] *WSV*, XVI, p.133 (24 March 1718).

ascending to the upper part of the works.[39] Nonetheless payments made to the men in need and their widows were not overgenerous. While it was rare for a widow to receive more than five pounds from the clerk of the works in June 1710 the clerk paid '£6 9s. … towards a horse (which cost £15) being killed with a large piece of timber striking upon his head.'[40]

Although officially completed in 1711 St Paul's was still being worked on through to the 1720s. Many men had contributed to the works and been injured doing so, during this latter period they often petitioned the commissioners for either work appropriate to their ability or pensions. In September 1715 the commissioners chose 'Mr William Kempster … to be Master Mason to the said work, and Thomas Copson, a mason, who was formerly maimed, in this work … to be employed under him'. Several years later the commissioner's minute book notes Copson's rate of pay together with that for two labourers; 'Ordered that Thomas Copson (Disabled Mason) be allowed at the rate of 7s 6d per week, and Joseph Nibs & Philip Ellis (Disabled Labourers) 4s 6d per week'.[41] The employment of such men by the commissioners was a well established practice the rationale for which was ably set out by Richard Jennings, carpenter to the works, in 1710. He was responding to a challenge made by the Dean during the 'frauds and abuses' scandal in which the value of such men was questioned:

> I answer, that some of the men employed, are old, and cannot climb, and do some sort of work so well as when they were young; but they are such as have been employed above thirty years in the work, and have spent their youth and strength in it. Others there are who by falls, and other accidents in the works, have been much maimed and hurt, and have thereby been likewise unable to perform all sorts of work, but both the one, and the other have been employed in work suitable to them; and 'twas such work as was apt, and necessary, and which stronger men must have done, if the others had not; and on that account, I hope their wages were well bestowed on them, which was as much as they had when they were in their full strength, and soundness; and besides, seeing they could be usefully employed, I thought it too cruel, and inhuman, to dismiss them out of that work wherein their age and hurts had come upon them.

Sir Christopher Wren immediately confirmed Jenning's statement as did other members of the committee, much to the displeasure of the Dean.[42] Indeed there are some remarkable petitions from men who clearly did commit their working lives to the cathedral and other of Wren's works. For example John Hoy laboured not only on St Paul's but also St Edmund the King, St Michael Queenhithe and St Anne and St Agnes among others. He was injured in 1692 and submitted the following petition to the commissioners:

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[39] *WSV*, XVI, p.114.

[40] *WSV*, XIV, p.9 (August 1686 'paid … to John Capons Widow whose husband was killed by a fall from the W. end of the church, £2); XVI, p.101 (9 December 1701 'Ordered that the Paymaster do give the sum of five pounds to the poor Widow Staples (whose husband was lately killed in the work) for the present maintenance of herself and children'); XVI, p.103 (21 April 1704 'Ordered that the sum of £5 be given to poor Widow Mullins (whose husband being a labourer in this work was lately killed in the same) for her present subsistence.' Interestingly when the payment was actually recorded in June it was for '£10', XV, p.107; XV, p.190.

[41] *WSV*, XVI, p.119 (20 September 1715); XVI, p.137 (16 March 1722).

[42] *WSV*, XVI, p.149–151 (20 September 1710).

> Upon the petition of John Hoy setting forth that he hath been a labourer in St Paul's about 23 years and that he was lately very much hurt by a great stone falling upon him, whereby he was disabled for 20 weeks and paid to his chirurgeon £3 10s. 0d., and praying the Commissioners charity for his relief; and also upon Sir Chr Wren's commendation of him to have been a very skilful labourer in the taking down of old ruins both at St Paul's and other churches in London, It was ordered That £10 be given him for the loss of his time and for paying his chirurgeon.

John Hoy was illiterate suggesting his persuasive petition may have been formulated by a third party. If this was the case it points toward a degree of complexity in the approach taken by labourers to the system of charitable support.[43] In an even more remarkable example a craftsman petitioned for relief in 1697:

> Upon the petition of Edward Arnold, Carver, setting forth that he was employed in the Building of the portico at the West end of the church in the Reigne of King Charles the first, and has also for the most part been employed in the rebuilding of this church, since the dreadful fire, and he being now 85 years of age and lost one of his eyes, and is in a very low and poor condition, praying relief, The Committee thinking him a fit object of charity did order that £5 should be given him for his present subsistence.[44]

Arnold's success encouraged him to petition again the following year, however this time he went further albeit with a deferential tone, and requested a pension. The commissioners, though still agreeing he was an 'object of charity', would not commit to such an open ended arrangement. They instead responded as follows,

> Upon the petition of Edward Arnold, Carver, showing that he has been a laborious workman in the old and new cathedral of St Paul's, that he is now 86 years of age and hath lost one of his eyes in that service, and thankfully acknowledging the Commissioners former charitable gift of £5, but being past his labour humbly prays for a pension during his life. Whereupon It was ordered that £5 more be given him for his further subsistence.[45]

That he made no further applications suggests the commissioners need not have been quite so reticent about offering a pension to an eighty-six year old man.

Early modern metropolitan society had a range of established methods by which those injured in a variety of locations or in occupational activities could be cared for and maintained. In particular the long-standing role of the parish was key in providing immediate response and support for those who suffered accidents in public places. While mainly concerned with residents, strangers might also benefit from parochial largess when need arose. Those injured in the course of their work might expect, or at least hope for, support from their masters, craft companies or the administrators of the new larger-scale undertakings such as major construction projects or dockyards. Nonetheless around the turn of the century it is clear that aspects of this system were no longer coping with the scale and complexity of metropolitan life. The previously mentioned parochial systems of relief were not explicitly designed for such a purpose and were applied in a disjointed and sometimes

[43] *WSV*, XVI, p.69 (7 July 1692).
[44] *WSV*, XVI, p.83 (23 March 1697).
[45] *WSV*, XVI, p.92 (30 March 1698).

reluctant fashion. The national system of charity briefs was also failing perhaps, as Pepys implies, through excessive demands engendering a form of 'compassion fatigue'.

The metropolis began to see secular steps taken to provide charitable relief that was both event specific and locally focused. Such measures drew upon both the new commercial structures of the city and its newspapers to provide a framework for action. The nature of urban work also encouraged the development of a more complex pattern of support for injured workers. While the charitable actions of craft companies was nothing new the scope of their actions was in some cases widened. The Watermen's Company for example managed an ever-growing number of transport workers engaged in a significantly hazardous activity. Similarly the administrators of major public works developed procedures to financially support injured workers. In many cases the funds requested were to pay surgeons as access to their skills became more wide-spread during the period. Indeed workers themselves became more skilled — even labourers — and thus such men were valued (certainly for their labour contribution if not as individuals) and it appears that a debt of obligation structured the responses of their governors or employers to what were becoming well informed expectations of support. Yet not all was new as demonstrated by the source of a proportion of the funds disbursed by these various metropolitan undertakings; such funds continued to be garnered at least in part from public charitable donations as seen in the system of Sunday Ferrymen and the monies collected at the 'stairfoot door' of St Paul's.

Medical response to accident events

It is not the purpose of the present study to rehearse the development of surgical practice related to traumatic injury during the early modern period, however an attempt will be made to review briefly the range of medical intervention available to accident victims and the attitudes of medics to such patients.[46] This will provide a further layer to understanding the social and cultural context that the accident victim occupied in early modern mentalities.[47]

The victim of an accident in London had a number of medical options available to them. Firstly recourse could be, and most often probably was, made to the domestic sphere where the tending of minor wounds would have been a regular occurrence. This 'domestic' sphere could be extended to the context of neighbourhood, or parish, and so encompass the role played by parish nurses and midwives in the care of the sick and injured. But for those not

[46] For a discussion of the development of early modern surgery see Wear, A., *Knowledge and practice in English medicine, 1550-1680*, (Cambridge, 2000), pp.210–274.

[47] For a brief discussion of changing medical attitudes toward accident victims during the eighteenth century see Porter, 'Accidents in the eighteenth century', pp.90–106.

able to access parochial care and not well versed in such treatments guidance was available in the form of 'first aid' or remedy manuals.[48]

In 1633 Stephen Bradwell published *Helps for suddain accidents endangering life* a work that acknowledged that those caring for the injured might be 'farre from physitions and chirurgions'. Bradwell's text concentrated on various poisonings, bites and stings, although falls, near drownings, choking and burns were also discussed. The following year Richard Hawes published *The poor-mans plaster box*, a volume which was directed at the lower — yet still literate — ranks of society. Whilst not addressing the more complex issue of broken bones Hawes was happy to provide advice on treatments for any 'small wound or hurt with sword, knife, axe or any other edge toole'. His compendium also covered 'wounds comming by biting of beasts', 'burning by common fire' and 'falls and bruises' for which he cited a number of occupationally related causes. In practice his, and Bradwell's, remedies went little further than the administration of herbal drinks and the application of various poultices, however the affirmation of such traditional remedies through the medium of print must have encouraged many to follow their advice.

If the injuries of accident victims were more severe than could be tended in the domestic context then a number of medical practitioners could be called upon for assistance. Indeed in geographic terms early modern London afforded the best possible response to traumatic injury with regard to the range of available medical personnel. The distress and delay occasioned by the search for a qualified practitioner in the countryside was rarely a problem in the metropolis; although social rank and economic capacity could place limits of almost equal significance on both access and choice.[49]

Metropolitan medical personnel ranged from unqualified and unlicensed bonesetters to the master surgeons attached to the city's great hospitals. Margaret Pelling has reviewed the distribution of barber-surgeons in the City of London during the 1640s. Pelling concluded that there were some two-hundred practitioners free of the Barber-Surgeons Company in 1641, with another sixty or so freemen following related occupations.[50] Occupational data from the 1692 Poll Tax returns indicates that amongst the near thirteen-thousand City of London householders to record an occupation 178 stated medically-related callings; suggesting that the City as a whole may have housed some four-hundred practitioners. Extrapolating from these figures those gaining their living through medical pursuits across the entire metropolis are likely to have numbered in the region of one-and-a-half-thousand.

[48] For the wider context of seventeenth century medical publishing see, Furdell, E.L., *Publishing and medicine in early modern England*, (New York, 2002).
[49] Nagy, D.E., *Popular medicine in seventeenth century England*, (Ohio, 1988), pp.4–19.
[50] Pelling, 'Appearance and reality', pp.84–89.

Whilst a formidable accumulation of medical practitioners it should be remembered that such individuals ranged from humble tooth-drawers to the king's physicians.[51]

For those in the lower ranks of society who suffered a minor injury the administrations of an apothecary, rather than a surgeon, might be sought (outside of London the wider medical role played by such individuals was often recognised with the title 'surgeon-apothecary').[52] Apothecaries could clean and dress wounds, and dispense first-aid remedies of the type found in the works of Bradwell and Hawes.[53] Those with injuries to their bones might make recourse to a bonesetter. Such individuals were adept at manipulating bones and joints, and in the case of accident victims reducing dislocations and setting fractures. Unlicensed medical practitioners were not however without their critics, in particular the Company of Barber-Surgeons took direct measures to restrict their activities. In 1712, for example, the Company summoned Mr Bartlett, a truss maker, to appear before them for practising surgery and ordered him 'to take from his sign board that he cures Ruptures'. Similar measures were taken in 1720 when it was 'Ordered that the porter in Southwark and a bone setter in Cheapside be prosecuted for bone setting'. While the vindication of professional status drove such demands the outcome was to limit access to medical care for less wealthy Londoners. In some cases however actions were more justifiably aimed at protecting the public from charlatans for whom the apparently injured were easy prey. In 1713 the Company Court,

> Upon hearing a complaint against Mr Godman & Mr Pinsent for pretending that one Vincents thigh was broke when it was not & then they had set it contrary to truth & proficiency in Surgery & the patient & other witnesses being examined & proving the fact against him, the Court fined Mr Godman five pounds for his unskilful & wilful practice & to be sued upon by the law or his bond as shall be thought most convenient. [54]

The Barber-Surgeons Company also exercised the power to examine and inspect ships' surgeons many of whom were to be found residing in the east end of London and the riverside areas. A similar system of regulation was operated by the Dutch East India company in Holland; additionally employees of the Dutch Company were, after an examination by the Company's surgeons, entitled to receive standardised payments when

[51] Spence, *London in the 1690s*, pp.141–142; appendix III, Table C, p.182.

[52] Roberts, R.S., 'The personnel and practice of medicine in Tudor and Stuart England part I. The provinces', *Medical History*, 6 (1962), pp.268–369. Such combined titles were generally avoided in London as a result of the acrimonious attempts to demark the practice of medicine and surgery between the College of Physicians and the Company of Barber-Surgeons; see Roberts, R.S., 'The personnel and practice of medicine in Tudor and Stuart England part II. London', *Medical History*, 8 (1964), pp.223–229.

[53] Roberts, 'Personnel and practice, Part II', p.229.

[54] Young, S., *The Annals of the Barber-Surgeons of London* …, (London, 1890), pp. 350–351 (19 June 1712, 13 August 1713, 1 July 1720).

injured in service.[55] In the case of the English Company the company's surgeon-general was tasked to provide medical care within the main yard at Blackwall for which the workers paid a standing charge of 2d. each month. The surgeon-general also recruited surgeons for the company's ships and furnished their chests; furthermore he was required to 'cut the hayre of the [men] in the Companies said yards, and ships, once every forty days', a task he no doubt delegated.[56]

Surgeons were at the forefront in dealing with those who suffered serious injury. Most surgeons enhanced their learnt skills with periods of service at sea or during warfare. In such environments they gained experience of a wide-range of traumatic wounds which they might then re-encounter amongst the injured civilians of the metropolis. Later in their careers surgeons might rise to prominence either as senior surgeons operating at the London hospitals or by publishing works of instruction and observation. One of the earliest such texts was *The surgeons mate or military & domestique surgery* by John Woodall, surgeon-general to the East India Company. Published in 1617 Woodall's work provided an extensive text for less experienced ships' surgeons with particularly detailed advice on the treatment of traumatic injury. Later in the century, and this time drawing on medical experience gained partly during the civil war, Richard Wiseman published his 1676 work *Several chirurgical treatises*. This comprised three books which addressed respectively the treatment of general wounds, gun-shot wounds, and fractures and luxations [dislocations]. Wiseman recounted well over one hundred case-studies demonstrating his methods in treating sometimes quite serious traumatic injury. The following describes a typical example of one of Wiseman's cures when, with the help of a fellow surgeon, he reduced the dislocated elbow of a servant in London:

> The former of these luxations happened to a servant maid in Whitefriars carrying a pail of water. Her feet slipping, she endeavoured to save herself; but falling backward, she pitcht upon her right hand, and distorted the head of the bone inward a great way. The poor creature was carried into the next house, being an ale-house, and Mr Clarke a neighbouring chirurgeon and myself were fetched. Dressings being made ready, and the wench being seated, one of the company stood on the contrary side of her, with both his hands upon that arm below the shoulder, and held her firm. Mr Clarke made an extension below the cubit, and myself with a boulstered girt upon the prominent bone in the bout of the arm pulled it backward. After we had thus come to the very brink of the joint, Mr Clarke bowing the arm suddenly forward, I drew it back into place;

Wisemen then embrocated the injured arm and applied a bandage. He admitted to only partial success however, concluding his narrative with the words 'she was lame long after'.[57]

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[55] Bruijn, I.D.R., 'The health care organization of the Dutch East India Company at home', *Social History of Medicine*, 7.3 (1994), pp.370–373.

[56] East India Company, *The Lawes or standing orders of the East India Company*, (London, 1621), pp.32–33.

[57] Wiseman, *Several chirurgical treatises: of fractures*, p.493.

On other occasions more drastic intervention was required and individuals were conveyed to one of the London hospitals in hope of being treated by their eminent surgeons. Such surgeons were however few in number and in practice often unavailable so the provision of immediate treatment fell to junior surgeons, apprentices or the hospital 'dressers'. The case book of Richard Austin, an observer of surgical practice at St Thomas's Hospital, describes the measures taken to treat an 'old woman' admitted after her head was run over by a 'coachman driving furiously' in November 1725:

> She was immediately brought to the hospital, but no surgeon being there, Mr Howgrave one of the pupils lodging at the Hospital Coffeehouse was called to dress her up for the present & to stop the flux of blood, the coach being lightly loaded the wheel made a wound almost like a semicircle & turned back a large [f]lap of the scalp … he thought to have stopped the flux by replacing the [f]lap & applying large pledgits of dry tow[el] with proper bandage, but this answered not the end … So that Mr Thompson another pupil was called who finding the blood running freely, he dipped pledgits in hot oil of terebinth [turpentine resin] with wads of tow[el] and proper bandage whereby the vessels were glued up and the flux stopped …

It was not until two days later that the patient was seen by the hospital's principal surgeon William Cheselden, a highly accomplished practitioner.[58] Austen noted that the woman was eventually 'quite cured about the beginning of January' 1726.[59] Surgical activity at St Thomas's was relentless, a survey of the available records for 1682 suggests that at least thirty-eight amputations were carried out and several broken bones set. These operations ranged from 'Mr Hollyer, surgeon, taking off three toes from Joseph Beale' to 'Mr Perse taking off a leg from John Swinnock'. The accounts also record payments to Edmund Curle for the regular supply of crutches and wooden-legs and note the purchase of twenty-one gallons of 'brandy for the chyrugions use' in surgery.[60]

In another more celebrated example of trauma surgery a careful reading of the sequence of events surrounding the injury to Samuel Wood, a miller's servant, suggests that the public acclaim attributing his cure to the leading surgeon James Ferne was not entirely justified. On 15 August 1737 Wood was working in Mr Fenton's windmill at Limehouse-Wall on the Isle of Dogs. In moving through the mill carrying a rope, secured to his wrist by a slip knot, the rope became entangled in the mechanism.[61] He was drawn off the floor and into the gears where his arm and shoulder were dismembered. A detailed account of the event written by John Belchier, surgeon to Guy's Hospital, appeared in the pages of the Royal Society's

[58] 'William Cheselden (1688–1752)', *ODNB*.

[59] Wilson, P.K., '"Sacred sanctuaries of the sick": Surgery at St Thomas's Hospital 1725–26', *London Journal*, 17.1 (1992), pp.39–40.

[60] LMA H.1/ST/D1/10.

[61] *London Evening Post*, 16 August 1737; *Daily Gazetteer*, 19 August 1737; *Common Sense or the Englishman's Journal*, *Read's Weekly, Universal Spectator and Weekly Journal,* 20 August 1737;.

Philosophical Transactions; an illustrative engraving was also produced for the benefit of St Thomas's Hospital (Fig. 4.2).[62]

FIG. 4.2 Engraving illustrating the injuries received by Samuel Wood in August 1737

Source: Wellcome Images; © Wellcome Trust

Although severely injured Wood managed to alert his brother who summoned help from a nearby house, he then walked unaided the '100 yards' to the house before collapsing. Those present staunched his wound with 'a large quantity of loaf-sugar … till they could have the assistance of a surgeon, whom they sent instantly for to Limehouse'. The un-named surgeon, most likely a sea or naval surgeon, on arrival,

> examine[d] particularly into the wound in order to secure the large blood vessels, there was not the least appearance of them nor any effusion of blood: So having first brought the fleshy parts of the wound as near together as he could, by means of a needle and ligature, he dressed him up with a warm digestive, and applied a proper bandage. The next morning he opened the wound again, in the company of two surgeons more, and not perceiving any effusion of blood at that

[62] 'John Belchier (1706–1785)', *ODNB*; Belchier J., 'An account of the man whose arm with the shoulder-blade was torn off by a mill, the 15th of August 1737', *Philosophical Transactions*, 40 (1737–1738), pp.313–316.

> time, he dressed him as before, and sent him to St Thomas's Hospital, where he was admitted a patient under the care of Mr Ferne.[63]

Four days later Ferne opened the wound amongst 'the greatest concourse of surgeons and gentlemen of curiosity' but finding no sign of the feared bleeding from the subclavian artery took no action simply instructing the wound to be dressed.[64] Two months later Wood was said to have been completely cured. While much of the surgical discussion of the injury concerned the unexpected absence of arterial bleeding the reporting of the event more generally is worthy of further consideration.

Reports of the 'shocking accident' were given in some detail in both newspapers and journal; the juxtaposition of man and machine enhancing the sense of drama. Indeed the engraving, possibly produced initially for purposes of anatomical instruction, includes in its upper right-hand corner a vignette of Wood being lifted from the floor and into the teeth of the millwheel, the rope attached to his wrist clearly depicted. Belchier's detailed account of the injury and treatment names only one individual, the surgeon James Ferne. It is however clear that Ferne contributed little if anything to Wood's survival, yet the recovery was directly attributed by contemporary newspapers to the 'great care and skill of the surgeons at St Thomas's Hospital' and noted as 'the most memorable and surprising cure that ever was performed in the kingdom'.[65] The quick thinking actions of the initial responders including the woman who owned the nearby house, the administrations of the first surgeon at the scene and the later contribution of his two colleagues goes essentially unrecognised, and the individuals themselves remain nameless. As for Wood on 17 November 1737 he was presented to the Royal Society 'as the most surprising accident that ever happened'; those present collected £8 for his benefit. He also appeared at the Royal Exchange 'and had money given him by several merchants etc. as a real object of compassion'[66]

While medical response to accident victims certainly had the preservation of life as its initial goal the motives of some surgeons with regard to sensational 'cures' and the reporting of them undoubtedly had other objectives. Surgeons, including those employed by the hospitals, relied on aristocratic and other wealthy patrons to provide both professional status and income. Thus self-promotion through publishing and lecturing became a vital part of their activity. It appears that accident victims were most highly prized by surgeons if they presented unusual injuries acquired in spectacular circumstances, and ideally that they survived the subsequent treatment. In a similar manner Harley has identified that surgeons

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[63] Royal Society, *Medical essays and observations relating to the practice of physic and surgery*, vol 2., (London, 1745), pp.340–342.

[64] *Daily Gazetteer*, 22 August 1737.

[65] *Common Sense or the Englishman's Journal*, *Read's Weekly*, 29 October 1737.

[66] *The Old Whig or The Consistent Protestant*, 24 November 1737; *Read's Weekly*, 26 November 1737. Wood was said to be selling copies of the engraving to 'such gentlemen as are so kind to relieve him'.

were disinclined to undertake autopsies if they were accompanied by little or no case history as their primary goal in such circumstances was to obtain information on morbid anatomy for the purposes of instruction and dissemination.[67] It is certain that the ease with which case histories could be constructed for injured civilians made such 'studies' preferable to those encountered in more fluid military environments, as Richard Wiseman noted 'In the wars my employment did not permit me to see the finishing of their cures'.[68]

Finally it should be remembered that surgical intervention at this period was normally limited to routine and often simple treatments that nonetheless varied greatly in their efficacy. Beier reviews the practice of the London surgeon Joseph Binns whose case notes show that although generally successful in his treatment of accident victims his methods were limited in scope and provided little flexibility for case specific response. While he took routinely dogged steps to promote a good cure of the injuries of those he treated when they occasionally became infected and gangrenous he eschewed the more dramatic course of amputation as a controlling measure; he also appeared to prioritise the healing of broken bones over attempting accuracy in their anatomical 'setting' thus assigning some patients cures which were no doubt accompanied by longer-term mobility problems.[69] Richard Wiseman seems to have followed a similarly conservative approach to healing with almost twice as many procedures involving the application of external processes rather than direct surgical intervention.[70] Wiseman like other practitioners of the period relied heavily on personal experience, often gained through apprenticeship or military service, to direct cautious therapeutic steps when confronted with the diverse symptoms presented by those who suffered accidents in the metropolis.

Section 4.2 Hazard recognition and regulatory response

The foregoing text has recounted the wide-range of accidents, both fatal and otherwise, that afflicted Londoners and also delineated the circumstances which led to such events. Within that sample there are a number of repeated occurrences that one would expect the rulers and governors of London, at all levels, to have identified as amenable of further control. It was in no ones interest to allow patently dangerous situations or activities to remain unchallenged, however it can be safely stated that the period rarely saw over-arching institutional response to metropolitan hazards. There were however localised responses to such dangers that imposed measures, rules and regulation to encourage a more orderly and less dangerous

[67] Harley, D., 'Political post-mortems and morbid anatomy in seventeenth-century England', *Social History of Medicine*, 7 (1994), pp.24–25.
[68] Wiseman, *Several chirurgical treatises: of wounds*, p.403.
[69] Beier, *Suffers and healers*, pp.64–81.
[70] Wiseman, *Several chirurgical treatise*.

urban environment. Reviewing the incidence and nature of such measures will provide an insight into the extent that contemporaries felt able to control their own environment, actions and destiny in an age that was still redolent with providential justifications and understandings yet, as the eighteenth century progressed, was taking specific steps to impose *civilised* order upon certain aspects of the urban environment in terms of both design and processes.[71]

Despite such 'modernising' moves it would not be unreasonable to observe that danger lay in wait for many of London's inhabitants each time they ventured outdoors. For some it was their occupation that presented particular hazards for others it was simply the everyday dangers to be found in and on the streets, highways and waterways. Nonetheless many occupations were governed by bodies such as livery companies who applied rules to commercial activity which — if only tangentially — encouraged safe practices. In some circumstances more structured workplaces presented opportunities for specific regulation to ensure safe working behaviours. For the wider public the civic authorities were expected to take steps to limit the risks presented by fire, vehicles and other obvious hazards. Certain spatially characterised areas of the public city presented particular hazards, for example streets, markets and riverside wharfs. At the same time those following certain activities or occupations in more private workplaces were exposed to particular levels of risk, such as foundries, breweries, construction sites and warehouses. The author has previously made use of the serial data from the *Bills of Mortality* in combination with other social, economic and spatial data to suggest a relationship between space, activity and levels of risk in early modern London. The results of that analysis have been published elsewhere and will not be rehearsed in the current work.[72]

While the early modern metropolis saw some growth in regulatory actions these were aimed mainly at providing a more orderly and secure urban environment or to protect property. The safety of Londoners as individuals was generally addressed in ways which were encompassed incidentally by such measures. While the health and wellbeing of London's inhabitants was of general concern to the rulers of the city specific steps to protect people from personal risk were only sporadically introduced. Even in the area of occupational hazards there was an assumption that the dangers posed in specific callings were unavoidable components of such activity. As John Graunt asserted 'we shall say nothing of … those that have been drowned, killed by falls from scaffolds, or by carts running over them, etc. because the same depends on the casual trade and employment of

[71] For a discussion of the *civilising* project in relation to London see Ogborn, M., *Spaces of modernity: London's geographies, 1680–1780* (New York, 1998); in particular chapters one and three. For provincial aspects see Borsay, P., *The English urban renaissance: culture and society in the provincial town, 1660–1770*, (Oxford, 1989).

[72] Spence, 'Killed by a cart', pp.9–26.

men'.[73] Few therefore considered the hazards to health that early modern occupations presented as worthy of scholarly concern. One writer did however engage in such a study; the Italian Bartolomeo Ramazzini.

Ramazzini's work, *A Treatise of the diseases of tradesmen*, is considered the earliest systematic study of occupational health. Originally published in Modena in 1700 it was first made available for the English market in 1705. The text for the most part concentrates on the environmental conditions endured by artisans, particularly the nature of the *airs* they breathed and the effect certain postures had on their bodies over time. Ramazzini says little about traumatic injury resulting from occupational activity, although in the case of brewers he recognises that the inhalation of noxious fumes could result in sudden death.[74] That preventative measures might be taken to avoid physical injury is rarely considered as he appeared to consider such hazards as an inevitable part of particular callings. For example in writing about bakers he notes that,

> Of all the retainers to the baking trade, perhaps those who only bake the bread in the ovens, are least exposed to injuries; for tho' they suffer a little from the excessive heat in filling and drawing the oven, especially in summer, while they're covered all over in sweat, yet they are much refreshed with the smell of the hot bread: for bread is a great restorative, and exhilarates the spirits with its very smell.[75]

Clearly Ramazzini discounts the possibility of suffering burns during such activity; injuries of this sort being considered either normal for the occupation or indicative of a lack of skill or dexterity on the part of the individual and either way were not amenable to resolution by learned means.[76] Nevertheless Ramazzini noted that the carrying of heavy materials rendered workers such as millers and porters liable to ruptures, as were those who ran such as footmen, advising that cures could be obtained by the wearing of trusses. He also interestingly suggested that 'I usually advise them to wear trusses likewise by way of prevention'.[77] He further acknowledged that noisy workplace environments, such a watermills, could result in occupational deafness and fleetingly mentions that seafarers are 'constantly exposed to all the injuries of weather, as well as to the continual alarms of danger' though in both cases these are simply presented as observations of *fact*.[78] Few other writers considered occupational health from a learned perspective during the course of the

[73] Graunt, *Natural and political observations*, p.32.

[74] Ramazzini, *Treatise of the diseases of tradesmen*, (London, 1705), pp.139–140. (Ramazzini observes that miners are liable to injurious falls but assigns the cause of such falls to demons, ghosts or devils noting that the only preventative action is 'prayer and fasting', pp.9–10).

[75] Ramazzini, *Diseases of tradesmen*, p.156.

[76] For a comment on burns as 'normal' injuries see Pelling, 'Apprenticeship', pp.49–50.

[77] Ramazzini, *Diseases of tradesmen*, p.157, 204 & 209–211.

[78] Ramazzini, *Diseases of tradesmen*, p.159 & 183.

eighteenth century, but if they did their focus was either on noxious airs or military contexts.[79]

The regulation of hazard and thus reduction of exposure to risk in early modern London was piecemeal and as previously noted tended to be associated predominantly with specific trades, activities or spaces. The discussion of sudden death in chapter three progressed from the most commonly occurring hazardous events to the rarest, in a simple correlation it might be expected that regulation would have developed across a parallel spectrum. The understanding of hazard and risk in the early modern period was not however formulated in a such a positivist manner. For contemporaries the significance of a hazard related to the magnitude of the resulting injury — especially the possibility of death — and not to frequency of occurrence. Similarly exposure to risk was understood in terms of calling and status rather than numerical incidence. For these reasons a limited pattern of regulation developed that was as much concerned with the avoidance of damage to property and livelihood as it was injury to people.

The current work has established the most significant single form of hazard in early modern London as drowning nonetheless few measures were taken by contemporaries to address this risk directly. While mariners were clearly at high risk little was done to protect them from drowning as it was perceived a natural hazard of their occupation and in any case in the context of the metropolis such individuals were often seen as transients or outsiders. Those whom London saw as at greater risk were the resident watermen, their passengers and goods. Consequently this group did benefit from some degree of regulation through the application of the by-laws of the Watermen's Company.

Watermen were regularly summoned to appear before the rulers of the Company charged with carrying more than the prescribed number of passengers. For example in June 1702 'Mr Weedon and Hampden' were fined 5s for 'carrying supernumary passengers'.[80] It is unclear whether such fines were primarily imposed with a view to protecting the trade of other watermen, who would by the action loose the additional fares, or if the main concern was to protect passengers from the dangerous instability presented by an overcrowded vessel. The use of boys to operate vessels was also criticised directly on safety grounds but probably also because many were not bound as apprentices. The matter was raised as a particular issue at a Special Court of Assistants of the company in late 1707. The court noted,

[79] For example see, Hales, S., *A description of ventilators: whereby great quantities of fresh air may with ease be conveyed into mines, goals, hospitals, work-houses and ships, in exchange for their noxious air* (London, 1743), or Pringle, J., *Observations on the diseases of the army, in camp and garrison* (London, 1752). For a discussion of late-eighteenth century observations related to occupational health see Farge, A., 'Work related diseases of artisans in eighteenth-century France', in Forster, R., & Ranum, O., (eds.), *Medicine and society in France, selections from the Annales*, vol.6 (Baltimore, 1980).

[80] GL, Ms.6282/1.

> that notwithstanding the severity of the law against unskillful boys carrying and transporting passengers and goods on the River Thames in boats etc. that there are great numbers of such boys that daily work to the great hazard of peoples lives and goods.

Consequently a recommendation was made to increase the related fine from 2s 6d to 10s with the authority of the 'Lord Mayor & Aldermen [and] the Lord Chief Justice of her Majesties Court of Queens Bench'.[81] It appears that the impressments of watermen for war service lay at the root of the problem.

The Company rulers' concern for public safety could be exploited in the pursuit of personal gain; especially when combined with misogynistic prejudice. In 1707 the Company resolved to take action against a waterman named John Wells. He had previously convinced the court to award him the position of ferryman at Thames Ditton but then reneged on paying 'the clerk his usual and accustomed fees for the same'. Wells had earlier presented evidence to the court that,

> the said ferry was managed by a woman living in the said town of Ditton contrary to law and the constitutions of this company and the said rulers having considered the great danger that passengers were in both to life and goods

granted the operating rights to Wells.[82] Whether or not the ferrywoman's passengers were actually in danger the fact that Wells used such an appeal suggests some concern amongst the rulers of the Company for public safety.

That the company was, or at least appeared to be, able to enforce order on the river was demonstrated by the expansion of their powers to the full extents of the Thames. The Act of 1699 which delivered this jurisdictional extension makes clear that safety was a key issue:

> Whereas notwithstanding the Laws that have been heretofore made for good Order Rule and Government amongst the Watermen and Wherrymen useing and rowing on the said River of Thames it hath oftentimes happened that divers People passing by Water upon the said River have been put in Danger of their Lives and Goods and many times have perished and been drowned and this occasioned by [the] Unskilfullnesse and want of Experience in Wherrymen and Watermen and Persons out of the Rule of any Master or Governor.[83]

It would seem that with regard to passenger traffic on the River Thames there were increasing attempts during the late seventeenth and early eighteenth centuries to control operators and their activities on the grounds of improving safety and diminishing the risk of drowning. Indeed with regard to the issue of administrative disorder on the Thames we can trace the first attempts to impose a centralised control to the earlier disputes over the jurisdiction of the Admiralty.[84] That these developments, eventually backed by parliament, also enhanced the authority of the Company of Watermen may have been an equal driver for change. Nonetheless at a time when specific attempts were being made to impose civility on

[81] GL, Ms.6287/2 (9 October 1707).
[82] GL, Ms.6287/2 (20 August 1707).
[83] 11 William c. 21.
[84] See above, section 2.3.

the streets of the capital it appears that parallel measures were being imposed on the dangerously disorderly urban river that flowed through its heart.

The majority of Londoners however travelled by land, whether as pedestrians, equestrians or in vehicles and the evidence shows that many were injured, sometimes with fatal consequences. The various city authorities perceived vehicles to be the principle cause of congestion, damage to buildings and roads, and to be the origin of many street accidents.[85] Actions were taken therefore to control the number, size and movements of carts, drays and waggons in particular. For example two important groups of carriers who operated within the metropolis were the woodmongers and the carmen. The two groups were in continual conflict, both commercially and physically, and in 1694 the City authorities intervened to set the number of licensed woodmongers' carts at 120 while restricting them to the transport of fuel and coals only. The authorities allowed a further 420 carts to be operated by carmen as long as they desisted from the practice of carrying fuel.[86] The circulation of carts and, to some extent, coaches was also controlled. Since the early seventeenth century the movement of vehicles around the busy quayside area of Thames Street had been strictly regulated. According to regulations of 1617, empty carts were required to stand for hire at specified locations. Carts, once hired, could only enter Thames Street from the north along certain streets, while laden carts could only exit by means of five streets adjacent to Tower Wharf and the two riverside markets of Billingsgate and Queenhithe. Empty carts approaching from Southwark were prevented, by a post or bar, from entering Thames Street eastwards from London Bridge. This one-way system suggests that careful thought had been given to the pattern of circulation and to the needs of the inhabitants of narrower streets which were thereby closed to commercial traffic.[87]

Evidence from the Old Bailey makes it clear that there was an expectation that such regulations, and others such as those related to the activities of coaches, should be obeyed. In 1710 a coachman named Jacob Bragg was indicted for killing Christopher Denmare 'by driving the near wheel of his coach over his left leg'. Denmare was 'an under Beadle … whose business it was to regulate the standing of Coaches in Cornhill, [he] observ'd the prisoner [Bragg] to be out of his stand, [and] order'd him to drive to such a place, which the Prisoner refusing, the deceas'd took hold of his Horses; upon which the Prisoner whipt them, and drove them against him, and threw him down, and one of the Wheels ran over his Leg and broke it'. The jury decided there was no premeditated malice and therefore found Bragg guilty of manslaughter.[88] Denmare was not alone in performing such a role; an order was

[85] Bennett, E. *The Worshipful Company of Carmen of London, a short history*, (London, 1952), p.37; Maitland, *History and survey of London*, p.453; Spence, 'Killed by a cart', pp.9–26.
[86] Bennett, *Carmen of London*, pp.78–79.
[87] Bennett, *Carmen of London*, pp.36–39. See also Spence, *London in the 1690s*, Fig. 2.4, p.32.
[88] OBP, 6 September 1710, Jacob Bragg (ref. t17100906-9).

made in 1722 with the intent to manage the dangerous congestion developing on and around London Bridge. The Lord Mayor, Alderman and Common Council instructed that 'three sufficient and able persons be appointed and constantly maintained; one by the Governors of Christ's Hospital, one by the inhabitants of the ward of Bridge Within, and the other by the Bridge Masters. They directed carts to keep to the left, ensured that they did not stop or unload, and arrested offenders.[89] Carters, and others, who broke these and other regulations were liable to fines or confiscation of their vehicle.[90]

Attempts were also made to control the quality of vehicle construction and the manner of their operations. One of the justifications made for the incorporation of the Company of Wheelwrights was grounded in concerns for safety; their 1670 charter noted that many

> undertake the profession and trade of a wheelwright not withstanding that they are ignorant and unskilful … much mischief happeneth to persons in the street by falling of carts and coaches and great damage to merchants and others in their goodes as also losse and danger to gentlemen.[91]

The Company byelaws of the same year required wheelwrights to use 'good and substantial materials' in the production of their wheels and axles and the Company took active steps by means of searches and inspections to ensure its members abided by these standards.[92] For example in May 1688 Thomas Girdler was found guilty by the Company of attempting to sell 'severall coach wheeles made of unsound timber … and did fine him in all four pounds for his rotten wheels.'[93] In an attempt to extend aspects of vehicle control to a wider area and hoping to prevent accidents caused by negligently driven carts parliament took action in 1715 to enforce the leading of carts by men on foot when within the city.[94] The courts took a dim view of those who ignored such regulations when they became involved in fatal accidents. At the conclusion of a 1727 Old Bailey trial of a carter who, while riding in his cart, ran over a two year old child near Old Street the *Proceedings* reported that,

> he was found guilty of manslaughter, for as much as he was in his cart when he should have been by the side of his horse, which may deter others from the like practice, if examples can have any effect on those who are so notorious for carelessness and insolence.[95]

In another case two carmen were jointly indicted for causing the death of a young girl by effectively racing their carts. The jury heard that,

> they were driving their carts hastily along [Cannon] Street, striving which should get formost; and Martin's Cart drove Norman's Cart upon the child, and squeezed it to death. The prisoners

[89] Maitland, *History and survey of London*, p.52.
[90] Spence, *London in the 1690s*, p.32.
[91] Bennett, E., *The Worshipful Company of Wheelwrights of the City of London, 1670–1970* (London, 1970), p.130.
[92] Bennett, *Company of Wheelwrights*, p.142.
[93] Bennett, *Company of Wheelwrights*, p.26.
[94] 2 Geo I c.57.
[95] OBP, 30 August 1727, Joseph Presley (ref. t17270830-31).

> said that they were driving in haste, and did not think to do any hurt, and laid the fault one upon another.

The judge considered their explanation but directed the jury to find them guilty of manslaughter because,

> Tho the prisoners were about their lawful imployment, yet they ought to be careful how they drive their carts; and altho the fact could not reach their lives, yet it might be a warning to others, and they must not think to escape.[96]

Questions of negligence while driving carts or coaches appear repeatedly in such trials, however the very reoccurrence of such incidents suggests the imposition of regulation was only partially successful in delivering an orderly environment to the capital's streets.

For some time it had been an accepted practice to, where possible, separate pedestrian passage from vehicle movement by means of wooden posts. A substantive example of such protective measures, relating to bridges, is found within legislation of 1663. Section twenty of the *Act for enlarging and repairing of common highways* required,

> That the said Surveyors doe take care that all and every Bridge or Bridges within theire respective limits shall […] have sufficient walls or posts and railes of each side thereof four foot high at the least and that the said walls or posts and railes be from time to time kept in sufficient repaire.[97]

While a similar post and rail practise was somewhat randomly adopted within the streets of the City the opportunity afforded by the creation of new thouroughfares in the expanding parts of Westminster gave impetus to a more over-arching approach to street planning. As Ogborn makes clear by the mid-eighteenth century the governance of Westminster's public streets had shifted from the enabling powers bestowed upon justices of the peace to a new breed of Commissioner Paviours who would ensure 'properly laid and regulated pavements', the 'erecting of lamps or lights' and the creation of post-delineated footways. The civilising nature of such a re-ordering of the street environment was emphasised by the proposer of the scheme, John Spranger, who identified such 'footwalks' in particular as,

> A kind of proof, that we are a free people, and that the French are not so. The gentleman, as well as the mechanic, who walks the streets of Paris, is continually in danger of being run over, by every careless or imperious coachman, of whom there are many; and in fact these accidents frequently happen in that city, in so much that few people of distinction ever walk the streets. [98]

But walking even the improved streets of the British metropolis was not without genuine hazard. As noted previously open and unguarded cellar doors could result in violent, sometimes fatal, falls among passing pedestrians. Churchwardens therefore took measures to prevent such accidents where vaults or holes were necessarily left open in the highway. For example action was taken at St Dunstan in the West in 1684 when the churchwardens 'Paid 2

[96] OBP, 6 September 1693, Adam Martyn & Richard Norman (ref. t16930906-6).
[97] 14 Charles II c.6.
[98] Ogborn, *Spaces of Modernity*, pp.91–104. (Spranger's proposal was published in 1754).

men for watching the vault to prevent persons falling into it ... £1 11s'; this during a period of extensive construction work on the vaults in the churchyard.[99] Extreme weather could also make public areas dangerous as occurred in the winter of 1669 when labourers were paid 3s 'for breaking the ice before the church [of St Alphage London Wall] in the great frost'; churchwardens once again taking responsibility for ensuring the safety of their fellow parishioners.[100]

During the period of study there were moves to advance an agenda of increasing order and control throughout the urban environment. Such measures were in part a direct and rational response to perceived hazards but, as noted above, also asserted expectations of responsibility for actions taken or omitted. There is good evidence for an increase in the use of authoritative agency, whether national or local, to enforce certain behaviours that would mitigate particular dangers. Rigorous and detailed methodologies of control were formulated to impose rational ordering over the chaotic threat presented by a variety of hazards. Such hazards ranged from simple activities encountered on a daily basis to more universal dangers such as the threat posed by fire within the urban environment.

The response to the death of Charles Jones while bell ringing at St Margaret Westminster provides a good example of petty authority instituting control measures to counter the potential for harm in a particular activity. On 27 May 1674 the churchwardens of St Margaret Westminster had to bear the cost of £3 6s 6d to cover the 'charges and expenses upon the accidental death of Charles Jones by a bell rope in the steeple'.[101] The death of Jones, who was only fourteen years old, was investigated by both inquest and vestry. Immediate blame was attributed to the keeper of the bells who absented himself "upon no occasion of the parish" and left a group of boys to ring a death knell without supervision. The vestry was later motivated to dismiss the keeper but more significantly to draft a set of strict regulations concerning future bell ringing activity.[102]

At a larger scale the threat that fire posed to people and property was rarely under-estimated throughout the early modern period, however at the same time the hazard was seen increasingly as something to which regulatory and technological responses could be applied to both prevent its occurrence and, if that should fail, to limit its impact.[103] Actions taken following the Great Fire in 1666 provide a well known and often accepted starting point for a range of measures by both City and national authorities to provide a safer built environment

[99] GL, Ms.2968/6 (4 September 1684).

[100] GL, Ms.1432/5.

[101] WAC, E54 (1674).

[102] Westlake, H.F., *St Margaret's, Westminster: the church of the House of Commons*, (London, 1914), p.67.

[103] For a general review of the development of fire fighting in early modern European cities see, Roberts, 'Fire in French cities', pp.9–27; Holloway, *Courage high!*, pp.5–10, 21–29; Friedrichs, C.R., *The early modern city, 1450–1750*, (London, 1995) pp.276–281, and Goudsblom, J., *Fire and civilisation*, (London, 1994) pp.143–152.

and the means with which to effectively fight future fires should they occur. The approach did have the merit of encouraging a metropolitan-wide standard of response but its component parts were not however especially novel. The important Rebuilding Act of 1667 required external walls to be made of brick or stone partly to limit the spread of fire. The Act also observed that some trades were more hazardous than others; section nineteen of the Act enabling that 'Trades and occupations judged […] perilous in respect of fire may be prohibited in high and principal streets'.[104] But building in stone and brick had previously been required by a Commonwealth Act of 1657, and many of those tasked with designing and constructing new buildings were already well versed in using appropriate materials to limit fire risk.[105] Indeed Balthazar Gerber, writing in 1663, made it clear that one of the roles of the clerk of works on any building project was to ensure the safe construction of houses. He advised that,

> the Clarke of the works must be very careful not to suffer the carpenters to lay any timber under the chimneys; since by the laying of timber under them, many houses have been set on fire and burnt to the ground[106]

Gerber's work went on to make further exhortations concerned with avoiding the use of sub-standard bricks by bricklayers and frost damaged stone by masons, as such materials could lead to structural failure and collapse.[107]

It was not only in the area of construction that measures were taken to reduce fire risk but also across the urban landscape through the increasing application of technology to fire-fighting. In an early and very pragmatic response to fire George Atwell published guidance on 'quenching houses on fire' in 1662. His book, *The faithful surveyour*, advised the removal of air from fire, by various means, to extinguish it rather than dousing with water or pulling down buildings which he felt simply provided additional fuel for any conflagration.[108] A more institutional response was found in the so called 'Parish Pumps Act' of 1707 which instructed parochial authorities to purchase and maintain suitable fire-fighting equipment and wherever possible to install fire hydrants.[109] This Act did not however represent a novel approach as individual London parishes, City Companies and other institutions, were engaged in such activities at least some three decades before the act was passed. In the parish of St Dunstan in the West for example the vestry purchased an engine as early as 1675, also ordering:

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[104] 18 Charles II c.8; also see Roberts, 'Fire in French cities', pp.11–12.
[105] Bell, *Great Fire of London*, p.250.
[106] Gerber, B., *Counsel and advice to all builders; for the choice of their suveryours, clarks of their works, bricklayers, masons and other workmen …*, (London, 1663), p.78.
[107] Gerber, *Counsel and advice*, pp.26–28.
[108] Atwell, G., *The faithful surveyour*, (Cambridge, 1662), p.95–99.
[109] 6 Anne c.58.

> That the Water Cocks for quinching fire be sett and placed as followeth: One at the corner of Churchyard Alley in Fetter Lane. One at corner of Jackanapes Lane and in Chancery Lane. One at the corner of Cliffords Inn Lane. And one against the Porters Stone at the East end of Church in Fleet Street.[110]

Access to such fire-cocks was closely controlled by the parish, the minutes of the following vestry meeting noting that 'the key made for the Water Cocks for quinching of fire be henceforth kept by the senior churchwarden'.[111]

But the very nature of piecemeal early adoption of such technology lead to problems. Indeed the 1707 Act was quickly followed by a revising Act in 1708 which clarified the duties of parishes, the 'rewards' available to those bringing engines to fires, and the often disputed nature of party-wall construction.[112] Some felt other problems would only be resolved by an even more centralised and ordered response. In 1718 an unknown author published a short but critical paper which made several recommendations to improve fire fighting in London. In particular the writer noted that,

> It is notorious that there is no plug or fire-cock in some streets and in others they are placed at such uncertain distances and so obscurely and are so often removed and altered that they are either not to be found, or it is so long before they are found, that in the meantime the flames get ahead and do great damage

The suggested solution was for 'the churchwardens to place them at some particular, settled distance from each other'.[113] The author was also concerned about providing standardised sizes and materials — brass — for both fire-plugs and cocks; an invitation to peruse such equipment at the engine-makers at Mill-Bank in Westminster possibly exposing a commercial inspiration for the scheme. This aside the recommendations set out so clearly by the pamphlet position it firmly within the canon of the civilising project as directed toward the disorderly streets of London.

One well-known aspect of the response to the Great Fire was the development of fire insurance. While insurance as such was no barrier to conflagration the financial exposure risked by investors encouraged further corporate developments in fire-fighting. Major insurance companies, such as the Westminster, Hand-in-Hand and the Sun, formed their own uniformed fire brigades, a more organised — and modern — development beyond that provided by the parish.[114] Such 'firemen' no doubt helped to counter the ravages and spread of urban fires, however there was a further area of incendiary hazard that was beyond their remit.

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[110] GL, Ms. 3016/2 (6 September 1675).
[111] GL, Ms. 3016/2 (10 November 1675).
[112] 7 Anne c.17.
[113] Anon., *The case of the inhabitants of the cities of London and Westminster … with respect to the laws now in force for preventing mischiefs that may happen by fire*, (London, 1718), pp.7–8.
[114] Holloway, *Courage high!*, pp.27–30; Davies, *Westminster Fire Office*, pp.47–52; Henham and Sharp, *Badges of extinction*, pp.12–25.

The streets of London were witness to a danger that presented both immediate personal threat and also a hazard with much greater potential to cause death and damage. Gunpowder was the key ingredient in ammunition, explosives and a product that both thrilled and irritated in equal measure; fireworks. The risks of manufacturing such pyrotechnics within the urban environment were very real with the City authorities making numerous attempts from the 1670s onwards to control their production and misuse.[115] Whereas controlling manufacturers was relatively straightforward managing the actions of merchants who stockpiled gunpowder was more problematic. Action was taken in 1718 regarding the storage of gunpowder following a petition from the inhabitants of Wapping, Stepney and Aldgate who lived in fear of explosion. A parliamentary investigation concluded that several thousand barrels of powder were poorly stored, sheltered and guarded in close proximity to the Tower, the navy victualling yards and residential housing across the eastern riverside district. A Bill was subsequently proposed 'to prevent mischiefs which may happen by having too great quantities of gunpowder in storehouses owned by private persons in and about London, Westminster and the suburbs'.[116]

While pressure could be brought to bear on merchants preventing individuals, particularly children and youths, abusing fireworks was a more persistent problem; yet orders and proclamations by both City and national authorities set out to do so. As noted by an order of 1684 the oft repeated aim was to 'hinder all persons from throwing squibs and crackers in the street' and to prevent fireworks being 'thrown into coaches passing the streets of this city [as] great mischief [was] thereby done'.[117] This particular order had cascaded down from the Court of King's Bench to the Mayor who passed it to the Aldermen requiring them to instruct the constables to take action. While letting off fireworks in the streets can be seen as simply disrupting the orderly character of public space throwing such devices into carriages went further in that it could be perceived as threatening social relations and hierarchies. London was not however unique in its concerns about the physical dangers of pyrotechnics or for that matter their potential to highlight or disrupt social hierarchies. Following a specific firework manufacturing accident in Paris during 1706 for example a legal revision banned such activity within the city limits. The strained relationship between the royal use of fireworks and more popular, and commercial, even republican uses during the eighteenth century has been noted elsewhere.[118]

[115] See above sections 3.5 and 3.9.

[116] *Journals of the House of Commons*, 19, p.62 (1803), 21 January 1718.

[117] *Precept by the Mayor to the Aldermen to charge all constables to prevent the throwing of squibs and crackers into coaches* (1684).

[118] Lynn, M.R., 'Sparks for sale: the culture and commerce of fireworks in early modern France', *Eighteenth-Century Life*, 30.2 (2006), p.80; also see Ogborn *Spaces of modernity*, pp.236–238.

Returning to specific regulation of fire hazards within London it is clear that as well as the threat of fires within the domestic and traditional manufacturing sphere the city's greater and more novel enterprises were also minded to take preventative measures. In particular those who governed such sites took steps to control and manage the activities and behaviours of those who worked or visited their spaces. In March 1699 the reconstruction of St Paul's cathedral was interrupted by a serious fire focused in the organ maker's shed located under an arch by the north-east vestry. The fire-fighting was led by the workforce supported by local parish and Company engines, aside from the damage caused to the structure, this response cost the cathedral at least £21 8s 2d.[119] Soon after the commissioners met in committee and drew up a set of regulations aimed at preventing future fires, these included the following measures:

> To provide for the joiners' glue-pot & tarring ropes in some part of the church, and clear the inside of all sheds.
>
> To take care of sweeping the vestry chimnies very frequently.
>
> That the clerk of the works do discard any workman or labourer that smokes tobacco in his work.
>
> That a trusty labourer be employed for melting and running of lead, and not to make fire above, but at certain times, & in such secure places as shall be directed him.
>
> That the plumber do use the grate for heating his irons, and not make any fires but in the places appointed him, & that only in the mornings.
>
> That the clerk of works, or his deputy, do see all places where fire have been for masons or plumbers extinguished with care, before they leave work at noon.[120]

Attempts were clearly being made to control the working practices of those who posed a risk by using fire as part of their occupational activity. But more than this the commissioners desired to control the personal behaviour of their workmen by demanding that the clerk dismiss anyone found smoking tobacco. Stringent though these regulations appear they were unable to prevent a further, but lesser, fire that occurred near the choir in 1703.[121]

A similar concern about fire at another major, and unique, London site is to be found in an advertisement enticing ship-owners to moor their vessels in the Howland Great Wet Dock at Rotherhithe. Published in the pages of *The Daily Courant* the text announced that

> All owners, commanders of ships, and others concerned, are hereby informed, that at the Great Wet Dock at Rotherhithe there is very good conveniences, at reasonable rates, for laying up any ships or vessels, and their stores, without having any anchor down or cables in water, altho' the ship lies always afloat.

It is clear that marine owners were concerned about the risk of fire in such circumstances as the text goes on to specifically reassure that,

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[119] *WSV*, XV, p.49–51 (January–March 1699).

[120] *WSV*, XVI, p.95 (1699); Also see Lang, J., *Rebuilding St Paul's after the Fire*, (Oxford, 1956), pp.206–8.

[121] *WSV*, XV, p.95 (April 1703).

> whereas it is not admitted that any fire should be made in ships that lie in the dock, proper cook-rooms are preparing at convenient distance on shore, for the seamen to draw their victuals at.

Such a pre-emptive declaration of fire safety suggests a raised level of hazard awareness on the part of the Great Dock designers and managers but also reveals the persistent fears of those vessel owners who brought their craft and cargoes to the teeming waterways of metropolis in the early eighteenth century.[122]

Early modern London relied on a range of formal and informal responses to aid victims of accident and disaster. Around the end of the seventeenth century it is possible to discern the beginnings of a move away from traditional briefs and parochially encouraged giving to more secular, and modern, methods for eliciting funds; most notably through the medium of newsprint. For those who suffered work-related injuries London's livery companies, and the larger manufacturing and construction undertakings, had procedures to deliver social support, medical care or compensation. Those injured within the public spaces of the metropolis were most often supported by the parochial authorities who organised or funded their immediate care. In both cases such bodies, and the injured themselves, were able to turn to a wide spectrum of metropolitan medical services — from local bonesetters and apothecaries to master surgeons in the great hospitals. Despite such responses there was little concept at the time of a preventative approach to issues of occupational health. Many of the injuries and afflictions of work being considered as simply the natural adjunct to any particular calling. Yet as the metropolitan environment changed and, through modernising pressures, became more orderly it was acknowledged that such environmental alterations also lessened the everyday exposure to risk for many Londoners. The imposition of regulatory instruments and the implementation of new technologies also helped to further extend the orderly management of risk in both public and private space.

Nonetheless the above modernising measures and responses failed to reverse the rise in the incidence and occurrence of accidental injury and death during the eighteenth century.[123] One explanation for this can be found in the character of the population at risk. That population continued to comprise high numbers of migrants who were for the most part unworldly in modes of metropolitan behaviour, lacked experience of complex working environments and presented poorer levels of literacy and education. They were in every sense more vulnerable to the hazards of the metropolis. Another factor to be considered is the expansion of the suburbs, in particular their role as centres of manufacturing and the inability generally of the livery companies to extend their jurisdiction into them. Thus it can be

[122] *Daily Courant* (6 October 1714).

[123] See above section 3.14. The rise may simply be an effect of keeping parity with increasing population, however this would still suggest that such measures failed to have a positive impact.

supposed that the combination of a vulnerable workforce and less well regulated working environments would have resulted in an increased level of exposure to risk within those spaces; similar in pattern to that found in later eighteenth century Paris.[124] In that city the heavy demand for labour within the construction sector led to the employment of many unskilled migrants. The inexperience of such workers was said to explain their more regular appearance as casualties on building sites than that of native Parisians.[125]

[124] Potofsky, A., 'The construction of Paris and the crises of the Ancien Régime: the police and the people of the Parisian building sites, 1750–1789', *French Historical Studies*, 27.1 (2004). As Potofsky makes clear in the case of late eighteenth century Paris the reformation of, what were perceived as self-serving, guild controls over building activities across the wider city led to an increase in 'hazards to public safety', p.22.

[125] Potofsky, 'Construction of Paris', pp.25–26.

Chapter 5 'Accident event narratives' and early modern mentalities

Section 5.1 Constructing early modern accident events

Accidents are social constructs; issues of cause, blame and responsibility are continually reworked in response to changing social and cultural norms and values.[1] The term accident was used frequently during the early modern period to indicate events and outcomes that were in broad terms incidental or unpredictable; furthermore such events could be for good or bad, hence the 'happy accident' of a chance meeting or good fortune. The idea that an accident — explicitly one that resulted in harm or casualty — was an irrational event was not held widely. Such events were seen in one of two ways: as direct acts of divine providence or that they had unique and unchartable origins that, while not of supernatural design, resulted from a set of 'chance' circumstances. Such views suppressed the development of more rational explanation of accidents as repeatable events with identifiable earthly causes. Indeed contemporary intellectuals actively resisted such a position; as noted previously John Graunt felt such events brooked no analysis, beyond enumeration, as each was the result of specific and to some extent unique conditions.[2] In some ways Francis Bacon took a parallel view when through the careful recording and recreation of a set of specific circumstances he aimed to recreate experimentally 'unique' events that had originally occurred by the chance of nature.[3]

Setting aside the wider historical interpretation of the term 'accident', while of course accepting that such terminological nuances framed the perceptions of contemporary recorders and consumers of such events, the following text is focused primarily on the popular construction, recording and dissemination of accident events in the form of narratives of disaster. Such narratives occurred in newsprint, ballads, pamphlets, diaries and journals, with a multiplicity of functions and meanings, constrained, directed and interpreted by both writers and readers. Yet it is through such structured narratives that an insight can be gained of the way in which early modern people perceived the accident event. To invoke Gaskill's tripartite division of sources once again, the text to this point has addressed both 'the way things were *supposed* to be' and 'the way things *really were*', in this chapter the aim is to suggest 'how things *seemed* to contemporaries'.[4]

[1] For a brief explanation of the modern formulation of the term 'accident' see Green, J., 'From accidents to risk: public health and preventable injury', *Health, Risk & Society*, 1.1 (1999), pp.25–29.
[2] Graunt, *Observations*, p.42.
[3] Witmore, *Culture of accidents*, pp.2–41 & 111–129.
[4] Gaskill, *Crime and mentalities*, p.21.

Section 5.2 Private recording: diaries and journals

While some contemporaries wrote journals of everyday affairs making occasional reference to accident events, both trivial and spectacular, others focused their whole effort on recording such events. The tradition of recording examples of God's providences was long standing but particularly exemplified in the London case by the writings of Nehemiah Wallington.[5] Wallington, a non-conformist 'puritan', collected examples of God's work for his own reflection but also when appropriate to exchange with other believers. This exploitation of accident event narratives, as a tool to delimit the boundaries of Godly life, helped to construct and reinforce the group identity of puritans as they searched for signs of God's special favour. Non-puritan journal writers may have had a similar purpose in, or at the back of, their minds but are also likely to have noted such events more simply as colourful incidents within their everyday lives.

The best known diary of this period is that of Samuel Pepys and the entries within his journals make reference to near misses, accident events and sudden death.[6] Pepys' friend and fellow diarist John Evelyn made similar entries, although his writing often took a wider view with more reliance upon information gained from correspondence rather than first hand experience.[7] Amongst other early modern chroniclers Celia Fiennes noted several accidents experienced on her journeys; it is significant however that her observations are not unusual for travel writing which often reflects the perils of such activity.[8] Slightly different but still in the genre of personal journal writing is Richard Smyth's *Obituary*, which records chronologically the deaths of individuals known to him during his life in the City of London in the mid-seventeenth century.[9]

In further exploration of the character of accident event narratives in personal writing Samuel Pepys' diary stands out as both the best known and most accessible exemplar. By reviewing the range of recurring accident event narratives found within the diary it seems possible to suggest particular concerns or fears of the author. For example the dangers of travel, particularly by water, are noted throughout although this is perhaps understandable for a clerk to the Navy Board. Pepys however demonstrates other concerns; fire was greatly feared both on land and at sea, but he also worried about dogs, falling houses and broken limbs. Pepys makes a number of references to the perils of coach travel, both his own and others. Charles II's health became his concern in 1669 when at Whitehall he heard that,

[5] Seaver, *Wallington's world.*
[6] Latham, R., and Mathews, W. (eds.), *The diary of Samuel Pepys*, 11 vols., (London: 1970–83).
[7] Beer, E.S. de (ed.), *The diary of John Evelyn*, 6 vols (Oxford, 1955).
[8] Morris, C. (ed.), *The journeys of Celia Fiennes*, (London, 1947).
[9] Ellis, H (ed.), *The obituary of Richard Smyth …*, (London, 1849).

> the King and Duke of York is gone by 3 in the morning and had the misfortune to be overset with the Duke of York, the Duke of Monmouth, and the Prince, at the King's-gate in Holborn; and the King all dirty, but no hurt. How it came to pass I know not, but only it was dark and the torches did not, they say, light the coach as they should do.[10]

Pepys' views did not always indicate a fear for his own person in this regard; in May 1661 for example he notes with evident pleasure his participation in a race from Walthamstow to London during which he 'had great sport to try who should drive fastest, Sir W. Batten's or Sir W. Penn's charriot, they having four and we two horses, and we beat them. But it cost me the spoiling of my clothes and velvet coat with dirt.'[11] On another occasion his pleasure was vicariously derived from the avoidance of injury by one of his servants. In February 1669 he recorded that 'our little [foot]boy, going to 'light [from our coach], did fall down; and, had he not been a most nimble boy (I saw how he did it, and was mightily pleased with him for it), he had been run over by the coach.'[12] Here Pepys emphasises that he was a direct witness to the event; a factor that appears to have encouraged many to positively record accident events.

On a further occasion Pepys records taking preventative steps to protect his family from the dangers of the urban environment during a particularly serious storm. He goes to some lengths to justify his actions by describing the range of hazards he encountered in the streets and reinforced his estimation of the risks by making reference to a named individual killed by the storm:

> Having agreed with Sir Wm. Pen and my wife to meet them at the Opera, and finding by my walking in the streets, which were everywhere full of brick battes and tyeles flung down by the extraordinary Winde the last night, that it was dangerous to go out of doors; and hearing how several persons have been killed today by the fall of things in the streets and that the pageant in Fleetstreet is most of it blown down, and hath broke down part of several houses, among others Dick Brigdens, and that one Lady Sanderson [Saltonstall], a person of quality in Covent garden, was killed by the fall of the house in her bed last, I sent my boy home to forbid them to go forth.[13]

A few years later Pepys touches on a similar danger with reference to the designs of both builders and God. With regard to the continuing post-Great Fire rebuilding programme he relayed that,

> This day there is fallen down a new house, not quite finished, in Lombard Street, and that there have been several so, they making use of bad mortar and bricks; but no hurt yet, as God hath ordered it.[14]

Thus Samuel Pepys embodied two potentially conflicting aspects of thought at this period. While he was a regular churchgoer he was also given to modern scientific curiosity, signified most notably by his membership of the Royal Society. Pepys' writing expresses a discordant

[10] *Pepys*, 8 March 1669.
[11] *Pepys*, 29 May 1661.
[12] *Pepys*, 8 February 1669.
[13] *Pepys*, 18 February 1662.
[14] *Pepys*, 12 December 1668.

understanding of the accident event as providential intervention combined with a more pragmatic view based in the realms of chance and probability. In March 1667 Pepys travelled to Deptford:

> to a private storehouse to look upon some cordage of Sir W. Batten's; and there being a hole formerly made for a drain for tar to run into, wherein the barrel stood still of stinking water, Sir W. Batten did fall with one leg into it; which might have been very bad to him, by breaking a leg or other hurt, but *thanks be to God* he only sprained his foot a little.[15]

On that occasion, with little harm done, Pepys was happy to grant God a hand in Sir William Batten's good fortune. Yet as early as 1662 Pepys had made an explicit reference to chance having a role in the outcome of such events:

> about 8 a-clock went down to Deptford and there with Mr. Davis did look over most of his stores; by the same token, in the great storehouse, while Captain Badily [Master-Attendant at Deptford and Woolwich yards] was talking to us, one from a trap-door above let fall unawares a coil of cable, *that it was 10,000 to one* it had not broke Captain Badily's neck, it came so near him – but did him no hurt.[16]

By 1693 Pepys was confident enough in his acceptance of simple probability to correspond with Sir Isaac Newton over a particular problem. Pepys asked Newton to calculate if one, two or three 'sixes' would be most likely to be thrown respectively by a set of six, twelve or eighteen dice.[17] While accepting Newton's answer he refrained from applying such probability to higher questions in the manner of Pascal in the 1660s with his 'wager' on the existence of God.[18] For Pepys it seems that while the occurrence of a particular event may have been driven by chance — and perhaps even probability — the nature of the outcome (for good or bad) remained firmly in the hands of God.

The diary entries also provide evidence for Pepys' specific fears and hence point to things he considered particularly dangerous. For example Pepys clearly had specific apprehensions of danger associated with dogs. As noted above in 1662 he commented on the death of a child at Walthamstow 'torn to pieces by two dogs'.[19] Pepys also recorded two occasions of personal encounters with dangerous dogs; during the first he reflected on his own weakness in not responding to the attack in a sufficiently calm manner:

> on foot to Greenwich; where going, I was set upon by a great dog, who got hold of my garters and might have done me hurt; but Lord, to see in what a maze I was, that having a sword about me, I never thought of it or had the heart to make use of it, but might for want of that courage been worried.[20]

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[15] *Pepys*, 4 March 1667; [my emphasis].
[16] *Pepys*, 22 August 1662; [my emphasis].
[17] Braybrooke, R.L. (ed.), *Diary and correspondence of Samuel Pepys …*, vol.iv, (London, 1876), pp.254–259.
[18] Bernstein, P.L., *Against the gods: the remarkable story of risk*, (New York, 1996), pp.69–71.
[19] *Pepys*, 25 September 1662.
[20] *Pepys*, 11 May 1663.

Pepys appeared to have learnt from that event as when fearing a dog attack some three years later he had the wits to arm himself. Nevertheless he was still evidently uncomfortable with the action as in his fearful state he inadvertently lost his sword belt:

> And there took his coach with four horses and away towards Hampton Court, [...] At Branford I light, having need to shit; and went into an Inne door that stood open, found the house of office, and used it, but saw no people: only after I was in the house, heard a great dog bark and so was afeared how I should get safe back again, and therefore drew my sword and scabbard out of my belt to have ready in my hand - but did not need to use it, but got safe into the coach again. But lost my belt by that shift, not missing it till I came to Hampton Court.[21]

Interestingly Pepys returned to thoughts of dangerous dogs in the summer of 1682 when he pressed John Evelyn for information on the usefulness of dogs in warfare. Evelyn corresponded with Pepys writing an extensive account of such occurrences through history, although he concluded they were not to be trusted and therefore of limited value.[22]

Pepys, like many other Londoners, had a very real fear of house fires; a fear that was understandably greatly amplified following the Great Fire of 1666. Pepys' writings set out unambiguously the intensity of his personal fears in this respect with several entries making clear reference to the danger and impact of fire. Just a few months after the trauma of the Great Fire he noted that,

> While we were sitting in the morning at the office, we were frighted with news of fire at Sir W. Batten's, by [a] chimney taking fire; and it put me into much fear and trouble, but with a great many hands and pains it was soon stopped.[23]

Several years later Pepys was still keen to offer words of advice on the occasion of another fire, in a letter he made clear his personal belief in supernatural direction or 'effect':

> I received your [letter] of the 30th [October], which gives me occasion of praising God on your behalf, with relation to the evil you were so near sustaining from your neighbours fire. Indeed the very mention of it (though it pleased God to prevent its effects) put me into great pain; and I hope it will conduce to the awakening in your neighbours and self a great caution in that particular.[24]

Yet, as noted above, Pepys' conclusion appears to eschew the inevitability of events and instead encourages practical measures to be taken in the avoidance of such hazards.

As can be seen from the example of Pepys' diary the recounting of accident events, and related hazards and dangers, provides an insight into the mentality of individuals. While Pepys fails to directly expound upon the relationship between probability and providence it is possible to tease out his views through a careful reading of the language used. Personal concerns regarding particular hazards are also expressed through journal writing, and in

[21] *Pepys*, 28 January 1666.

[22] Bédoyère, G. de la (ed.), *Particular friends: the correspondence of Samuel Pepys and John Evelyn*, (Woodbridge, 1997), pp.132–135. Letter from Evelyn to Pepys on 10 July 1682.

[23] *Pepys*, 24 January 1667.

[24] Smith, J., *The life, journals & correspondence of Samuel Pepys*, vol.1, (London, 1845), p.245. Letter from Pepys to Mr Hewer, at Brompton, on 2 November 1680.

correspondence, again providing insights into character and beliefs. When such events were directly experienced as a form of trauma it would seem sensible to assign such writing a cathartic role.[25] An additional rationale for such recording, especially so when found in correspondence, was as a means to gather and transmit knowledge and advice. Such a function could be employed to extend and assist in the advancement of providential ideologies, as in the case of Wallington, but might also be used to communicate more pragmatic and didactic instruction based upon referential experience.

Section 5.3 Public reporting: telling stories and printing news

If accident events are social constructs then the narrative transmission of such events, whether oral or textual, is the mechanism by which they are constructed. Consequently a review of the public reporting, or narrative telling, of sudden death events will provide insights into the focus, purpose and dissemination of such 'stories'. While the following discussion begins with a brief consideration of oral forms of transmission it is undoubtedly the case that by the late seventeenth century the overlap between oral and written narratives, especially in the metropolis, was complex to the point of interdependency.[26] It should be noted that a fully comprehensive 'intellectual discourse of accidents' would undoubtedly include a theological turn, with an emphasis on providential understanding, however the following text is aimed at elaborating the more mundane and hence more widely experienced 'public discourse of accidents' that was to be found within the homes, streets, worksites and gathering places of early modern Londoners.

However it was transmitted the accident event narrative was almost universally structured as a short account told as a story or anecdote. Such accounts were of a classic tripartite construction; first setting out the 'situation', then revealing the specific 'crisis' and finally delivering the 'resolution'.[27] This short report from a 1719 edition of a London newspaper provides a good example of this structure.[28] Firstly the timing, actor(s), and setting are established:

> On Saturday last the Duke of Portland as he was hunting near his own house at Garrards-Cross in Buckinghamshire, riding to turn the Stag,

Then the 'crisis' is outlined:

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[25] See Robinett, J., 'The narrative shape of traumatic experience', *Literature and Medicine*, 26.2 (2007), pp.290–295. Also see, Range, L.M., Kovac, S.H. and Marion, M.S., 'Does writing about the bereavement lessen grief following sudden, unintentional death?', *Death Studies*, 24.2 (2000), pp.115–134.

[26] Fox, A., *Oral and literate culture in England, 1500–1700*, (Oxford, 2000), pp.5–10, 40–41.

[27] Gossman, L., 'Anecdote and history', *History and Theory*, 42 (2003), pp.147–150.

[28] *Weekly Journal*, 15 August 1719.

> his horse threw him off backwards, by which he was very much bruised and hurt, and looked upon to be in great danger,

Finally the narrative concludes with a suitable 'resolution':

> but upon being let blood, and other methods used, his Grace is looked upon to be out of danger.

Such 'story telling' could take longer, or even shorter, forms but the self-contained structure of the narrative is presented repeatedly. This structure was well understood by readers, or listeners, with the 'situation' allowing them to picture the event, the 'crisis' providing the essential matter of interest and in the case of accident events building anticipation for the 'resolution' whether it be for good or ill. It is notable that most of these short narratives omit any explicit providential observation, although comments of a judgemental or blaming character are sometimes referenced.

Orality

Originally stories would be told orally and indeed even within London, an environment so heavily steeped in the printed word, this was still the case. While Londoners had on average a higher level of literacy than the rest of the country many remained illiterate.[29] Thus the opportunity to hear stories recited from experience or memory, or read aloud from printed sources, would have been welcomed by many. As noted previously orality lay at the centre of the judicial process of the coroner's inquest. The findings of such inquests were not routinely published although some printed accident event narratives effectively represent a summary transcript as the following newspaper report suggests:

> On Wednesday night last, about ten o'clock, one Francis Drury, a young Hackney-Coachman, in driving a servant maid and two children for diversion round Tower Hill, and turning short about, overset his coach on the ridge of the counterscarp, so that both coach and horses tumbled down to the rails; by which unhappy accident the coachman's skull was broke, whereby he died upon the spot. The servant maid had her arm broke, and was dangerously bruised; but the children were not hurt. Yesterday the Coroner's Inquest having sat upon the body of the deceased, brought in the verdict, *accidental death*.[30]

Thus public knowledge of the outcomes of such events would be socially amplified by a dynamic mixture of judicial theatre, oral repetition and printed distribution.

Some consideration should be given to the venues at which such transmissions might take place, aside from private reading in the home, and the purposes for which such narratives were publicly retold. It is well known that printed texts were obtained, read or listened to at alehouses, taverns and coffeehouses; that accident event narratives formed part of such communications is without doubt. A further significant forum for such story telling

[29] Raymond, J., *Pamphlets and pamphleteering in early modern Britain*, (Cambridge, 2003) pp.89–91.

[30] *The Post Boy*, 23 August 1722; *BofM* 22 August 1722.

may well have been the barber's shop. Early modern barbers often engaged in minor surgery, particularly bleeding and wound dressing, and were likely to have been resorted to in the immediate aftermath of injurious accidents. But their premises were also noted as locations for the exchange of information; as Fox observes 'Barbers … seem to have been readers: their shops acted both as centres of news and as places where newsletters or pamphlets might be seen.'[31] This conjunction of medical care and communication would have given barbers a guiding role in the construction of accident event narratives and the potential to enhance such stories with both expert knowledge and graphic detail.

Aside from the exposition of first-hand experiences such oral transactions might be considered to be positioned within the genre of trivial anecdote or gossip. Gathering material for such anecdotes did not have to await the arrival of regular newspapers in the early eighteenth century. It seems the *Bills of Mortality* were avidly read precisely because they contained descriptions — albeit very brief ones — of sudden violent deaths. John Graunt noted rather disdainfully that those who read the *Bills* 'looked among the casualties [to see] what had happened rare and extraordinary in the week current: so as they might take the same as a text to talk upon, in the next company'.[32] Yet Graunt himself could not resist the lure of sudden death as a topic of conversation, as Pepys relates when he came across Graunt in the Crown Tavern Westminster in 1668 'telling pretty stories of people that have killed themselves or been accessory to it, in revenge to other people and to mischief other people'.[33] Pepys' use of the term 'pretty' suggests anecdotes that were simultaneously gruesome and petty, while the terms 'revenge' and 'mischief' sit firmly within the purvey of the gossip. Nevertheless Graunt would have gained public attention, and therefore an opportunity to enhance his immediate social standing, through such activities. Other storytellers also gained such personal benefits but in most cases their tales would have drawn on local knowledge and traditions rather than mediated communications.[34]

On other occasions the accident event narrative may have been relayed for more didactic purposes. Usually accidents became less likely amongst the young, and in the workplace, as experience and skills developed; one essentially risk-free way of encouraging such learning was through narrative example. The textual structures of some narratives clearly allowed for a reading that might suggest a safer way of life or behaviour.[35] To give two examples which

[31] Fox, *Oral and literate culture*, p.39. For a discussion of barbers' shops as a social forum see Pelling, M., *The common lot: sickness, medical occupations and the urban poor in early modern England*, (London, 1998) pp.222–224.

[32] Graunt, *Observations*, pp.1–2.

[33] *Pepys*, 26 April 1668.

[34] Fox, *Oral and literate culture*, p.30–33.

[35] Hanawalt, B.A., 'The voices and audiences of social history records', *Social Science History*, 15.2 (1991), p.169.

might be taken as instructional texts for young boys or their parents, in 1738 the *Daily Gazetteer* reported:

> On Saturday last, as some boys were playing under a scaffold erected to beautify Drapers Hall, a hod, used by the labourers, fell from the scaffolding and cracked the skull of one of the boys, a lad of nine years old. He was immediately carried to St Thomas's Hospital, and died there on Monday night.[36]

In another example some eight years later it was noted that:

> Last Sunday as some boys were running after a horse in Stepney-Fields, near Whitechapel Mount, he kicked one of them on the head, which dashed out his brains, and killed him on the spot.[37]

If a moral instruction was to be taken from these episodes it would undoubtedly be 'do not play on building sites' and 'be careful around horses'. As Hanawalt has indicated such exhortations could be stated more clearly when involving communal condemnation of errant behaviour.[38] To give two early modern examples: In 1689 a pamphlet reported the views of a coroner's jury concerning the murder of Mary Turner by her unashamed husband, they noted that 'the neighbours, that discoursed and reasoned with him, endeavoured to lay before him the heinousness of his crimes.'[39] At other times poor working practices could be called into question. In the summer of 1736 John Maccoon a carter caused the death of a young child in Drury Lane. A witness during his trial at the Old Bailey testified he saw Maccoon stop to talk to a man about a job and then emphasised that in a lapse of responsibility he had 'let the cart go on by itself'.[40]

Proverbs were in wide circulation throughout the early modern period and fulfilled a similar function. Whilst most had a moralising purpose reflecting their religious or learned origins their repetition in workplace, inn or tavern could encompass practical instruction which sometimes played on the physical hazards of everyday life.[41] For example, 'the burnt hand dreads the fire' not only suggested that listeners should learn from their mistakes but also simultaneously reinforced the concept that fire itself was dangerous.[42] Other proverbs, or adages, included 'the best cart may overthrow' and 'tis ill playing with edged tools'.[43] Sometimes such observations required more explicit delivery; for example when a newspaper reported that several youths had been burnt by walking over the still smouldering remains of a house fire in 1730 the following editorial comment was added:

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[36] *Daily Gazetteer*, 15 July 1738.
[37] *General London Evening Mercury*, 2 August 1746.
[38] Hanawalt, 'Voices and audiences', pp.166–169.
[39] *News from Bishopsgate Street, being a true relation of a most barbarous and bloody murder*, 1689.
[40] OBP, 5 May 1736, John Maccoon, otherwise Maccools (ref. t17360505-61).
[41] Fox, *Oral and literate culture*, pp.133–151.
[42] Fox, *Oral and literate culture*, p.115.
[43] Howell, J., *Proverbs, or old sayed sawes & adgages*, (London, 1659), p.9 & 11.

> It is to be hoped these sad examples may be a means to prevent that fruitless and idle curiosity, which leads unwary and rash people into such hazards, as may be attended with consequences so fatal, when, if they escape danger, they cannot possibly do any good.[44]

As the period progressed the printed word was used to both inform about accident events and, to some extent, make critical observations upon them. The wider geographical dissemination of accident event narratives, even within the metropolis, naturally relied strongly upon such material.

Ballads

Three principal forms of printed literature carried narratives of sudden violent death: ballads, pamphlets and newspapers. All took as their subject matter events that were unusual, memorable, dramatic or disastrous. The most frequent social narrative focused on crime, especially murder and subsequent justice, but also to a lesser extent suicide. From a readers perspective such stories of personal violence engendered both fear and wonder, while for the writers the narrative was often straightforward, outcomes were predictable and the finished product often stereotypical.[45] The measured pace of judicial process also meant publishers were afforded an equally measured timescale within which to work and yet retain the immediacy required for successful circulation. Accident events, on the other hand, were less likely to appear in print for the simple reason that, although dramatic, they were also common-place and often had excessively simple narratives. Additionally their timeframe — from event to outcome — was often so condensed that the publishing process in terms of production and circulation was compromised. What did however draw the attention of ballad writers, pamphleteers and journalists were those accidents that seemed particularly unusual, complex, or which involved multiple-fatalities; significantly such events also had scope for the layering of providentialist exhortation.

Ballads covered a wide-range of human, political and religious affairs; some used accident events or natural disasters to convey their messages. Two key examples, with very different origins, include *The Lamentation of a bad market* and *A Sad and true relation of a great fire or two*.[46] The first tells the story of a major London fire that occurred in 1633; it explores the cause of the fire and then progresses to describe the partial destruction of London Bridge. The ballad also significantly recounts a drowning event associated with a different occasion when the Thames was frozen over. The 'bad market' refers to a wager, laid and then withdrawn by 'a gallant', that the ice was strong enough to bear a man's weight.

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[44] *Daily Journal*, 6 April 1730.

[45] Sharpe, '"Last dying speeches"', pp.147–148.

[46] *The Lamentation of a bad market, or the drownding of three children on the Thames … To the tune of* The Ladies fall, (c.1680); *A Sad and true relation of a great fire or two … To the tune of* Fortune my foe*, or,* Aim not too high, (1662).

That it was not, was then evidenced by three children venturing onto the ice, falling through and drowning:

> Three children sliding thereabouts,
> upon a place too *thin,*
> That so at last it did fall *out,*
> that they did all fall *in.*
> …
> Ye Parents all that *children* have,
> and ye that have none yet,
> Preserve your children from the grave,
> and teach them at home to sit.
>
> For had these at a Sermon been,
> or else upon dry ground,
> Why then I would have never been seen,
> if that they had been *drown'd.*

This part of the ballad gained significant persistence as a moralistic exhortation to parents to control their children and, as a condensed three verse version of the key stanzas, developed as a popular nursery rhyme in circulation from the early eighteenth to the end of the nineteenth centuries.[47]


A Sad and True Relation of a great fire or two.

The most terrible and dangerous fire began in the house of Mr. *George Delaun*, an *Hamborough* Merchant *in Lothberry*, neer the *Royal Exchange* in *Cornhil*, Where Master *Delaun* and his Wife being big with Child, Daughter to *Sir Thomas Allen* of *Finchly*, Mr. *Gilbert*, a Merchant, two Maid servants, and a Nurse and her Husband, were all burned to ashes in the mercilesse flames of fire. 1662

To the Tune of, *Fortune my Foe*, or *Aim not too High.*

FIG. 5.1 Title text and woodcut image of fire victims from the ballad *A Sad and true relation of a great fire or two …*, 1662.

The second ballad was based more closely on a verifiable event; a disastrous fire that occurred in Lothbury in December 1662 (see Fig.5.1).[48] The ballad tells the story of the fire, its origins, the names and character of the victims, and communal attempts at fire fighting:

[47] Opie, I. and P. (eds.), *The Oxford Dictionary of nursery rhymes*, (Oxford, 1997), pp.136–139, no.99 and plate V.

[48] See above, section 3.9, for a discussion of the fire.

They did so lustily water bring in,
Into the fire then they did it fling,
And with long hooks the fierceness to allay,
Or thousands more it would have brought to decay.

Mr. Terils house and others near danger lay,
Then by these fiery flames to melt away,
With wet to quench they many ways contrive,
To save their goods, their houses and their lives.

A further verse widened the scope of the message to another fire elsewhere in London:

That in Shoreditch likewise we may deplore,
Three houses burnt with their substance and store,
Two or three people that fire did destroy,
Some of their limbs in the rubbish after lay.[49]

The final verse concludes with advice similar to that found in the *Bad Market* ballad, encouraging the maintenance of orderly households and the proper respect for religion; 'All you that are Masters of a family, Govern well your house and fear the God on high'.

Pamphlets

Amongst pamphlets focused on accidents and disasters the most frequently occurring were those describing urban fires. A sample group of fourteen pamphlets, reporting on ten fires that occurred in London between 1649–1698 provide material for discussion. The earliest of these was *Death's masterpiece, or a true relation of that great and sudden fire in Tower Street, London*. The pamphlet, published in 1649, methodically lists those houses destroyed when twenty-seven barrels of gun powder exploded in a ship-chandler's shop. The cause of the ignition could not be established 'because none in the house was left alive to report' yet the pamphlet writer, in the same sentence, confidently asserted that by 'negligence fire came to those in the shop'. Running to six pages the second half of the pamphlet provided a house-by-house tally of those killed and wounded. The writer devoted considerable space to calculating the total number of fatalities, an activity complicated by the fact that among the casualties 'there is only found some parts of their bodies'. Giving the final death toll as 'threescore and seven, which is the number that is yet known certainly to be killed by this unhappy accident' the writer concludes with a review of the financial losses, 'judged to be threescore thousand pounds'. The impact of the event was undoubtedly widely experienced not only as a result of the explosive ignition but more especially through the widespread damage and losses both human and financial; this was clearly an event worth recording in print.

[49] The *BofM* reports a four person multiple fatality fire in the Bishopsgate area in March 1655, this may be the fire referred to.

Other pamphlets reported the Southwark fire of 1676,[50] the burning of the 'New Prison by Clerkenwell' in 1679,[51] the highly damaging Wapping fire of 1682,[52] and various others in Cripplegate (1687),[53] Thames Street (1688),[54] Southwark (1689),[55] Whitehall (1690),[56] Kensington Palace (1691)[57] and the Strand (1698).[58] Each fire had a particular characteristic that appears to have made it worthy of committing to print. In the case of Southwark in 1676 it was the loss of six 'eminent innes', not to mention five-hundred houses, that appeared of most significance. The fires in 1679, 1682 and 1689 shared anti-Catholic hysteria, derived from the Popish Plot, as a journalistic device to support scapegoating or blaming.[59] One of the Wapping fire pamphlets, *A True account of the dreadful fire which happened … at night in Wapping,* noted the apprehension of 'a fellow [with] several fire-balls about him', although none of the other pamphlets published in response to this event mention such an individual. The other two examples were more direct in attributing blame to Catholics. The fire at Clerkenwell was said to have been set by 'a papist that was there in custody, and by that means escaped', while the pamphlet describing the Southwark fire of 1689 included 'the manner of seizing a notorious papist' within its title. Nevertheless that same pamphlet concluded by exploring both the difficulty in establishing true cause and simultaneously emphasising the role played by potential negligence:

> How it began whether by the carelessness of a candle, or otherways, remains doubtful reports and conjecturals being various: As likewise doth the burning of the child in the house where it first began, said to be left in the cradle through hast and forgetfulness.

That an infant might be abandoned in such circumstances through simple 'forgetfulness' seems unlikely but the statement creates the impression of a disordered, and hence negligent, household at the very heart of the conflagration.

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[50] *A True narrative of the great and terrible fire in Southwark ...*, (London, 1676).

[51] *An Account of the fire at New-prison by Clerkenwell …*, (London, 1679).

[52] *Sad and lamentable news from Wapping …*, (London, 1682); *A Full and true account of the lamentable and dreadful fire …*, (London, 1682); *A True account of the dreadful fire which happened … at night in Wapping …*, (London, 1682); *A Modest account of that most dreadful fire which happened at Wapping …*, (London, 1682); *A More full and exact account of that most dreadful fire which happened at Wapping …*, (London, 1682).

[53] *A True account of that dreadful fire which happened in the house of Mr Samuel Seaton, …*, (London, 1687).

[54] *A True relation of the sad and dreadful fire in Thames Street …*, (London, 1688).

[55] *A Full and true account of the sad and dreadful fire which happened in the borough of Southwark …*, (London, 1689).

[56] *A Sad and lamentable account of the dreadful fire that happened … in the Mews near Whitehall …*, (London, 1690).

[57] *Great news from Kensington giving a particular relation of the late fire …*, (1691).

[58] *Sad and dreadful news from the Strand giving an account of a most dreadful fire …*, (London, 1698).

[59] For a discussion of the depiction in newspapers of this period of arsonists, real or imagined, as Roman Catholics, see Sutherland, *The Restoration newspaper and its development*, (Cambridge, 1986), pp.78–79; also Raymond, *Pamphlets and pamphleteering*, pp.341–355.

In the case of the fire in the house of Mr Seaton, pewterer, in 1687 the significance for the pamphleteer was the mass fatality that occurred. In particular among the seven victims was Mr Seaton's wife who appeared to have given birth during the fire, thus the newborn infant was reported to have 'found its cradle and grave at once'. The attraction of 'witnessing' such an event either in person or vicariously through print is confirmed in the observation that 'The bodies … were carried to a neighbours house; and there lay as affrightening spectacles to people, who flocked to see them'. The author also took the opportunity to provide some didactic instruction in fire prevention with the introduction boldly stating,

> The dismal effects of fire have been so sensibly felt by the Citizens of London … that (methinks) it should induce in them to a more than ordinary circumspection, in preventing those consequences, which are the immediate effects of a supine carelessness and negligence. So many and surprising have been the misfortunes of Landlords, and Masters of families, that they are equally engaged to a strict inspection of their workmen and servants, that neither an ill-placed candle, or an unregarded snuff of a tobacco pipe, nor the careless airing of linen (by which this unhappy accident came) should in one hour undo a family for ever.

The dual implication being that a disorderly house was a danger not just to its inhabitants but also its neighbours, and that the incompetence of servants usually lay at the root of such events. On another occasion, and despite claiming to 'only proceed to give an impartial account' the pamphleteer who reported the fire in Thames Street in 1688 felt obliged to point the finger of blame at a servant. The fire took hold in a hayloft above the stable of a timber merchant yet its cause was disputed with 'some affirming it to be done by a sky rocket falling on the hay loft; others by the carelessness of the horse-keeper'.

The manner in which pamphleteers might compete for readers through the reporting of disaster events is revealed in the five pamphlets related to the great Wapping fire of Sunday 19 November 1682. Those published by D. Mallet demonstrate the urgency required to get stories to print in a competitive market. The first pamphlet, *A Modest account*, appears to have been rushed into circulation the day after the fire and recounts the immediate event but gives little information on its outcome. The second pamphlet, *A More full and exact account*, reprints the text of the first but adds a 'truer account … of the damages sustained' made possible by being published on Tuesday 21 November (although the pamphlet mistakenly refers to this day as the 22). Both of Mallet's pamphlets speculate that the fire was started by a drunken sawyer who was careless with a candle and dropped it among wood shavings, a story repeated — although reworded — in *Sad and lamentable news from Wapping* published by J. Clarke.[60] It seems that Clarke's information was derived directly from Mallet's text with little factual alteration or addition. A more measured account of the fire is

[60] A similar explanation was presented as the cause of the burning of London Bridge in 1633 in the ballad *The Lamentation of a bad market* which recounts that 'a carpenter's son' playing with an axe 'into the chips there fell a spark, which sent out such flames, that it was known into Southwark'.

to be found in a pamphlet produced by Langley Curtis who significantly rejects the drunken labourer hypothesis and instead points blame towards the householder, a sea captain called Allen. Curtis, in *A Full and true account of the lamentable and dreadful fire*, goes to great lengths to describe the scope of the damage which was estimated to include the, exaggerated, loss of 'a thousand houses'. The fifth pamphlet to focus on this event, *A True account of the dreadful fire* published by George Croom, utilises a much neater type-face to construct a more religiously inspired and reflective text. It was no doubt published some days after the fire and ends with the rather optimistic lament 'God grant that everyone may amend their lives and that this may be the last fire that may happen to this great city or suburbs thereof'.

A Ballad of the Strange and

Wonderful Storm of Hail,

Which fell in *LONDON* on the 18*th.* of *May* 1680, which hurt ſeveral men, kill'ed many Birds, and ſpoiled many Trees; with other ſtrange Accidents, the like never before known in *ENGLAND*.

To the Tune of, Aim not too High.

GOod Chriſtians all attend unto my Ditty,
And you ſhall hear ſtrange Newes from London City;
The like before I think you ne'r did hear.
Which well may fill our hearts with Dread and Fear.
Upon the Eighteenth of this preſent May,
A Tempeſt ſtrange, pray mind me what I ſay:
So ſtrange, I think th. like was never known,
As I can hear of yet by any one.
Hail-ſtones as bigg as Eggs a pace down fell,
And ſome much bigger, as I hear ſome tell:
Who took them up as they lay on the ground,
And Meaſur'd, they were found Eight Inches round.

And Fourteen Ounces two of them did Weigh,
As one who weigh'd them unto me did ſay:
It is ſo ſtrange, and yet ſo very true,
The like before no mortal ever knew.
Much miſchief by theſe Hail-ſtones there was done,
For in St. Leonard Shoreditch there was one
Who as he was a dreſſing Hemp, 'tis ſaid,
All on a ſudden he was ſtricken dead.
His Child being by at this was terrifi'd,
My Father he is dead, the Child he cry'd:
At this Out-cry Neighbours came in amain,
And found the man as they ſuppoſed ſlain.

FIG. 5.2 *The Ballad of the strange and wonderful storm of hail … to the tune of* Aim not too high, (1680) with a dramatic, and probably original, woodcut illustrating the great hail storm of May 1680.

A variety of pamphlets addressed other forms of accident and disaster, mainly noting the unusual circumstances of the event. Perhaps the most regular subject of such pamphlets was the urban storm. One pamphlet supplied 'a relation of several wonderful storms' that noted the devastation caused by hailstones in London, Oxford and Blois in France in 1680.[61] While the French example was included to press home a Protestant providentialist view the English examples were presented more descriptively without significant religious reflection (although

[61] *An Account of a strange and prodigious storm of thunder, lightning & hail …*, (London, 1680).

a ballad published in response to the event took a more religious stance, see Fig. 5.2).[62] Deaths caused by the collapse of buildings, whether by storm or through dilapidation, also captured the attention of pamphleteers.[63] In January 1689 a storm was reported to have caused great damage across the metropolitan area, after providing a detailed enumeration of trees blown down or churches damaged the author noted 'that which is most lamentable, is, the loss of several persons lives, as by the fall of a house …'.[64] On other occasions it was the ensuing flooding that became the focus, as in the pamphlet titled *England's most dreadful calamity by the late floods …*, which notably begins with 'the old proverb, *water and fire are two good servants, but bad masters*'.[65] The six page pamphlet commences with a detailed account of storm and flooding incidents in and around London and then widens its narrative to places a distant as Durham.

Further natural disasters that found expression through pamphlets included lightning strikes, such as that which took the lives of Margaret Simpson and an infant named Elizabeth Griffin in a house in Southwark in 1679.[66] Simpson was described as 'a widow … of a very ill conversation, as to turbulence of spirit, swearing, drinking etc.' thus the 'thunderbolt' was characterised as a form of divine intervention; an explanation for lightning of great antiquity. It is notable however that no providential explanation was proffered for the death of the innocent infant she was holding at the time. In another example the victim recovered which provided a richer narrative vein for the author. John Thomson, a hemp-dresser, was struck by lightning while at work in Shoreditch during the previously mentioned storm of May 1680.[67] The author supports the veracity of the report by listing three 'good witnesses' on the title page; 'John Thomson, the party aggrieved; Mr Gratian Bale, chyrurgion; Robert Laver, who took him up'.[68] The narrative interweaves several comments on the actions of a 'wise and omnipotent God' with an almost forensically detailed description of the event and Thomson's wound pattern.

Yet another, though rarer, natural event to be reported through pamphlets was that of the earthquake. Such events were most often located overseas and thus could be manipulated by pamphleteers to promote the providential hegemony of the English Protestant faith.

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[62] *A Ballad of the strange and wonderful storm of hail …*, (1680).

[63] See for example, *The uncertainty of humane life: set forth in a full and true account of a most sad and dreadful accident, which happen'd on Wednesday the 19th of this instant May, 1714 ...*, (London, 1714); *BofM* 18 May 1714 (St Katherine Coleman).

[64] *A True account of the great damages done by the late storm which happened … on Sunday morning, January the 12th 1689*, (London, 1689).

[65] *England's most dreadful calamity by the late floods …*, (London, 1682).

[66] *Dreadful news from Southwark, or, a most true relation how one Margaret Simpson widow, together with … an infant … were wonderfully struck dead with a thunderbolt …*, (1679); *BofM* 5 May 1679 (St Mary Newington).

[67] *Most true but dreadful account from Shoreditch …*, (1680).

[68] Gratian Bale was a noted surgeon who became Master of the Barber-Surgeons Company in 1709; Young, *Annals of the Barber-Surgeons*, pp.305–306.

Occasionally however earthquakes occurred at home. In September 1692 a relatively weak but widespread quake was experienced across the south-east of England causing a small amount of structural damage. Although no fatalities were reported a pamphlet was quickly produced which capitalised by drawing parallels with the much more destructive event that had occurred in Port Royal, Jamaica, some two months before (see Fig. 5.3).[69]

FIG. 5.3 Frontispiece from a 1692 pamphlet titled
A Sad and terrible relation of two dreadful earthquakes

In attempting to describe the London quake the pamphlet noted that 'some conjectured it the sudden blowing up of powder-mills near London'. That Londoners would make such a comparison is not surprising as only two years previously two gun powder-mills at Hackney had indeed exploded. A broadsheet was printed at the time which described that event in some detail and provided a careful consideration of the disaster's cause, concluding that most likely it was the fault of 'the over-covetousness of the workmen, in working a longer time than (by their rules) they ought, to get money for their extraordinary expenses the week

[69] *A Sad and terrible relation of two dreadful earth-quakes the one happening in England …*, (1692).

following.'[70] Thus once again the blame was directed at the lower ranks and servant classes, although the indication in this instance that 'rules' were broken provides some legitimacy in such a view.

As discussed pamphlets tended to record the exceptional and not the mundane, thus drowning rarely appears as a subject in such literature. Two exceptions to this pattern can however be shown to have quite specific justifications for publication. The first example is a broadsheet in poetic form which reflected on the drowning of two merchants in the Thames.[71] The text was written by a friend of one of the victims and was presented in the form of an elegy. We can only surmise at the circulation of such a sheet, however as the attribution line reads 'printed for J.H. for the use of the *friends* of the deceased' it was likely to have been relatively limited. The other pamphlet might have expected a much wider readership dealing as it does with a multiple-fatality boating disaster.

Sad and deplorable news from Oxfordsheir and Barksheir describes the deaths of 'about sixty persons, men, women and children in the lock near Goring in Oxfordshire' in 1674.[72] The pamphlet is notable however as it focuses four of its six pages on a critique of the popular press in relation to the reporting of 'God's judgements':

> It is strange to see how greedie mortals eye the labouring press, and with gaping mouths attend its delivery; ready to swallow and devour whatever it brings forth … To satisfy which insatiable appetite of our Newsmongers and their *Athenians*, heaven and the elements seem peculiarly to have consented. This being an age, and this year especially a year of wonders, and if not everywhere prodigious, yet in no part not remarkable in some eminent example of Providence …'

While the tone of this critique would suggest some opposition to both the printing and the consumption of 'false and romantick news' or even the 'more serious strangeness of equally sad and wonderful truths' the pamphlet actually forms part of that very genre. The author goes on to make it clear that the only justification for publishing such material should be because,

> what shall be related to the living, may be to their benefit, made use of without any uncharitable reflections on the dead; who perhaps may be more innocent than the surviving hearers of the sad catastrophe.

Consequently unlike many other pamphlets that presented accident events as evidence for divine retribution against the sinful lives and behaviours of their victims, in this case when faced with such a large number of casualties a more subtle exploration of the event was called for. Here the victims — whose names, relationships and death or survival are described in some detail — are not necessarily considered sinful themselves but are

[70] *Dreadful news from Hackney Marsh giving a true relation of the blowing up two powder mills: …*, (London, 1690).
[71] *On The Memory of Mr. Caleb Skinner … drowned at Black-wall …*, (London, 1688).
[72] *Sad and deplorable news from Oxfordsheir and Barksheir …*, (London, 1674).

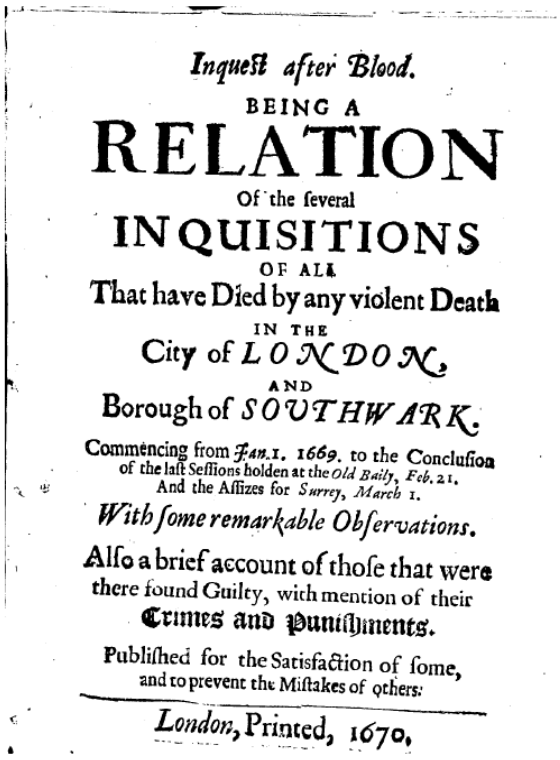
presented as a warning to others. Yet the warning, as either an exhortation to Godly living or a didactic instruction not to overload boats, becomes blurred further given the manner in which the accident event narrative is presented as a separate factual report within the pamphlet. In that section blame is directly attributed not to God's intervention but to the watermen who 'imprudently rowing too near the shore of the lock, they were by the force of the water drawn down the Lock [and] overwhelmed they were all turned into the pool.' This single publication encapsulates the difficulties faced by pamphleteers as they sought to combine a variably providentialist discourse with the accurate, 'true relation', of journalistic reporting.

From pamphlets to newsprint

One of the earliest attempts to provide a serial, or coranto-style, publication related to judicial affairs in London was published in early 1670. The *Inquest after blood being a relation of the several inquisitions of all that have died by any violent death in the City of London and Borough of Southwark* offered a dramatically focused, yet journalistically thorough, account of recent legal hearings. In appearance its title page is that of a pamphlet — complete with black-letter type for the phrase 'crimes and punishments' — however the contents directly reported a series of coroners' inquests in a largely non-judgemental fashion (see Fig. 5.4). The inquest subjects included Henry Cooper a victualler who committed suicide (found *non compos mentis*), a poor painter called Ralph who having found a few days work fell to his death off a loose scaffold board (the jury assigned him the surname 'Painter' as his real name was unknown), and two carpenters killed by the collapse of some houses on Fish Street Hill.[73] The author of *Inquest after blood* was clearly present at the inquest hearings as several asides indicate first-hand evidence gathering, for example in the case of another suicide the phrase '(by the way I noted)' was included. After seven pages of such reports a new section was introduced titled 'At the sessions and general goal delivery holden for London and Middlesex, Febr. 22'. This section comprised summary accounts of those sentenced to death or other punishments and was followed by a further, even less detailed, section on the Surrey assizes. While these accounts notably precede the formal publication of the proceedings at the Old Bailey by several years they remain, typically for this period, lacking in detail. This publication is however more significant for the attempt made to deliver it as a serial publication.[74]

[73] *BofM* 11 January 1670 Henry Cooper ('hanged himself'); 18 January 1670 Ralph Painter (killed by a fall from a scaffold); 25 January 1670 Francis Ware and William Dewe ('2 killed by the fall of a house').

[74] McKenzie, A., 'From true confessions to true reporting? The decline and fall of the Ordinary's *Account*', *London Journal*, 30.1 (2005), pp.55–56.



Inquest after Blood.

BEING A

RELATION

Of the ſeveral

INQUISITIONS

OF ALL

That have Died by any violent Death

IN THE

City of LONDON,

AND

Borough of SOUTHWARK.

Commencing from *Jan.*1. 1669. to the Concluſion of the laſt Seſſions holden at the *Old Baily*, *Feb.*21. And the Aſſizes for *Surrey*, *March* 1.

With ſome remarkable Obſervations.

Alſo a brief account of thoſe that were there found Guilty, with mention of their

Crimes and Puniſhments.

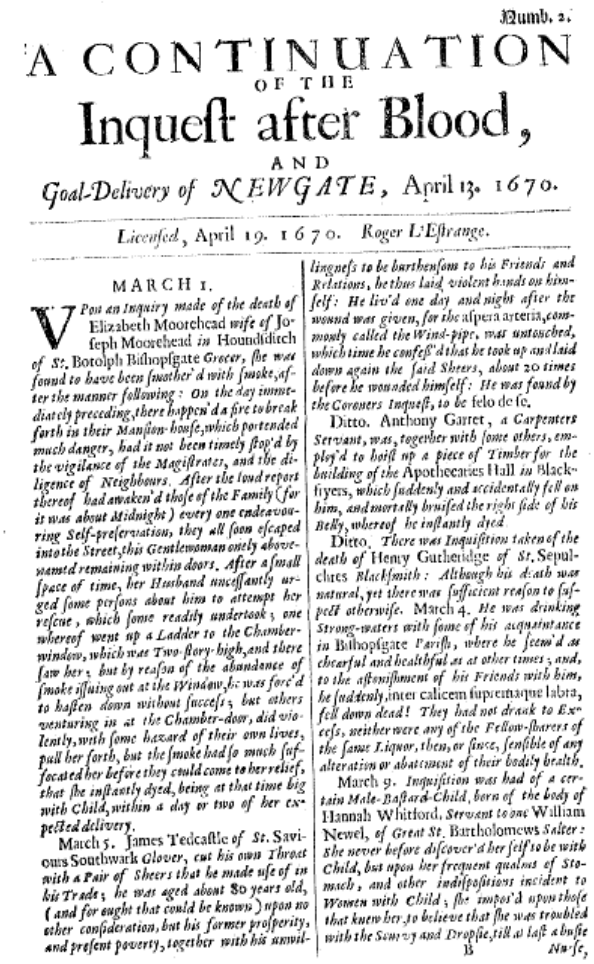
Publiſhed for the Satisfaction of ſome, and to prevent the Miſtakes of others:

London, Printed, 1670.

FIG. 5.4 Front page of the 1670 publication *Inquest after blood …* showing its pamphlet-style typesetting

Serialisation is evidenced by the publication in April 1670 of the appropriately named *A Continuation of the Inquest after blood, and goal-delivery of Newgate*. Making a direct link with the previous edition this later copy has 'Numb. 2' printed in the top-right corner of its front page (Fig. 5.5). Of particular significance is the form of this publication; the *Continuation* not only adopted a single two-sided folio-size sheet rather than the previous fourteen-page quarto booklet but in a dramatic shift the typesetting was also radically simplified with a two-column broadsheet style reminiscent of later newspapers. The content was nonetheless similar with detailed reports from inquests and summary information on the proceedings at the Old Bailey. There is no evidence for a third issue; consequently it would not be unreasonable to assume that this venture from the presses of Thomas Newcomb failed.[75] Nevertheless the concept of the *Inquest after blood* and its execution across the two extant issues illustrates a remarkable moment in the publication history of human interest journalism, moving as it does from pamphlet style 'with some remarkable observations' to the cleaner lines and drier text of newsprint.

[75] 'Thomas Newcombe, the elder, (1625x7–1681)', *ODNB*. By 1670 Newcombe was operating three presses and printed the archetypal early English newspaper, the *London Gazette*.



Numb. 2.

A CONTINUATION
OF THE
Inquest after Blood,
AND
Goal-Delivery of NEWGATE, April 13. 1670.

Licensed, April 19. 1670. Roger L'Estrange.

MARCH 1.

Upon an Inquiry made of the death of Elizabeth Moorehead wife of Joseph Moorehead in Houndditch of St. Botolph Bishopsgate Grocer, she was found to have been smother'd with smoke, after the manner following: On the day immediately preceding, there happen'd a fire to break forth in their Mansion-house, which portended much danger, had it not been timely stop'd by the vigilance of the Magistrates, and the diligence of Neighbours. After the loud report thereof had awaken'd those of the Family (for it was about Midnight) every one endeavouring Self-preservation, they all soon escaped into the Street, this Gentlewoman onely abovesaid remaining within doors. After a small space of time, her Husband unceasantly urged some persons about him to attempt her rescue, which some readily undertook; one whereof went up a Ladder to the Chamber-window, which was Two-story-high, and there saw her; but by reason of the abundance of smoke issuing out at the Window, he was forc'd to hasten down without success; but others venturing in at the Chamber-door, did violently, with some hazard of their own lives, pull her forth, but the smoke had so much suffocated her before they could come to her relief, that she instantly dyed, being at that time big with Child, within a day or two of her expected delivery.

March 5. James Tedcastle of St. Saviours Southwark Glover, cut his own Throat with a Pair of Sheers that he made use of in his Trade; he was aged about 80 years old, (and for ought that could be known) upon no other consideration, but his former prosperity, and present poverty, together with his unwillingness to be burthensom to his Friends and Relations, he thus laid violent hands on himself: He liv'd one day and night after the wound was given, for the aspera arteria, commonly called the Wind-pipe, was untouched, which time he confess'd that he took up and laid down again the said Sheers, about 20 times before he wounded himself: He was found by the Coroners Inquest, to be felo de se.

Ditto. Anthony Garret, a Carpenters Servant, was, together with some others, employ'd to hoist up a piece of Timber for the building of the Apothecaries Hall in Blackfryers, which suddenly and accidentally fell on him, and mortally bruised the right side of his Belly, whereof he instantly dyed.

Ditto. There was Inquisition taken of the death of Henry Gutheridge of St. Sepulchres Blacksmith: Although his death was natural, yet there was sufficient reason to suspect otherwise. March 4. He was drinking Strong-waters with some of his acquaintance in Bishopsgate Parish, where he seem'd as chearful and healthful as at other times; and, to the astonishment of his Friends with him, he suddenly, inter calicem supremaque labra, fell down dead! They had not drank to Excess, neither were any of the Fellow-sharers of the same Liquor, then, or since, sensible of any alteration or abatement of their bodily health.

March 9. Inquisition was had of a certain Male-Bastard-Child, born of the body of Hannah Whitford, Servant to one William Newel, of Great St. Bartholomews Salter: She never before discover'd her self to be with Child, but upon her frequent qualms of Stomach, and other indispositions incident to Women with Child; she impos'd upon those that knew her so to believe that she was troubled with the Scurvy and Dropsie, till at last a lusty

B Nurse,

FIG. 5.5 Front page of the 1670 publication *A Continuation of the Inquest after blood …* showing its broadsheet-style typesetting and serial numbering in the header at top-right.

Newspapers

As noted earlier the weekly *Bills of Mortality* can be considered as a serial publication focused upon epidemics, murder, suicide and the accident event. This view is supported by the copying and re-printing of their content in a range of eighteenth century newspapers. A particularly early use of this information is found in the *Flying Post* which in May 1700 supplied a textual account of 'casualties' clearly derived from the *Bills*.[76] A good example of a more direct transposition is found in the *Original Weekly Journal* with a type-setting arrangement suggestive of the quantitative style of the *Bills* (see Fig. 5.6.a). Interestingly this edition also supplied a narrative account of the same accident events thus combining information derived from the *Bills* with additional journalistic sources (see Fig. 5.6.b). It is generally accepted that the inclusion of informational material, such as the *Bills of Mortality*

[76] *Flying Post*, 21 May 1700.

data, helped to establish the reliability of a title's 'news' through a form of referential authority. [77]

(a)

CASUALTIES.

Exceſſive Drinking 1. Frighted at Allhallows on London Wall 1. Overlaid 2. Scalded in a Brewer's Copper at St. Mary Magdalen Bermondſey 1.

Chriſtned			Buried		
Males	—	217.	Males	—	278.
Females	—	192.	Females	—	308.
In all	—	406.	In all	—	586.

Increaſed in the Burials this Week 92.

(b)

On Tueſday Night a young Woman in St. James's drank Geneva to ſuch Exceſs, that ſhe fell down dead, with a Glaſs full in her Hand, as ſhe was going to drink it.

On Wedneſday Morning early a Brewer's Servant near Billingſgate getting over a Boiling Copper of Liquor to reach ſomething he wanted, at which time his Foot unhappily ſlipping, he fell into the Copper, and was Scalded to Death immediately, before any Body came to his Aſſiſtance.

FIG. 5.6 Extracts from the *Original Weekly Journal* of 9 January 1720 showing (a) typesetting imitative of the format of the *Bills of Mortality* and (b) a descriptive account of two of these casualties from the same issue.

Such an approach to the reporting of accident victims was in fact widespread, many newspapers of the time supplemented their 'home' or 'London' sections with accounts of such incidents varying in both significance and detail. Their inclusion was frequent enough to draw criticism from some journalists keen for a more concerted focus on political and diplomatic affairs. For example in 1725 Daniel Defoe noted 'this article called home news is a new common hunt, tho' upon a cold scent after casualties'. Later Eustace Budgell observed that the domestic items in newspapers were limited to 'Robberies, bloody murders, [and] accounts of draymen's carts that have run people over'.[78] Such contemporary views have influenced later historians of print culture causing some to dismiss such reporting as 'extremely uninteresting' or simply 'miscellaneous news'.[79] But even if limited in scope or individual significance such narratives helped to construct a social knowledge of accident events that permeated the eighteenth century metropolis. Even without narrative detail the empirical reporting of 'casualty' figures — used ostensibly to support competing newspapers in their attempts to claim superior informational veracity — could aid in the construction of social norms. Observing the effect this had on the reception of suicides MacDonald and Murphy infer such reporting established suicide as a 'social fact, not a supernatural sign'; an

[77] On this style of informational journalism in provincial newspapers see Cranfield, G.A., *The development of the provincial newspaper, 1700–1760*, (Oxford, 1962), pp.95–99.

[78] Both quoted in Cranfield, *The provincial newspaper*, p.71: (Budgell, *The Bee*, vol.I, p.242; Defoe, *Applebee's Original Weekly Journal*, 21 August 1725).

[79] Cranfield, *The provincial newspaper*, p.91; Sutherland, *The Restoration newspaper*, p.78.

equally convincing argument could be made for the factually-based reporting of accident events.[80]

Early provincial newspapers often recycled metropolitan news to establish publishers' credibility but also, more prosaically, to fill column space; or as Cranfield phrased it they were 'a mere parasite upon the London press'.[81] In many cases information from the *Bills* was presented in a more explicitly direct copying of style and content than was likely to be found in London editions. To give one example, from its founding in 1722 the *Gloucester Journal* repeatedly included such material; individual news items were provided with a heading indicating the paper of source, as was the information taken from the *Bills*. The *Gloucester Journal* gradually incorporated news items in its copy that were not of metropolitan origin, in the issue of 10 September 1728 for example the item headed 'Accidents' provided narrative detail on causalities from both London and elsewhere including a drowning event in Wiltshire (Fig. 5.7).

Accidents. *A young Gentleman on board the* Bridgewater, *the Son of a Surgeon at Deptford, fell into the Hold and daſh'd his Brains out.* —— *A Labourer, who was helping to mend the Common Sewer in Chancery-Lane, the Ground fell in upon him, which broke his Back, and bruiſed him ſo, that his Life is deſpaired of.* —— *Joſeph Steneard, at the Hole in the Wall, in Bradford, Wilts, was found Drowned near his own Houſe, was about 60 Years of Age, and thought to be diſordered in his Senſes.*

Preferments. *Mr. Samuel Southeran is made Land-Waiter at the Port of Hull, in the room of Henry Clough.* —— *Mr. James Herriot is made a Preventative Officer in the Port of London.* —— *Mr. Jonathan Dear is made Deputy King's Waiter in the Port of London, to Mr. Man Principal.* —— *The Rev. Mr. Allen, late Curate of Lavenham in the County of Suffolk, was preſented by Tho. Sanford, Eſq; to the Living call'd King's Chappel in Boſton in New England, worth 600l. per Annum.* —— *Mr. John Eddowes, Fellow of New-College, Oxon, was ſworn lately Yeoman of the Almonry before the Board of Green-Cloth, at Hampton-Court.* —— *Mr. William Blackmore, a Gentleman belonging to the Earl of Cheſterfield (and is now with his Lordſhip at the Hague) ſucceeds Mr. Eddowes as Groom of the Almonry.* —— *Mr. William Boulton is made Land-Waiter at the Port of Hull, in the room of Mr. Joſeph Clever, ſuperannuated.* —— *Mr. David Stone is made Land-Waiter at the Port of London, in the inferior Liſt, in the room of Mr. Thomas Wilkins, diſmiſs'd.* —— *Mr. Philpot is made Land-Waiter, in the inferior Liſt, at the Port of London.* —— *Mr. William Reeves is made Land-Waiter,*

Bankrupts. *William Hooper and John Newnam, late of London, Brewers and Partners.* —— *John Noakes, of Nenfield, in the County of Suſſex, Chapman.* —— *Simon Wood late of Southtown, in the County of Suffolk, and now of London, Chapman.* —— *John Beanlands, Jun. of Warely in Yorkſhire, Clothier.* —— *Edward Wight, late of the Strand, Cyderman and Chapman.*

The LONDON Weekly Bill of Mortality.

Aged	44	Impoſthume	1
Abortive	0	Leproſie	1
Apoplexy	1	Meaſles	0
Aſthma	0	Mortification	5
Cancer	1	Plurifie	0
Canker	0	Rheumatiſm	0
Childbed	14	Rickets	0
Colick	1	Riſing of the Lights	0
Conſumption	55	Small Pox	36
Convulſion	135	Spotted Fever	4
Dropſie	15	Stilborn	10
Evil	1	Stone	1
Fever	138	Stoppage i' th' Stom.	1
French Pox	0	Suddenly	0
Gout	0	Teeth	18
Griping in the Guts	12	Thruſh	2
Hooping-Cough	0	Tiſſick	3
Horſeſhoehead	0	Vomiting	0
Headmouldſhot	2	Water in the Head	2
Jaundice	1	Worms	2

CASUALTIES.

Executed 1. Found dead (an Infant) 1. Hang'd himſelf (being Lunatick) 1. Kill'd accidentally by a fall down Stairs 1. Murder'd 1. Overlaid 1.

Chriſtned Males 167. Females 160. In all 327.
Buried Males 263. Females 262. In all 525.
Increaſed in the Burials this Week 4.

FIG. 5.7 Extract from the *Gloucester Journal* of 10 September 1728 showing both a news item headed 'Accidents' (top left-hand column) and *Bills of Mortality* information with typesetting in close imitation of the original including the separate listing of casualties as first seen in the *Bills* in 1722.

As the century progressed some London newspapers began to print more detailed and regular narratives of accident events. Editors understood that they advanced the standing of

[80] MacDonald and Murphy, *Sleepless souls*, p.307.
[81] Cranfield, *The provincial newspaper*, pp.28–32.

their product if readers empathised with accident 'victims' but that such a stance inevitably meant avoiding excessive moralising for fear of offending readers who developed such affinities. In order to promote empathy a range of journalistic devices were used. These encompassed indications that an individual's life had been 'cut short' or that there was a greater sadness than their singular death might suggest. As noted previously a youth burnt to death at a fire in 1730 was reported to be on the verge of matrimony, while in 1739 the *Universal Weekly Journal* hinted at what might have been when it noted of a recently drowned apprentice that 'his time [as an apprentice] was expired within six months'.[82] Yet moralising must at times have seemed useful to editors if they wished to encourage further discourse of events amongst their readers especially if this appeared to highlight foolish behaviour; an approach taken in the following report:

> On Monday in the afternoon, a woman pretty well dressed as she was turning into Petticoat Lane from Whitechapel, was thrown down and ran over by a brewer's dray; and tho' she had the immediate help of an eminent surgeon, she died in about two hours; the drayman called out to her to stop, 'til he came by, the place being narrow, but she pushed forwards, and lost her life by endeavouring to save a moment of time.[83]

That such discourse followed publication is not in doubt, London's newspaper industry developed rapidly and expansively during the eighteenth century. It has been suggested that by the 1750s some 16,500 newspapers were distributed daily within the metropolis; such a figure is suggestive of an active readership of anything up to 200,000 people.[84]

With such a wide readership it is not surprising that newspaper publishers were keen to report, amongst individual accident events, incidents of multiple drowning or major fires; on the one hand reader empathy was ensured due to the frequency with which Londoners were confronted by such dangers, yet the unusual nature of multiple death events provided an exciting additional narrative to counter the literary tedium that such familiarity might otherwise promote. It is in the case of such reporting, especially fires, that we find evidence for the use of periodicity to capture the readers attention. As has been outlined earlier major fire narratives developed gradually over two, three or sometimes more editions. Initial reporting focused on the extent of the conflagration while later reports told of possible cause, damage and casualties. Sometimes the fate of those injured and hospitalised was returned to, although most frequently to report their subsequent death.

The editorial tool of *implied* periodicity was often deployed in the case of individual accident victims with reports concluded using phrases such as 'and is bruised in a such a violent manner that it is thought her life is in danger' or 'but there are little hopes of his

[82] See above section 3.9, *Daily Courant*, 5 April 1730; *Universal Weekly Journal*, 5 May 1739.
[83] *Universal Weekly Journal*, 8 September 1739.
[84] Barker, H., *Newspapers, politics and English society, 1695–1855*, (Harlow, 2000), p.46–47.

recovery'.[85] It is however exceptionally rare to find an actual follow-up report on the outcome of such events, whether for good or ill. In some cases linked reporting could be found but only by reading competing publications that reported the same event across differing dates. To give one example; on a summer evening in 1739 a man fell from his perch on top of goods stacked on a cart when two vehicles collided at the eastern end of Cornhill. As he fell he was crushed between the cart and a passing coach, becoming entangled in the spokes of the revolving cartwheel. Desperately injured he was conveyed to hospital where he died the following day. The first report of this event, which occurred on a Friday, was published in the *London Daily Post* on Saturday 2 June, ending with the observation that 'it was not believed he could live many hours; however he was carried to St Bartholomew's Hospital'. While the following issues of that publication failed to return to the story another paper, the *Daily Post*, reported on Monday 4 June 'On Saturday died in St Bartholomew's Hospital the carman who received his death wounds by falling from a cart …'. Such an example suggests that readers desiring narrative closure were most likely to achieve this by reading across several titles as they were published throughout the course of the week following any given event.

The impact of accident event narratives

By engaging readers, and by extension those who listened in public places, with the detailed narratives of accident events newspapers fulfilled more than a simple commercial function. Through published accounts the wider metropolitan public became tertiary witnesses to such events in a similar way that secondary witnessing was experienced by those who attended coroners' inquests. As MacDonald and Murphy note newspapers could, particularly by using rich description, 'place their readers at the scene of the death' and 'vastly enlarge the circle of people who interpreted specific events'.[86] One might ask however what the recipients of such narratives gained from this process? While some drew on such material for anecdotes or gossip to be relayed in workplaces, ale or coffee houses, others would take the printed narrative as a 'representation' of reality on which to build their own imagining of the event, their own *fabula* or story.[87] In other words tertiary witnesses did not, by definition, witness the *actual* event but instead constructed their own *fabula* based upon the narrative content and its 'signs' interwoven with their own lived experiences. Such a process helped the recipients to form an understanding of their world and events within it.

The constant telling, retelling and personal imagining of accident events, and the sudden violent deaths often associated with them, came to perform a significant role in the

[85] *Read's Weekly*, 15 April 1732; *General London Evening Mercury*, 2 August 1746.
[86] MacDonald and Murphy, *Sleepless souls*, pp.316, 335.
[87] Kafalenos, E., *Narrative causalities*, (Columbus, 2006), p.15.

construction of a new metropolitan identity. As such events were almost always characterised as urban and presented as empirically grounded they became a mechanism in formulating a much needed shared identity within the socially fragmented and increasingly secular metropolitan population. Just as the active collecting of *providential event narratives* had helped to bind together the disparate puritan community of the early seventeenth century, the uncertainties and anxieties of secular life in the early eighteenth century metropolis came to be addressed, shared and to some degree alleviated through the mass-reading of printed *accident event narratives*. But this positioning went further as writers and artists came to visualise the eighteenth century city in these same terms.

Both William Hogarth and Samuel Johnson drew upon accident events to characterise metropolitan life. Johnson's poem 'London', first published in 1738, makes almost immediate reference to a number of urban fears and hazards ranging from criminal behaviour and accidents to secular thought:[88]

> For who would leave, unbrib'd, Hibernia's Land,
> Or change the Rocks of Scotland for the Strand?
> There none are swept by sudden Fate away,
> But all whom Hunger spares, with Age decay:
> Here Malice, Rapine, Accident, conspire,
> And now a Rabble Rages, now a Fire;
> Their Ambush here relentless Ruffians lay,
> And here the fell Attorney prowls for Prey;
> Here falling Houses thunder on your Head,
> And here a female Atheist talks you dead.

In the third and fourth lines of the above extract Johnson emphasises his view of such hazards as purely metropolitan in nature by noting their absence in rural Scotland; aside that is from hunger. Hogarth's depictions of eighteenth century London reflect a similar preoccupation with accident events. Two particular works stand out, although they are by far from unique in this respect within the canon of his work. Perhaps Hogarth's most famous engraving is 'Gin Lane', in this scene Hogarth not only presents the depredation that alcohol could make on society but also a number of other hazards representative of the imagined metropolitan environment (Fig. 5.8). Included in the image, in the central background, dilapidated buildings collapse into the street, to the right hand side a riotous crowd gathers, and a suicide hangs within a further ruinous structure at the upper right.

Another engraving, the 'Second stage of cruelty', depicts a number of animal and vehicle-related accidents (Fig.5.9). Although the narrative of the scene refers to the cruelty inflicted upon animals by man there are several events represented within the image that suggest that such behaviour encourages a disorderly environment with a range of associated hazards. Hogarth clearly chooses an urban setting as the natural forum within which such

[88] Johnson, *London: a poem*.

activities could be more convincingly set. In this image the left foreground is occupied by the aftermath of a coaching accident, while in the middle distance a sleeping drayman is oblivious to the child reaching for his hoop under the wheels of the dray and who will imminently be run over. In the far distance a group of people run after an escaped bull as it gores a man throwing him high into the air.

FIG. 5.8 *Gin Lane* by William Hogarth (1751)

Source: British Museum (© Trustees of the British Museum)

While at the beginning of this period the coroner's jury, inquest audience and the immediate neighbourhood delimited the normal extents of communicated knowledge of accident events by the mid-eighteenth century that situation had changed radically with first pamphlets and then more concertedly newspapers enlarging the critical audience for such narratives a thousand-fold or more. The *published* accident event narrative came to be understood as a recurring secular reality of metropolitan life rather than a singular event of supernatural interest. By this means the accident event became a significant component in the early modern perception of urban space and the life conducted within it. It is clear that those writers and artists who portrayed London as a dystopian cauldron of death and disorder were less projecting their creative imagining and more reflecting a socially constructed knowledge

of the urban environment. An environment formed with reference to an accepted regularity and normative incidence of accident events, and other social disasters, as an integral characteristic of early modern metropolitan life. That such a view developed also helps to explain the reluctance of contemporaries to overtly engage in measures aimed at hazard avoidance and risk reduction, as the identified dangers came to be conceived as a core constituent of the early modern urban construct rather than a manageable imposition upon it.

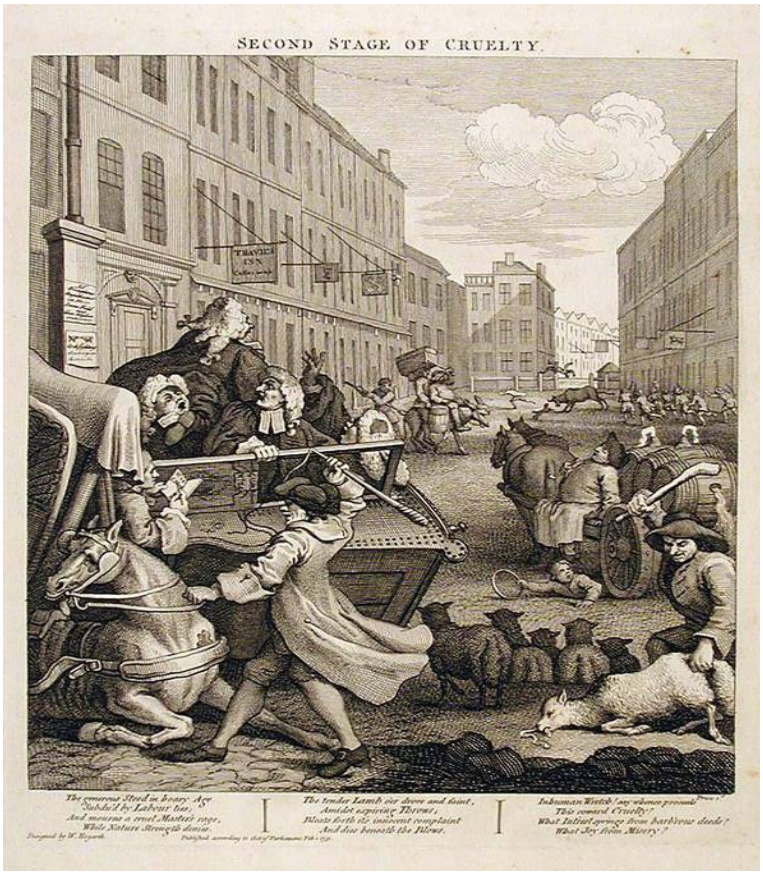


FIG. 5.9 *The second stage of cruelty* by William Hogarth
(*The four stages of cruelty*, plate 2, 1751)

Source: British Museum (© Trustees of the British Museum)

It is however also through print culture that we can glimpse the first glimmers of a more rational modern mind-set with regard to hazards. In a letter published in *The Gentleman's Magazine* in January 1751 a reader named D.R., observed that,

> It is well known that many families in London are obliged to live upstairs, one, two or three stories … we hear of dreadful accidents by children falling through the windows, or by the sashes being lifted open, and the unhappy young things left (by carelessness) to gaze at … something.

D.R. then observes that the only reason for opening a window is to 'let in fresh air' and if the lower sash was fixed in place and the upper lowered instead that they were 'fully persuaded that many lives would be saved.' The letter continues with an opinion that falls into domestic

fires also contributed to many childhood deaths and that someone might invent a stove ‘to hinder so common and terrible a disaster’. Whoever D.R. was they betray in their letter evidence for the beginnings of a critical understanding of accidents as not simply a normal and expected component of London life but as the result of specific identifiable hazards where the application of technology might result in a reduced exposure to risk for the most vulnerable.

Chapter 6 Conclusion

Section 6.1 Aims, objectives and outcomes

One of the main aims of this thesis was to provide a detailed characterisation of the accident in the social and cultural context of early modern London. Delivering such an aim required the critical structuring of contemporary data for fatal accidents across a period of some seventy-five years between 1654–1735. By utilising information primarily derived from the weekly *Bills of Mortality* rather than the more partial data source of coroners' inquests this primary aim was successfully achieved. Taking a wider view of the accident phenomenon a further aim was to provide a thick description of the accident event as it was experienced and understood by contemporaries; a range of sources have supported the development of a such a 'description'. It is apparent from the foregoing text that there are four principal areas of focus related to the study of the early modern accident; the comprehension of actual events from an historical perspective, the social responses made to accident events and victims, the contemporary framing of hazards and risk, and the cultural role and impact of accident event narratives.

Section 6.2 Enumerating sudden violent death in the early modern city

In order to understand the phenomenon of the accident in the early modern city it has been necessary to fully comprehend the character and extent of accidents as recorded events. Through a careful and critical examination of the available data the thesis has to a greater extent achieved this aim. Key within the analysis has been the structuring and enumeration of fatal accident information through a categorization based largely upon the culturally 'authorised' terminology used by the original data-collectors; the searchers. The principal causes of accidental death have been established and were found to include drowning, falls, being struck by objects and transport-related accidents (sections 3.2, 3.3, 3.6, 3.7 and 3.8).

A major accomplishment of the study has been the construction and analysis of a database of more than twelve-thousand accident-related fatalities for the years 1654–1735; an invaluable resource for not only the current work but also in support of future research. The database encompasses twelve major causes or agencies of accidental death ranging from the highly numerous cases of drowning through to much rarer events such as deaths associated with tobacco pipe stabbings (3.2 and 3.11). The data has enabled a review of the seasonality, geography and longer-term trends of accidental death. To begin with seasonality the analysis established that most accidents occurred during the summer months primarily related to increases in economic and transport activity. A secondary peak in such deaths was associated with the poorer weather and shorter days of winter, especially so in the case of fire-related

deaths (3.9). Occasionally more specific activities might be interpreted as having particular seasonal patterning, such as construction-related falls which peaked during the late summer and autumn (3.3).

With regard to longer term trends it was clear that the cyclical patterns of economic activity provided the biggest influence on accident rates; periods with more port, commercial and transport activity were mirrored by a greater number of fatalities. A factor particularly emphasised by the highly convincing inverse relationship between the high cost of goods, indicating economic difficulties and depressed markets, and reductions in transport-related deaths. Furthermore environmental factors also affected such trends especially with reference to construction-related deaths, which appeared to increase during both the post-Great Fire rebuilding phase and in a more geographically nuanced response to suburban expansion (3.14).

The data provided some indications of geographic patterning, however these tended to reflect very specific circumstances related to particular agencies of death. In the most general observation it was clear that three-fifths of all drowning events took place in the down-river reaches of the Thames, suggesting a strong correlation between commercial maritime activity and the hazard of drowning (3.2). Perhaps not surprisingly falls were found to be very urban in character, although again an increased occurrence in the down-river area of the Thames and the riverside parishes suggests specific maritime-related risk factors (3.3). Other agencies of death exhibited geographical patterning, for example the significant concentration of individuals reported as 'killed' in the West End may indicate an increased level of casual violence in that area (3.5). For some categories however even more specific geographical factors could be discerned; with regard to vehicle-related deaths there was a clear differentiation between the areas where being run-over by a cart or dray was more likely than by a coach (3.7).

The archives of early modern London have supplied a vast quantity of data in support of the project to identify and enumerate accidental death events; although their ability to deliver the detailed study of particular incidents is more limited. With this in mind a fruitful area for further analysis would be to explore a range of accident types, events or circumstances through the disparate yet contemporary records of coroners' inquests and similar sources that survive for areas beyond the historical boundaries of London or those inquest records from the mid-eighteenth century onwards which are available for some areas of the metropolis, in particular Westminster.[1]

[1] Gibson and Rogers, *Coroners' records*, pp.29-32.

Section 6.3 Experiencing accident events in the early modern city

This study has considered the accident event through various lenses and in a number of contexts. In particular the study has established that such events can be best understood through a focus on the character of social, and medical, response but has also identified that such responses were often framed by contemporary understandings of hazard and risk, and the cultural guides established through the reception of accident event narratives. By taking such an over-arching view it has been possible to form a wider understanding of the character of the early modern accident, in effect constructing a thick description of the phenomenon.

While the original structuring of the analysis of the various sources drew in part on the approach set out by Gaskill the following review helps to establish a more subtle interplay of evidence and interpretation (1.2). To provide one immediate example, while the administrative group of records, which included the *Bills of Mortality* and parochial burial registers, were used initially to provide 'raw serial data' a consideration of the origins of the sources has helped to indicate why certain causes of death were either highlighted or marginalised in a wider social and cultural context. For example the recurring pattern of drowning was regularly reported but rarely with descriptive detail, it was instead framed by the searchers in particular using a simple yet authorised vocabulary undoubtedly developed as a result of its sheer repetitive monotony (2.2 and 3.2). One outcome of which was to suppress the significance of this cause of death even if only in terms of its numerical primacy. Similarly the circumstances that led to death through casual violence, especially if the victims identity remained unknown, also merited little comment beyond the word 'killed' (3.5). On the other hand deaths of family or household groups especially if associated with perceived major urban hazards such as building fires or traffic accidents were often relayed with a greater depth of narrative commentary both in administrative records and in more derivative sources such as pamphlets and newspapers (3.7, 3.9 and 5.3). That contemporaries perceptions of the pattern and incidence of accident events differed from that established through an interrogation of the serial data was further confirmed when issues of seasonality and geography were considered, as noted above.

It is undoubtedly the case that sudden traumatic events make a range of demands upon the societies within which they occur and in turn help to formulate social and cultural frameworks of understanding. Responses to such events are also redefined across time as wider perceptions and understandings of the world, religious and intellectual beliefs, and cultural values shift and change. In the case of early modern London immediate response to accident victims, alive or dead, involved a range of actors including parochial officials, civic authority, guild and craft rulers, medical practitioners and, of course, family, friends, colleagues and neighbours (2.2, 4.1, 4.2 and 5.2). In each case responses were framed by the

social position/relations and economic status of the victim; for example while Londoners benefitted from the greatest concentration and range of medical practitioners anywhere in the realm individual access was dependant on social status and economic capacity. Nonetheless aspiring medics appear to have been keen to treat urban accident victims as they occurred in a stable environment, unlike maritime or military contexts, within which cures could successfully be provided and case histories established thus providing opportunities for self-promotion through demonstration, teaching and publication (4.1).

More generally social responses to accident victims were most frequently channelled through parochial assets. Where this involved money it is clear that the greatest part was directed to recompense surgeons, hospitals and nurses, although a range of other petty officials also made demands upon that resource. Such money derived principally from parochial giving however there are interesting hints that more modern secular forms of solicitation and collection of charitable funds were developing at the start of the eighteenth century (4.1). Although craft guilds, livery companies and major public undertakings also assisted those injured at work they often did so by pursuing means other than the simple granting of funds. Not infrequently a relaxation of rules, reallocation of tasks, or practical forms of assistance were substituted for financial awards. In addition certain undertakings looked to the healthcare of their workforce through the provision of surgeons, as in the case of the East India Company, but also through systematic collection and redistribution of charitable funds, such as in the case of the Watermens' Company or during the rebuilding of St Pauls. In all these situations however the primary driver for a socially engineered response was predicated on the rapid re-establishment of normality and order in the face of the disorderly effects of accident events especially in public and occupational contexts (2.3 and 4.1).

That both public and private bodies acted to re-establish normality in the aftermath of traumatic accident events is clear, however such responses rarely incorporated an element of review leading to behavioural alteration (2.2, 2.3, 4.1 and 4.2). In other words early modern society, especially during the seventeenth century, was reluctant to take positive steps to counter hazards or high risk activities. Two factors appear to have guided thought in this area first that certain hazards and risks were the natural partners of particular occupations or activities, and second that unforeseen danger arose through the behaviours of disorderly households or individuals, particularly of the lower orders (4.2 and 5.3). It is notable that many urban fires were reported as having their origins in such disorderly circumstances, also that certain animal-related injuries and deaths were framed as 'disorderly' incidents (3.8, 3.9, 5.2 and 5.3).

During the early eighteenth century however some initial steps appear to have been taken toward hazard avoidance and risk reduction as an element, or perhaps initially as a by-

product, of wider measures made to implement a more orderly, modern and civilised urban environment. That such dangers were rarely addressed directly may again reflect the belief that certain hazards and risky activities were a natural and concomitant component of urban life. To give one example it is evident that a great deal of technological, commercial and civic effort went into developing mechanisms for fire-fighting yet much less effort was applied to developing and promoting fire prevention strategies (3.9 and 4.2).

Contemporaries gained knowledge of urban accidents in the seventeenth century firstly through information gathered and relayed through coroners' inquests but also increasingly by means of the summary information disseminated within the weekly *Bills of Mortality* (2.2 and 2.3). Such dissemination came to be a recurring part of metropolitan social discourse and hence its adoption by the fledgling newspaper industry of the early eighteenth century appears inevitable (5.3). A more significant question for this historian, and one which other historians of such early newspapers have ignored, was *why* the reporting of accident events was so frequently undertaken, so widespread and so persistent? Through a wider reading of the evidence noted above it would seem that printed accident event narratives fulfilled two principal functions, one exploited the information as a form of authorised truth, the other came to support an imagined characterisation of accidents as an integral part of London life. Both of these *readings* reinforced a sense of urban disorder that helped to underscore the promotion of strengthened civic authority and environmental improvement as a means to construct a more orderly metropolis.

Further research in this context could follow a number of strands and so develop a fuller 'thick interpretation' from this initial thick description. It is clear that more work could be undertaken on the social responses to accident victims and the affects that accidents had on individuals. Material to support such work resides in parochial documentation, livery company and hospital records, and also the proceedings of inquests and court cases; however a careful interweaving of these sources would be required to provide consolidated, and well contextualised, micro-histories of individuals and events. The development of hazard recognition and risk reduction strategies, partly as a project of modernity, would certainly benefit from more focused study. In this case however the need would be to widen the area of research beyond London and importantly extend the period of study for a further fifty or so years. The current study has identified the beginnings of a more rational approach to accidents from the mid-eighteenth century onwards; by extending the study chronologically it should be possible to link to the more extensively researched area of nineteenth century occupational health. Finally the inclusion of accident event narratives in early English newspapers has prior to the current work been most notable by its absence from historical accounts. More systematic and expansively contextualised research in this area would help to

explain much about both the contemporary reception of accident events and the persistence of this *genre* within journalistic endeavour.

Section 6.4 Mentalities of the unexpected: some final thoughts

One of the aims of this study has been to draw on the evidence of accidents to support construction of early modern 'mentalities of the unexpected'. While a significant proportion of the research effort has been expended on the characterisation of the early modern accident sufficient further study has helped to support an initial attempt to satisfy such an aim. It is evident that accident events, and their narratives, were a recurrent feature of urban life and as the seventeenth century gave way to the eighteenth became increasingly embedded in metropolitan discourse. The earlier conceptualisation of the accident as a providential 'act of God' gradually became adapted through the adoption of the notion of chance, and later probability, to become a two-part phenomenon; one element, the occurrence, was seen to be dictated by chance, while the outcome more often remained in the hands of God.

If the popular concept of the accident itself was changing it is also clear that its place or role in the characterisation of urban life was also shifting. Initially accident events were seen as likely to occur in a wide-range of circumstances, essentially wherever a 'sinner' might be found, however by the end of the seventeenth century the accident was more likely to be conceived as an urban event than anything else. It is most likely that the coincidence of metropolitan developments in governance, with reference to sudden violent death in particular, and networks of communication helped to redefine the nature of the accident event. As this occurred the popular mentality of the accident event, or the 'unexpected', was transformed to a point where it became in urban contexts 'expected'; a transformation driven by narrative mediation of a constructed normality.

To develop this view a little further it might be noted that the enumeration of fatal accident data in early modern London supported a number of contemporary objectives. Although rejected by practitioners of political arithmetic as not capable of any analytical utility such information was readily appropriated by the publishers of news-print in support of their efforts to establish their own editorial authority. As we have seen such data was gathered and mediated through a variety of administrative routes including coroners' inquests, and parochial and civic officials. Interestingly a key actor in this process was the often maligned female searcher whose descriptive skills framed individual deaths within what might be termed an accepted or 'authorised' characterisation. It is of note that this characterisation bestowed on accident victims by relatively low status women, once published, directly supported newspapers claims to authority and veracity in the public sphere. Thus the combination of coroners' inquests, *Bills of Mortality* data and later more

expansive news reporting helped to construct accident events as at once empirical fact and a subjective narrative discourse of metropolitan life.

The results of this study have drawn the accident event out from the realms of the incidental and anecdotal, a position all too readily embraced by previous historians, and repositioned it at the heart of our cultural understanding of the early modern period, or perhaps more accurately at the transition point between then and early modernity. It is now clear that accidents were not rare or unusual occurrences, rather that they were regular events, sometimes to the point of becoming routine. The study has elaborated not only the spectrum of accidents that took place but also considered, and reflected on, the various responses that early modern society made to them and their victims. Finally it has become apparent that the incorporation of accident events, as a form of narrative, within metropolitan newspapers helped to construct a social knowledge of such events that permeated the early eighteenth century metropolis. This in turn can be identified as creating an imagined reality of the urban environment as redolent with accidents and their consequences. Paradoxically the acceptance of such a 'reality' appears to have been one of the principal factors in obstructing early attempts to reduce urban hazards and risk.

APPENDIX I

Bills of Mortality database structure

(Note: The data were collected within an Access database structure, coded with shortened keywords and interrogated using SQL queries).

Field name	**Field type (and keywords)**
BILL	*DATE* [DD/MM/YYYY]
CAT[EGORY]	*KEYWORD*
accidental death	acci
murder	murd
suicide (self-murder)	suic
undefined death	unde
damaged bill	dama
no bill found/not extant	nobl
no casualties reported	zero
AGENCY	*KEYWORD*
animal	anim
blow	blow
bruised	brui
burnt	burn
cut-throat	cutt
drowned	drow
explosion	expl
fall (from something)	fall
found dead	foun
hanged	hang
hit (by something)	hit
injury (broken bone/fracture etc.)	inju
killed	kill
misfortune	misf
poisoned	pois
scalded	scal
shot	shot
smothered	smot
stabbed	stab
strangled	stra
suffocated, stifled or choked	suff
vehicle	vehi
wounded	woun
DETAIL [FREE-TEXT]	*CHARACTER*
SEX	*CHARACTER*
female	f
male	m

AGE	*CHARACTER*
infant	i
child	c
adult	a
youth	y

EMPLOY[MENT RELATED]	*NUMERIC*
non-occupational	1
probably non-occupational	2
unknown	3
probably occupational	4
occupational	5

OCCU[PATIONAL CATEGORY]	*CHARACTER*
labouring	b
construction/maintenance	c
transport - land	l
manufacturing/processing	m
transport - water	w

PARISH	*NUMERIC*	
(Parish where fatality reported)	0–178	[See Appendix II]

BURIAL	*NUMERIC*	
(Parish where fatality buried, if noted as different from above)	0–178	[See Appendix II]

Appendix II a

‘Parishes’ that comprised the area of the Bills of Mortality 1654–1735

Grouped according to the section headings printed in the weekly *Bills of Mortality*

Parishes within the Walls

Allhallows Barking
Allhallows Bread Street
Allhallows Honey Lane
Allhallows Lombard Street
Allhallows London Wall
Allhallows Staining
Allhallows the Great
Allhallows the Less
Christchurch [Newgate]
Holy Trinity the Less
St Alban Wood Street
St Alphage
St Andrew by the Wardrobe
St Andrew Hubbard
St Andrew Undershaft
St Anne Aldersgate
St Anne Blackfriars
St Antholin
St Augustine
St Bartholomew by the Exchange
St Benet Fink
St Benet Sherehog
St Benet, Gracechurch
St Benet, Paul’s Wharf
St Botolph Billingsgate
St Christopher le Stocks
St Clement, Eastcheap
St Dionis Backchurch
St Dunstan in the East
St Edmund [the King] Lombard Street
St Ethelburga [-the-Virgin within Bishopsgate]
St Faith under St Paul’s
St Gabriel Fenchurch Street
St George Botolph Lane
St Gregory by St Paul’s
St Helen
St James Dukes Place
St James Garlickhithe
St John the Baptist [upon Walbrook]
St John the Evangelist (Friday Street)
St John Zachary
St Katherine Coleman
St Katherine Cree
St Laurence Poutney
St Lawrence Jewry

St Leonard Eastcheap
St Leonard Foster Lane
St Magnus the Martyr
St Margaret Lothbury
St Margaret Moses
St Margaret New Fish Street
St Margaret Pattens
St Martin [Pomeroy] Ironmonger Lane
St Martin Ludgate
St Martin Orgar
St Martin Outwich
St Martin Vintry
St Mary Abchurch
St Mary Aldermanbury
St Mary Aldermary
St Mary at Hill
St Mary Bothaw
St Mary Colechurch
St Mary le Bow
St Mary Magdalen, Milk Street
St Mary Magdalen, Old Fish Street
St Mary Mounthaw
St Mary Somerset
St Mary, Staining
St Mary, Woolchurch
St Mary, Woolnoth
St Mathew, Friday Street
St Michael le Querne
St Michael, Bassishaw
St Michael, Cornhill
St Michael, Crooked Lane
St Michael, Paternoster Royal
St Michael, Queenhithe
St Michael, Wood Street
St Mildred, Bread Street
St Mildred, Poultry
St Nicholas Acon
St Nicholas Olave
St Nicholas, Cole Abbey
St Olave, Hart Street
St Olave, Old Jewry
St Olave, Silver Street
St Pancras, Soper Lane
St Peter le Poor
St Peter Paul's Wharf
St Peter, Cornhill
St Peter, Westcheap
St Stephen Walbrook
St Stephen, Coleman Street
St Swithin
St Thomas the Apostle
St Vedast

Parishes without the Walls

Bridewell Precinct
St Bartholomew the Great
St Bartholomew the Less
St Botolph without Aldersgate
St Botolph without Aldgate
St Botolph without Bishopsgate
St Bridget [St Brides]
St Dunstan in the West
St Giles without Cripplegate
Trinity in the Minories
Whitefriars Precinct
The Pesthouse [City]

Parishes in the City and Liberties of Westminster

St John the Evangelist in Westminster
St Margaret, Westminster
Rolls Liberty
St Ann Westminster
St Clements Danes
St George Bloomsbury
St George Hanover Square
St George Queen's Square
St Giles in the Fields
St James Westminster
St Martin in the Fields
St Mary in the Savoy
St Mary le Strand
St Paul Covent Garden

Out-Parishes of Middlesex and Surrey

St Andrew Holborn
St James Clerkenwell
St Luke Old Street
St Sepulchres without Newgate
Christchurch Spitalfields
St Leonard Shoreditch
St Mary Whitechapel
St Anne Limehouse
St Dunstan Stepney / Ratcliffe
St George in the East / Wapping Stepney
St John Wapping / Wapping Whitechapel
St Katherine by the Tower
St Paul at Shadwell
St John Hackney
St Mary Islington
Christchurch in Surrey
St George in Southwark [the Martyr]
St John Horsley Down Southwark
St Mary at Lambeth

St Mary at Rotherhithe
St Mary Magdalen, Bermondsey
St Mary Newington
St Olave, Southwark
St Saviours, Southwark
St Thomas in Southwark
The Pesthouse [Middlesex]

Appendix II b

‘Parishes’ that comprised the area of the Bills of Mortality 1654–1735

Grouped by the ‘Metropolitan Areas’ used for geographical analysis. These areas equate to the ‘aggregated analytical areas’ in Spence, *London in the 1690s*, p.19, (Fig. 1.7). (Also includes additional geographical areas not formally part of the area of the Bills of Mortality).

City within the Walls

Allhallows Barking
Allhallows Bread Street
Allhallows Honey Lane
Allhallows Lombard Street
Allhallows London Wall
Allhallows Staining
Allhallows the Great
Allhallows the Less
Christchurch [Newgate]
Holy Trinity the Less
St Alban Wood Street
St Alphage
St Andrew by the Wardrobe
St Andrew Hubbard
St Andrew Undershaft
St Anne Aldersgate
St Anne Blackfriars
St Antholin
St Augustine
St Bartholomew by the Exchange
St Benet Fink
St Benet Sherehog
St Benet, Gracechurch
St Benet, Paul’s Wharf
St Botolph Billingsgate
St Christopher le Stocks
St Clement, Eastcheap
St Dionis Backchurch
St Dunstan in the East
St Edmund [the King] Lombard Street
St Ethelburga [-the-Virgin within Bishopsgate]
St Faith under St Paul’s
St Gabriel Fenchurch Street
St George Botolph Lane
St Gregory by St Paul’s
St Helen
St James Dukes Place
St James Garlickhithe
St John the Baptist [upon Walbrook]
St John the Evangelist (Friday Street)
St John Zachary
St Katherine Coleman
St Katherine Cree

St Laurence Poutney
St Lawrence Jewry
St Leonard Eastcheap
St Leonard Foster Lane
St Magnus the Martyr
St Margaret Lothbury
St Margaret Moses
St Margaret New Fish Street
St Margaret Pattens
St Martin [Pomeroy] Ironmonger Lane
St Martin Ludgate
St Martin Orgar
St Martin Outwich
St Martin Vintry
St Mary Abchurch
St Mary Aldermanbury
St Mary Aldermary
St Mary at Hill
St Mary Bothaw
St Mary Colechurch
St Mary le Bow
St Mary Magdalen, Milk Street
St Mary Magdalen, Old Fish Street
St Mary Mounthaw
St Mary Somerset
St Mary, Staining
St Mary, Woolchurch
St Mary, Woolnoth
St Mathew, Friday Street
St Michael le Querne
St Michael, Bassishaw
St Michael, Cornhill
St Michael, Crooked Lane
St Michael, Paternoster Royal
St Michael, Queenhithe
St Michael, Wood Street
St Mildred, Bread Street
St Mildred, Poultry
St Nicholas Acon
St Nicholas Olave
St Nicholas, Cole Abbey
St Olave, Hart Street
St Olave, Old Jewry
St Olave, Silver Street
St Pancras, Soper Lane
St Peter le Poor
St Peter Paul's Wharf
St Peter, Cornhill
St Peter, Westcheap
St Stephen Walbrook
St Stephen, Coleman Street
St Swithin
St Thomas the Apostle
St Vedast

City without the Walls

Bridewell Precinct
St Bartholomew the Great
St Bartholomew the Less
St Botolph without Aldersgate
St Botolph without Aldgate
St Botolph without Bishopsgate
St Bridget [St Brides]
St Dunstan in the West
St Giles without Cripplegate
Tower Intra/Extra
Trinity in the Minories
Whitefriars Precinct

Westminster

St John the Evangelist in Westminster
St Margaret, Westminster

West End

Rolls Liberty
St Ann Westminster
St Clements Danes
St George Bloomsbury
St George Hanover Square
St George Queen's Square
St Giles in the Fields
St James Westminster
St Martin in the Fields
St Mary in the Savoy
St Mary le Strand
St Paul Covent Garden
The Temple

Northern parishes

Quakers' Burial Ground
St Andrew Holborn
St James Clerkenwell
St Luke Old Street
St Sepulchres without Newgate

Eastern parishes

Christchurch Spitalfields
St Leonard Shoreditch
St Mary Whitechapel

Eastern riverside parishes

St Anne Limehouse
St Dunstan Stepney / Ratcliffe
St George in the East / Wapping Stepney
St John Wapping / Wapping Whitechapel
St Katherine by the Tower
St Paul at Shadwell

Middlesex within the Bills

Bromley by Bow
Mile End Old Town
Poplar and Blackwall
St John Hackney
St John Hampstead
St Mary Islington
St Marylebone
St Mathew Bethnal Green
St Pancras
Stratford and Old Ford

Surrey within the Bills

Christchurch in Surrey
St George in Southwark [the Martyr]
St John Horsley Down Southwark
St Mary at Lambeth
St Mary at Rotherhithe
St Mary Battersea
St Mary Magdalen, Bermondsey
St Mary Newington
St Nicholas/Paul Deptford
St Olave, Southwark
St Saviours, Southwark
St Thomas in Southwark

'Parishes' and other areas either mentioned incidentally within the printed Bills of Mortality *1654–1735 or which represent geographical districts utilised for analytical purposes*

All Saints Chelsea
Artillery Ground, Tower Liberty
Gray's Inn
Lincoln's Inn
Mile End New Town [St Dunstan Stepney]
Norton Folgate
River Thames
St Giles Camberwell
The Pesthouse [City]
The Pesthouse [Middlesex]

APPENDIX III

Alterations to the list of parishes in the weekly *Bills of Mortality* between 1660 and 1746 through acts of accretion, amalgamation, division or removal[1]

1660	The 'divisions' of Middlesex and Surrey parishes and city and liberties of Westminster were imposed on the layout of the printed *Bills*; previously parishes from these areas had been intermixed.
1670	St Paul Shadwell *added (taken out of Stepney)*
"	All Hallows Honey Lane *removed (united with St Mary le Bow)*
"	St Andrew Hubbard *removed (united with St Mary at Hill)*
"	St Faith under St Paul's *removed (united with St Augustine)*
"	St Gabriel Fenchurch Street *removed (united with St Margaret Pattens)*
"	St Gregory by St Paul's *removed (united with St Mary Magdalene)*
"	St John the Baptist *removed (united with St Antholin)*
"	St John the Evangelist *removed (united with All Hallows Bread Street)*
"	St John Zachary *removed (united with St Anne and St Agnes)*
"	St Laurence Poutney *removed (united with St Mary Abchurch)*
"	St Leonard Eastcheap *removed (united with St Benet Gracechurch)*
"	St Leonard Foster Lane *removed (united with Christ Church Newgate)*
"	St Margaret Moses *removed (united with St Mildred Bread Street)*
"	St Margaret New Fish Street *removed (united with St Magnus the Martyr)*
"	St Martin Ironmonger Lane *removed (united with St Olave Old Jewry)*
"	St Martin Orgar *removed (united with St Clement Eastcheap)*
"	St Martin Vintry *removed (united with St Michael Paternoster Royal)*
1671	Christ Church [Southwark] in Surrey *added (taken out of St Saviours Southwark)*
1685	St James Westminster *added (taken out of St Martin in the Fields)*
1686	St Anne [Soho] Westminster *added (taken out of St Martin in the Fields)*
1694	St John Wapping *added (taken out of St Dunstan Stepney and St Mary Whitechapel)*
1726	St Mary le Strand *added (new church consecrated as part of the Commission for Fifty New Churches; previously referred to as St Mary in the Savoy)*

[1] Sources of information include: *Bills of Mortality*, 1654–1750; Birch, T., *A Collection of the yearly bills of mortality, from 1657 to 1758 inclusive. Together with several other bills of an earlier date*, (1759), p.10; House of Commons**,** *Eighth annual report of the Registrar-General of Births, Deaths and Marriages*, (1848) pp.cxliv–cxlix.

1729	St George Hanover Square *added (taken out of St Martin in the Fields)*
"	St Peter ad Vincula in the Tower *added* (*This was contested as being a non-parochial area; the Court of Kings Bench judged it not a parochial area in 1730 after which date it was removed; the area was reinstated to the Bills at a later date but after the period of the present study).*
"	Christ Church Spitalfields *added (taken out of St Dunstan Stepney)*
"	St George Ratcliffe Highway *added (taken out of St Dunstan Stepney) also known as St George in the East*
"	St George the Martyr [Holborn] in Queens Square *added (taken out of St Andrew Holborn)*
1730	St Anne Limehouse *added (taken out of St Dunstan Stepney)*
"	St Peter ad Vincula in the Tower *removed (See above)*
1731	St George Bloomsbury *added (taken out of St Giles in the Fields)*
"	St John Evangelist Westminster *added (taken out of St Margaret Westminster)*
1733	*St George in the East (sometimes referred to as St George Wapping Stepney was from this date referred to as* St George Middlesex)
"	St John [Horsleydown] in Southwark *added (taken out of St Olave Southwark)*
"	St Luke Old Street *added (taken out of St Giles Cripplegate)*
1746	St Matthew Bethnal Green *added (taken out of St Dunstan Stepney)*

APPENDIX IV

Cases from the Old Bailey Sessions Papers which refer to 'accidental' deaths between 1676 and 1754

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t16760628-4	28 June 1676	'Apprentice' (12 year old boy)	'Ancient gentleman'	Shot by chance by musket fired from window not knowing ramrod in barrel	Fleet Street	[Killing]	Manslaughter	Unknown (surgeon performed postmortem)
t16761213-2	13 Dec 1676	'young man'	'Poor ancient man'	Bruised by fall following collision when running	St James' Park	Murder	Not guilty (discharged)	Unknown
t16770711-4	11 July 1677	'Carman'	'Child'	Run over by cart having fallen off a bench	Bush Lane	Murder	Acquitted ('accidental')	Unknown
t16771212-1	12 Dec 1677	'Gentleman'	'Journeyman shoemaker'	Mistaken for thief and stabbed with a sword	Unknown	Murder	Not guilty ('part misadventure/part se defendendo')	Unknown
t16780828-4	22 Aug 1678	'Gentleman'	'companion'	Accidentally stabbed with a sword during quarrel	Tavern in King's Street	Murder	Not guilty ('by chance')	Unknown
t16780703-9	3 July 1678	'carpenter's man'	Youth (15 year old deaf and dumb lad)	Riding a strange horse it ran-away with him and he rode the lad down	Fenchurch Street	Murder	Not guilty	Unknown
t16781016-1	16 Oct 1678	Unknown servant (Young man)	Youth (Gunsmith's servant)	Accidentally shot with pistol not knowing it was charged	St Martin in the Fields	[killing]	Special verdict ('by misfortune')	Unknown

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t16790226-8	26 Feb 1679	'Ship's lad'	Thomas Young	shot on an adjacent vessel by ricochet	The Advance, Wapping Dock	Killing	Manslaughter	Unknown
t16790716-6	16 July 1679	Allen Roberts (carter)	William Niccols (child)	Run over by cart	Newgate Street	Killing	Not guilty ('done casually')	Unknown
t16811017a-1	17 Oct 1681	John Fulnum (drayman)	Sarah Richardson (5 year old child)	Crushed by a mason's stone toppled by dray	Seacoal Lane, St Sepulchres	Murder	Not guilty (together with his master bound for good behaviour)	Yes (prisoner and dray seized)
t16820116-6	16 Jan 1682	John Johnson & William Ashurst (carters)	Lucy Cook	Run over by horse and cart	St Giles Cripplegate	Killing	Acquitted: chance medley (with severe reprimand for carelessness)	Unknown
t16820712-11	12 July 1682	John Murrell (coachman)	Robert Atkins (6 year old child)	Run over by coach	Lincoln's Inn Fields	Killing	Not guilty ('mere accident')	Unknown
t16830524-2	24 May 1683	John Edgerly	William Stephenson	Shot accidentally when passing pistol between them	St Paul Shadwell	Killing	Guilty: Chance medley	Unknown
t16830829-10	29 Aug 1683	John Bowman (carter)	Thomas Haydon (child)	Fell under cart wheel	Unknown	Killing	Acquitted: Chance medley	Unknown
t16831010a-10	10 Oct 1683	John Piser (coachman)	Susan Roberts (child)	Run over by coach while with group of children in street	Russell Street	Killing	Manslaughter (reprieved before branding)	Unknown

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t16840227-9	27 Feb 1684	Thomas Howell (Hackney coachman)	John Pantreer (little child)	Run over by coach driven at full speed when competing with another coachman for a 'Fare'	Charing Cross	Killing	Acquitted of murder but guilty of manslaughter	Unknown
t16840903-19	3 Sept 1684	John Cowley (coachman)	Edith Isham (3 year old child)	Run over by coach	Chiswell Street, St Giles Cripplegate	Killing	Manslaughter	Unknown
t16840903-23	3 Sept 1684	Thomas Jeffes	John Martin	Bitten by dangerous dog – Jeffes previously warned of dog's behaviour	St Stephen Coleman Street	Killing	Acquitted	Unknown
t16841210-6	10 Dec 1684	Thomas Williams	Giles Berry	While playing Berry ran onto William's tobacco pipe which pierced his brain through his eye	St Giles in the Fields	Killing	Manslaughter	Unknown (attended by surgeons)
t16841210-18	10 Dec 1684	Joseph Gladman (carter)	Mary Patrick	Run over by loaded cart which hit a brazier's copper knocking the deceased under the cart	Maiden Lane, Cripplegate	Killing	Acquitted ('by misfortune')	Yes (indicted for manslaughter)
t16850225-5	25 Feb 1685	Andrew Archer (Hackney coachman)	'A poor old man'	During altercation between coach and a cart at Westminster Gate the victim's hand was crushed as he crossed the road; he died 10 days later	Westminster Gate	Killing	Manslaughter	Unknown

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t16850604-7	4 June 1685	Timothy Smith	Ann Betts	Run over by Smith's horse ridden very fast through a narrow lane	South Lane, Haymarket	Killing	Manslaughter	Unknown
t16860114-1	14 Jan 1686	Thomas Drew (victualler)	Richard Savage	Attempting to eject deceased accidentally forced tobacco pipe stem through nostril and into brain (both drunk)	St Giles Cripplegate	Killing	Manslaughter	Yes
t16860414-3	14 April 1686	John Finch and John Everidge (carmen)	Catherine Leeson (6 year old child)	Run over by cart turning into a yard	St Thomas Apostles	Killing	Not guilty ('accident')	Unknown
t16860414-10	14 April 1686	Samuel Lee	Thomas Powel	Run over by Lee's horse ridden at speed on the footpath in the dark	St James Clerkenwell(?)	Killing	Manslaughter	Unknown (attended by surgeons)
t16860520-21	20 May 1686	Henry Row (soldier)	Barnaby Reeve	Victim 'jostled' musket out of sentinel's hand which went off shooting him in the shoulder	Tower of London, All Hallows Barking	Killing	Acquitted	Unknown (musket valued at 5s.)
t16860707-8	7 July 1686	Richard Stoakes (waggoner)	Frances Pollard	Waggon horses jostled against Pollard's horse throwing her under the wagon wheel	Kensington	Killing	Acquitted ('misfortune')	Unknown
t16860901-7	1 Sept 1686	John Durham ('a boy')	George Thompson	Run over by unruly horse ridden at full speed	Highway, Mile End	Killing	Not guilty	Unknown

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t16860901-41	1 Sept 1686	Edward Matthews (carter)	Margaret Kempson (a child)	Run over by wheel of cart, late in day but accused of acting wilfully	St James Clerkenwell(?)	Killing	Manslaughter	Unknown
t16861013-9	13 Oct 1686	John Redhall (apprentice 15 years of age)	Benjamin Bridges (fellow apprentice)	Shot in head playing with pistols in master's shop not knowing they were charged	St Bartholomew Exchange	Killing	Not guilty ('*per misfortunam*')	Unknown (possible post-mortem; pistol valued at 5s.)
t16870701-27	1 July 1687	George Mordock	Zekiel Pool	Deceased was setting up ninepins when struck on head by prisoner's bowl	Stepney (*BofM* St Paul Shadwell)	Killing	Acquitted: Chance medley	Unknown
t16891211-6	11 Dec 1689	Thomas Hunt	Samuel Fox	Accidentally shot by old pistol found in scrap iron not knowing it was charged	Unknown (*BofM* St James Westminster)	Killing	Misadventure	Unknown
t16900717-23	17 July 1690	Robert Woakden (soldier)	James Tisdale (soldier)	Accidentally shot with musket	Unknown (*BofM* St Dunstan Stepney)	Killing	Not guilty (discharged)	Unknown
t16920629-39	19 June 1692	Aaron Hush (carter)	Jacob Bristow (child)	Run over by cart	White Cross Street	Murder	Misfortune	Unknown
t16940418-22	18 April 1694	Matthew Pryor (coachman)	Ann Hewetson ('wife')	Run over by coach, broken leg resulted in death 22 days later	Smithfield	Killing	Not guilty ('sad accident')	Unknown

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t16940711-14	11 July 1694	John Newton (Gentleman)	James Goddard	Accidentally shot exchanging pistol	Unknown	Murder	Acquitted ('accident')	Unknown
t16940830-33	30 Aug 1694	William Walker	Lydia Stockwell (spinster; girl)	Shot at random; stealing apples from orchard	Chiswick(?)	Murder	Manslaughter (part guilty)	Unknown
t16960708-10	8 July 1696	Robert Watts (carter)	Mark Paul (child)	Trapped child's head between wheel and post	Charing Cross near the River, St Martins in the Fields	Murder	Acquitted ('accident')	Unknown
t16961209-26	9 Dec 1696	John Butterick	Mary Horton (spinster; girl)	Shot by pistol ricochet in street; 'by chance'	St Giles in the Fields	Murder	Not guilty ('accident')	Unknown (pistol valued at 5s.)
t16970707-8	7 July 1697	Thomas Purcell (little boy)	Richard Bannister	Hit on head by brick	St Andrew Holborn	Murder	Acquitted ('accident, being very young')	Unknown
t16970901-46	1 Sept 1697	David Williams	Martin Smith	Run over by chariot with two horses	Fulham (?)	Murder	Acquitted ('accident')	Unknown
t17040601-9	1 June 1704	John Good (coachman)	Anthony Bighton	Run over by coach	Unknown	Murder	Not guilty ('accident')	Unknown
t17070423-22	23 April 1707	John Turner (coachman)	Sam Bumby	Run over by coach	St Martin in the Fields	Murder	Acquitted ('accident')	Unknown

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t17100906-3	6 Sept 1710	John Cox (carter)	Mordecai Witington (child)	Run over by cart horses	Stepney	Murder	Part guilty: Chance medley	Unknown
t17140630-37	30 June 1714	William Hughs (drayman)	Elizabeth Chamberlain (infant/child)	Crushed child's head between wheel and post	St Giles Cripplegate	Murder	Acquitted ('accident')	Unknown
t17151012-11	12 Oct 1715	William Barefoot (drayman)	George Lewis (infant/child)	Run over by dray while playing in the street picking up mulberry leaves	St Mary Whitechapel	Murder	Manslaughter	Yes (indicted for manslaughter)
t17170606-35	6 June 1717	William Leicester (carter)	John Corbet (boy)	Fell under cart wheel while 'running' a truck to and fro in the highway	St Martin in the Fields	Murder	Acquitted ('accident')	Unknown
t17210419-62	19 April 1721	Israel Green (carman)	John Wine (13 year old boy)	Run over by cart wheel retrieving a football that was kicked into the road or onto the cart	Thames Street	Murder	Manslaughter	Yes (indicted for murder)
t17261012-17	12 Oct 1726	Jenkin Davis	William Berry (gardener's boy 19 years old)	Whipped a dog that ran at him, he then struggled with its owner who struck him, he fell striking his head on the pavement	Picadilly, St James Westminster	Murder	Part guilty: Manslaughter	Unknown (surgeons performed postmortem)
t17270705-52	5 July 1727	Catherine Banfield (child's nurse)	John Cornish (18 month old child)	Child's clothing caught fire while nurse was out of the room	St Sepulchres	Murder	Acquitted ('accident')	Unknown

OBP Ref.	Date	Name of accused	Name of victim	Type of fatality	Location	Charge	Verdict	Coroner's Inquest?
t17270830-46	30 Aug 1727	John Bone (stable boy/man?)	Ann Ladyman	Run over by horse at full gallop	Lincolns Inn Fields	Murder	Acquitted ('accident)	Unknown
t17280228-58	28 Feb 1728	Thomas Plumb (coachman)	Matthew Dun ('husband')	Fell under wheel of coach in a fit or drunk	Aldgate	Murder	Acquitted	Yes (indicted for murder)
t17340911-5	11 Sept 1734	George Turner (servant)	Ann Croft (maid 'old woman')	Run over by runaway horse	Bear Street / Sow Gelders Lane, Fulham	Murder	Acquitted ('received her death accidentally')	Yes (indicted for manslaughter)
t17360115-25	15 Jan 1736	James Davison	Talmarsh Duke Ford	Fell from a large painter's servant's step-ladder	Long Acre	Murder	Not guilty ('accidental')	Yes (indicted for murder)
t17360505-61	5 May 1736	John Maccoon /Maccools (carter)	William Birchman (child)	Run over by cart	Drury Lane	Murder	Acquitted	Yes (indicted for murder)
t17470116-26	16 Jan 1747	William Turner (carter)	Mary Marshall (widow)	Run over by cart	Minories, Whitechapel without Aldgate	Murder	Manslaughter	Yes
t17540116-11	16 Jan 1754	Samuel Portman ('servant')	Elizabeth Norman ('wife and mother')	Accidentally hit by stone thrown at the wife of the accused	Gloucester Court, White Cross Street	Killing: Murder	Manslaughter	Yes (anatomy conducted 'before the coroner's jury')

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	1735–53	Ms. 17,614	
Allhallows London Wall	1675–1729/30	Ms. 5086	
	1729/30–1750	Ms. 5088	
Allhallows Staining	1650–1706	Ms. 4956/3	ChWdAcct
	1653–1710	Ms. 17,824	
	1710–28 & 1736–37	Ms. 17,825	
	1745/6–62	Ms. 17,830	
Allhallows the Great	1666/7–1720	Ms. 5159*	
	1720–50	Ms. 5161*	
Allhallows the Less	1655–1750	Ms. 5160/2*	
Bridewell Chapel	1665–66	Ms. 10,952*	
	1682–93/94	Ms. 8310/1*	
	1695–1742	Ms. 8310/2*	
	1742–1750	Ms. 8310/3*	
Holy Trinity Minories	1650–1714	Ms. 9238	
	1714–50	Ms. 9239	
Holy Trinity the Less	1653–1729/30	Ms. 9156*	
	1730–1750	Ms. 9157*	
St Alban Wood Street	1650–1657 & 1661–75	Ms. 7673/2	ChWdAcct
St Alphage London Wall	1650–78	Ms. 5746/1	
	1699–1732	Ms. 5746/2	
	1732–1812	Ms. 5746/3	
St Andrew by the Wardrobe	1558–1812	Ms. 4507/1*	
St Andrew Holborn	1558–1723/24	Ms. 6673/4–8*	
	1723/4–26	Ms. 6667/8	
	1726–1755	Ms. 6673/9 & 10	
St Andrew Hubbard	1662–1678[?]	Ms. 1278/1	
	1706–90	Ms. 4550*	
St Andrew Undershaft	1634–92	Ms. 4107/2	
	1692–1770	Ms. 4107/3	
	1742–74	Ms. 4114	
St Anne Blackfriars	1566–1700	Ms. 4510/1*	
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St Anne and St Agnes	1640–90	Ms. 6764/1*	
	1690–1734	Ms. 6764/2	
	1734/5–1812	Ms. 6764/3*	
St Augustine Watling Street	1653–98	Ms. 8872/2	
	1698–1731	Ms. 8872/3*	
	1731–1812	Ms. 8873	
St Bartholomew Exchange	1650–1678 & 1706–11	Ms. 4374/1	
	1703–04	Ms. 4383/2	ChWdAcct
	1723/24–1750	Ms. 4375	
St Bartholomew the Great	1647–77	Ms. 6777/2 & 3	
	1678–1715/16	Ms. 6780	BurAcct
	1716–82	Ms. 6781/1	BurAcct

St Benet Fink	1653–1812	Ms. 4098*	
St Benet Gracechurch	1558–1730	Ms. 5671*	
	1730–1812	Ms. 17,609*	
St Botolph Aldersgate	1640–1761	Ms. 3854/1–5*	
St Botolph Aldgate	1625–1665	Ms. 9222/2*	
(& The Minories)	1665–73	Ms. 9224*	
	1673–95	Ms. 9232/1*	
	1695–1711	Ms. 9226*	
	1711–30	Ms. 9232/1*	
	1730–67	Ms. 9232/2*	
St Botolph Billingsgate	1603–72	Ms. 942/1	ChWdAcct
	1678–1739	Ms. 942/2	ChWdAcct
	1685/86–1812	Ms. 4797	
St Botolph Bishopsgate	1717–52	Ms. 4517/1*	
St Bride Fleet Street	1653–72	Ms. 6540/1*	
	1665/66 & 1670–72	Ms. 6570/1*	BurAcct
	1673–95	Ms. 6540/2*	
	1686 & 1689/90	Ms. 6620A*	BurAcct
	1695–1706	Ms. 6548*	
	1695–1714	Ms. 6540/3*	
	1709–1726	Ms. 6550*	
	1714–36	Ms. 6540/4	
	1726–27	Ms. 6550*	
	1736–1812	Ms. 6543/1*	
St Dunstan in the West	1632–69	Ms. 10,345*	
(& Liberty of the Rolls	1669–1709	Ms. 10,348*	
& Whitefriars)	1709–39	Ms. 10,350*	
	1739–91	Ms. 10,353*	
St Ethelburga Bishopsgate	1672–1723	Ms. 4236/1	
	1723–92	Ms. 4236/2	
St Faith under St Paul	1645–85/6	Ms. 8882*	
	1669/70–80/81	Ms. 8883*	
	1685/86–1723	Ms. 8884*	
	1723–1800	Ms. 8885*	
St Gabriel Fenchurch	1571–1709	Ms. 5293	
	1709–1812	Ms. 5294	
St George Botolph Lane	1616–85	Ms. 4793	
	1685–1812	Ms. 4795	
St Giles Cripplegate	1653–57	Ms. 6419/5*	
	1657–63	Ms. 6419/6*	
	1663–67	Ms. 6419/7*	
	1667–72	Ms. 6419/8*	
	1672–79/80	Ms. 6419/9*	
	1680–88	Ms. 6419/10*	
	1688–96	Ms. 6419/11*	
	1696–1702/3	Ms. 6419/12*	
	1702/03–11	Ms. 6419/13*	
	1711–19/20	Ms. 6419/14*	
	1719/20–26/27	Ms. 6419/15*	
	1726/27–33	Ms. 6419/16*	
	1733–44	Ms. 6419/17*	
	1744–63	Ms. 6419/18*	
St Gregory by St Paul	1627–59/60	Ms. 10,232	
	1660–87	Ms. 10,233	
	1687–1726	Ms. 18,932	

	1726–56	Ms. 18,934	
St James Garlickhithe	1535–1692/3	Ms. 9140*	
	1708–46	Ms. 9141	
	1746–1812	Ms. 9142	
St John Hackney	1593–1733	Ms. 480/1*	BurTrans
	1734–1812	Ms. 480/2*	BurTrans
St John Zachary	1591–1682	Ms. 590/1	ChWdAcct
	1665–65/6	Ms. 10,952*	
	1693–1812	Ms. 6769	
St Katherine by the Tower	1678–1696	Ms. 9660	
	1684–1727	Ms. 9663	
	1704–1713	Ms. 9666*	
St Katherine Coleman	1653–1666	Ms. 17,832/2	
	1666–1741/2	Ms. 17,833*	
	1734–50	Ms. 17,837A	BurAcct
St Katherine Cree	1663–93	Ms. 7889/1*	
	1693–1722	Ms. 7889/2	
	1722–54	Ms. 7889/3*	
St Lawrence Pountney	1538–1739/40	Ms. 7670*	
	1740–1812	Ms. 7667	
St Leonard Eastcheap	1538–1752	Ms. 17,067	
St Leonard Shoreditch	1658–1674	Ms. 7494/2	
	1674–1699	Ms. 7499/2	
	1699–1715	Ms. 7499/3	
	1715–1729	Ms. 7499/4	
	1729–1740	Ms. 7499/5	
	1740–1750	Ms. 7499/6	
St Magnus the Martyr	1560/1–1720/1	Ms. 11,361*	
	1669–85 & 1686/7–89	Ms. 8786	
	1689–1700	Ms. 8787	
	1701–7	Ms. 2789*	BurAcct
	1720–1812	Ms. 11,362*	
St Margaret Lothbury	1558–1736	Ms. 4346/1*	
	1736–74	Ms. 4346/2	
St Margaret Pattens	1653–1812	Ms. 5287/2	
St Martin Ludgate	1558–1719	Ms. 10,213	
	1719/20–1812	Ms. 10,214	
St Martin Pomeroy	1539–1812	Ms. 4392	
St Martin Vintry	1668–1722	Ms. 5152*	
	1722–1812	Ms. 5154*	
St Mary Abchurch	1558–1736/7	Ms. 7666	
	1737–1812	Ms. 7667/3 & 4	
St Mary at Hill	1558–1812	Ms. 4546*	
St Mary Colechurch	1558–1666	Ms. 4438	
	1671–1812	Ms. 4439*	
St Mary Magdalen Old Fish St.	1664–1717	Ms. 10,221	
	1717–1732	Ms. 10,223	
	1733–1750	Ms. 10,224	
St Mary Staining	1644–78 & 1707–18	Ms. 1542/2	ChWdAcct
	1718–1749	Ms. 1542/3	ChWdAcct
St Michael Crooked Lane	1538–1723	Ms. 11,367*	
	1723–1812	Ms. 11,368*	
St Michael le Querne	1605–1718	Ms. 2895/2	ChWdAcct
	1718–1726	Ms. 2895/3	ChWdAcct
St Michael Paternoster Royal	1653–1681/2	Ms. 5143*	

	1681/2–1743	Ms. 5144*	
	1743–1812	Ms. 5146	
St Michael Queenhithe	1653–1707	Ms. 9147*	
	1707–1737	Ms. 9148	
	1711–1734	Ms. 9153/2*	
	1734–1737	Ms. 9154*	
	1737–1812	Ms. 9149*	
	1737–1812	Ms. 9154	
St Michael Wood Street	1559–1659/60	Ms. 6530	
	1619–1718	Ms. 524/1	ChWdAcct
	1678–1812	Ms. 6532	
St Mildred Bread Street	1648–1667	Ms. 3470/1A	ChWdAcct
St Mildred Poultry	1538–1723/4	Ms. 4429/1	
	1724–1812	Ms. 4429/2	
St Nicholas Cole Abbey	1650/1–1695	Ms. 5686	
	1695–1747/8	Ms. 5687	
St Nicholas Olave	1704–1812	Ms. 5896	
St Olave Jewry	1630–1672	Ms. 4400/1	
	1672–1685/6	Ms. 4400/2	
	1686–1812	Ms. 4401/2	
St Olave Silver Street	1561–1770	Ms. 6534 & 6534A	
St Peter Westcheap	1601–71 & 1681–99	Ms. 645/2	ChWdAcct
	1730–32 & 1739–54	Ms. 645/3	ChWdAcct
St Sepulchre Holborn	1662–1677	Ms. 7219/1	
	1677–1691/2	Ms. 7219/2	
	1691/2–1714	Ms. 7219/3	
	1714–1731	Ms. 7219/4	
	1731–1752	Ms. 7223/1	
St Stephen Coleman Street	1636–1689	Ms. 4449/2*	
	1689–1812	Ms. 4451/1	
	1711–1723	Ms. 4455*	Mortality book

Churchwarden accounts

Allhallows Bread St	1678–1699	Ms. 5038/1
Allhallows Honey Lane	1650–1771	Ms. 5026/1, 8638
Allhallows London Wall	1650–1745	Ms. 5090/2–3
Allhallows the Great	1650–1708	Ms. 818/1
St Alban Wood St	1650–1675	Ms. 7673/2
St Alphage London Wall	1650–1722	Ms. 1432/1–5
St Andrew by the Wardrobe	1650–1704	Ms. 2088/1–2
St Andrew Holborn	1667–1691	Ms. 19592, 4250A
St Bartholomew Exchange	1703–4	Ms. 4383/2
St Bartholomew the Great	1650–1693	Ms. 3989/1
St Botolph Aldersgate	1637–1679	Ms. 1455/1
St Botolph Billingsgate	1603–72	Ms. 942/1
	1678–1739	Ms. 942/2
St Botolph Bishopsgate	1567–1662	Ms. 4524/1–2
St Bride Fleet Street	1641–1701	Ms. 6552/1–2
St Clement Eastcheap	1636–1740	Ms. 977/1
St Dunstan in the West	1558–1700	Ms. 2968/1–6
St James Garlickhithe	1555–1699	Ms. 4810/1–2
St Magnus the Martyr	1638–1734	Ms. 1179/1
St Michael Queenhithe	1625–1706	Ms. 4825/1
St Sepulchre Holborn	1648–1683	Ms. 3146/1–2

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Allhallows London Wall	1700–1735	Ms. 5342/1
Holy Trinity the Less	1673–1725	Ms. 4836/1
St Alphage London Wall	1608–1766	Ms. 1431/2–3
St Andrew Hubbard	1600–1754	Ms. 1278/1–2
St Andrew Undershaft	1695–1759	Ms. 4118/1–2
St Bartholomew the Great	1662–1732	Ms. 3990/1–2
St Botolph Billingsgate	1592–1756	Ms. 943/1–2
St Bride Fleet Street	1667–1714	Ms. 6570/1–3
St Dunstan in the West	1588–1701	Ms. 3016/1–2
St George Botolph Lane	1600–1782	Ms. 952/1–2
St Giles Cripplegate	1692–1783	Ms. 6048/2
St Magnus the Martyr	1667–1782	Ms. 2791/1
St Mary Woolnoth	1708–1798	Ms. 1001/1
St Olave Jewry	1680–1768	Ms. 4415/2
St Stephen Coleman Street	1622–1749	Ms. 4458/1–2

Waterman and Lighterman's Company

Rulers Cash Book	1700–1740	Ms. 6282/1–2
Courts of Rulers and Complaints minutes and orders books	1700–1716	Ms. 6287/1–2

LONDON METROPOLITAN ARCHIVES

Burial registers

Christ Church, Surrey	1671–1696	P92/CTC/55/1
	1697–1718	P92/CTC/55/2
	1718–1726	P92/CTC/55/3
	1727–1751	P92/CTC/55/4
Christ Church, Spitalfields	1729–1747	P93/CTC1/43
	1748–1764	P93/CTC1/44
St George Martyr, Southwark	1653–1657	P92/GEO/140
	1665–1685	P92/GEO/141*
	1685–1714	P92/GEO/142*
	1695–1732	P92/GEO/143*
	1723–1757	P92/GEO/144
St John Wapping	1665–1707	P93/JN2/23*
	1708–1739	P93/JN2/24*
	1740–1770	P93/JN2/25*
St Luke Old Street	1733–1742	P76/LUK/1*
	1742–1747	P76/LUK/2/1
	1747–1752	P76/LUK/2/2
St Mary at Lambeth	1650–1669	P85/MRY1/342
	1669–1718	P85/MRY1/343*
	1719–1745	P85/MRY1/344*
	1746–1765	P85/MRY1/345
St Mary Rotherhithe	1650–1673	P71/MRY/7
	1674–1698	P71/MRY/8
	1699–1722	P71/MRY/9

	1723–1733	P71/MRY/10
	1733–1764	P71/MRY/11/1
St Mary Whitechapel	1658–1717	P93/MRY1/59–60*
	1717–1742	P93/MRY1/61*
	1743–1767	P93/MRY1/62*
St Olave Southwark	1639–1665	P71/OLA/10
	1685–1716	P71/OLA/12
	1717–1746	P71/OLA/13
St Paul Deptford	1730–1788	P75/PAU/1*
St Paul Shadwell	1707–1736	P93/PAU3/34*
	1736–1784	P93/PAU3/35
St Saviour Southwark	1653–1673	P92/SAV/3003
	1673–1705	P92/SAV/3004
	1705–1713	P92/SAV/3005
	1713–1722	P92/SAV/3006
	1722–1733	P92/SAV/3084
	1734–1776	P92/SAV/3085
St Thomas Southwark	1654–1672	P71/TMS/1358B*
	1672–1687	P71/TMS/1359
	1691–1716	P71/TMS/1360
	1716–1731	P71/TMS/1361
	1731–1772	P71/TMS/1370

St Thomas Hospital records

Treasurers week book [cash]	1681–1694	H.1/ST/D1/10
Patient admission undertaking	1689	H.1/ST/B9

WESTMINSTER ARCHIVES CENTRE

Churchwarden accounts

St Margaret Westminster	1650–1692	Ms. St Margaret E1–73
St Martin in the Fields	1650–1692	Ms. St Martin F1–48
St Mary le Strand	1677–1698	Ms. St Mary le Strand M/f22

CORPORATION OF LONDON RECORD OFFICE

Taxation assessments

Poll Tax Assessment (Bishopsgate Within)	2nd Quarter 1692	Assessment Box 32/26
Poll Tax Assessment (Cripplegate Without)	4th Quarter 1692	Assessment Box 32/15

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PAROCHIAL DOCUMENTS

Harleian Society Volumes (Register Series: burial registers)

Allhallows Bread Street	1538–1851	HS 43*
Allhallows Honey Lane	1538–1666/7	HS 44
Christchurch Newgate	1666–1754	HS 21*
St Antholin Budge Row	1538/9–1754	HS 8
St Benet Paul's Wharf	1619–1837	HS 41*
St Clement Eastcheap	1539–1812	HS 67 & 68*
St Dionis Backchurch	1538–1754	HS 3*
St Dunstan in the East	1653–1766	HS 84, 85, 86 & 87
St Helen Bishopsgate	1575–1837	HS 31*
St James Clerkenwell	1551–1754	HS 17*, 19* & 20*
St John the Baptist Walbrook	1686–1754	HS 8
St John Evangelist Friday Street	1653–1822	HS 43
St Katherine by the Tower	1653–1678	HS 76*
St Lawrence Jewery	1538–1812	HS 70 & 71
St Margaret Moses	1558–1850	HS 42
St Margaret Westminster	1660–1673	HS 64, 88* & 89*
St Martin Orgar	1624–1812	HS 68*
St Martin Outwich	1670–1852	HS 32
St Mary Aldermanbury	1538–1812	HS 61*, 62 & 65
St Mary Aldermary	1653–1812	HS 5
St Mary le Bow	1653–1769	HS 44* & 45
St Mary Mounthaw	1568–1812	HS 58*
St Mary Somerset	1654–1774	HS 60*
St Matthew Friday Street	1538–1812	HS 63*
St Michael Bassishaw	1538–1853	HS 72, 73* & 74
St Michael Cornhill	1653–1754	HS 7*
St Mildred Bread Street	1670–1853	HS 42*
St Olave Hart Street	1563–1700/1	HS 46*
St Pancras Soper Lane	1538–1697	HS 44
St Paul Covent Garden	1653–1752	HS 36*
St Peter Cornhill	1538/9–1774	HS 1* & 4*
St Peter Paul's Wharf	1653–1810	HS 41
St Stephen Walbrook	1557–1860	HS 49 & 50
St Thomas Apostle	1558–1680&1704–54	HS 6*
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Jupp, E.B., and Hovenden, R., *The registers of christenings, marriages, and burials of the parish of Allhallows, London Wall: within the City of London. from the year of Our Lord 1559 to 1675* (London: Chiswick Press, 1878)

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St Botolph Bishopsgate: 1628–1725

Hallen, A.W.C., *The registers of St Botolph, Bishopsgate, London*, vol.2 (Edinburgh, 1889-1895)

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Freshfield, E., *The register book of the parish of St Christopher le Stocks, in the City of London* (London, 1882)

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3 Hen VII c.2, , *Act against murderers*, (1487)

1 Hen VIII c.7, *An Act concerning Coroners*, (1509)

26 June 1657 (9 Charles II), *Act for preventing the multiplicity of buildings in and about the Suburbs of London and within ten miles of the same*, (1657)

14 Charles II c.6., *Act for enlarging and repairing of common highways*, (1663)

18 Charles II c.8, *An Act for the rebuilding of the City of London*, (1667)

11 William c.21, *An Act for the explanation and better execution of former Acts made touching Watermen and Wherrymen rowing on the River of Thames and for the better ordering and governing the said Watermen Wherrymen and Lightermen upon the said River between Gravesend and Windsor*, (1699)

4 Anne c.25, *Act for the better collecting charity-money on briefs by letters patent, and preventing abuses in relation to such charities*, (1705)

6 Anne c.58, *An Act for the better preventing mischiefs that happen by fire*, (1707)

7 Anne c.17, *An Act for the better preventing mischiefs that happen by fire*, (1708)

2 Geo I c.57, *An Act for better regulating of Hackney coaches, carts, drays, cars and wagons within the cities of London and Westminster and the weekly Bills of Mortality; and for preventing mischiefs occasioned by the drivers riding upon such carts, drays, cars and wagons*, (1715)

25 Geo II c.29, *Act for giving proper reward to Coroners*, (1751)

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Proclamation by the Mayor against Fireworks, etc (1673) [CLRO, COL/SJ/27/001]

Proclamation by the Mayor against Squibs and Fireworks (1674) [CLRO, COL/SJ/27/002]

Precept by the Mayor to the Alderman to charge their Constables to prevent Bonfires and Fireworks (1682) [CLRO, COL/SJ/27/003]

Precept by the Mayor to the Aldermen to charge all Constables to prevent the throwing of Squibs and Crackers into Coaches (1684) [CLRO, COL/SJ/27/004]

Precept by the Mayor to the Aldermen to charge all Constables and Watchmen to apprehend all persons who make or throw Squibs, Serpents or other Fireworks and order their Beadle to go from house to house to warn the inhabitants (1697) [CLRO, COL/SJ/27/005]

Precept by the Mayor to the Aldermen to charge all Constables and Watchmen to apprehend all persons who make or throw Squibs, Serpents or other Fireworks, etc. (1714) [CLRO, COL/SJ/27/006]

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British Journal (1729)
British Weekly Mercury
Champion or Evening Advertiser
Common Sense or the Englishman's Journal
Daily Advertiser
Daily Courant
Daily Gazetteer
Daily Journal
Daily Post
Evening Post (1709)
Flying Post
General London Evening Mercury
Grub Street Journal
Fog's Weekly Journal
General London Evening Mercury
Grub Street Journal
London Daily Post and General Advertiser
London Evening Post
London Gazette
Mercurius Publicus
Original Weekly Journal
Parker's Penny Post
Read's Weekly Journal or British Gazetteer
The Gentleman's Magazine
The Old Whig or The Consistent Protestant
The Post Boy
Universal Spectator and Weekly Journal
Universal Weekly Journal
Weekly Journal or British Gazette

Weekly Journal or Saturday's Post
Weekly Journal with Fresh Advices Foreign and Domestick
Weekly Packet

Pamphlets, broadsides and ballads

An Account of a strange and prodigious storm of thunder, lightning & hail …, printed for N.I. (London, 1680)

An Account of the fire at New-prison by Clerkenwell whereby the greatest part of that house was burnt down on Friday night, May the 9th, 1679: presumed on very violent suspicions to be set on fire by a papist that was there in custody …, printed for L.C. (London, 1679)

A Ballad of the strange and wonderful storm of hail which fell in London on 18th May 1680 … to the tune of Aim not too high (1680).

The Case of the inhabitants of the cities of London and Westminster … with respect to the laws now in force for preventing mischiefs that may happen by fire (London, 1718),

A Continuation of the inquest after blood … (1670)

Death's masterpiece, or a true relation of that great and sudden fire in Tower Street, London; which came by the fiering of gunpowder, on Friday the 4th of January, 1649, printed for Francis Grove (1649)

Dreadful news from Hackney Marsh giving a true relation of the blowing up two powder mills: wherein were two hundred and sixty barrels of powder … with a particular account of the number of men and women killed, …, printed for Alex. Milbourn (London, 1690)

Dreadful news from Southwark, or, a most true relation how one Margaret Simpson widow, together with Elizabeth Griffin an infant of about a year and an half old, were wonderfully struck dead with a thunderbolt in Ship Yard in Kent Street on Monday the 4th of this instant August between two and three of the clock in the afternoon … (1679)

England's most dreadful calamity by the late floods being a most lamentable account of the great damages sustained by the fearful inundations, caused by the unparalleled rain which fell on the 24th of April 1682: …, printed for P. Brooksby (London, 1682)

A Full and true account of the lamentable and dreadful fire that began in Cinnamon Street Wapping, printed for Langley Curtis (London, 1682)

A Full and true account of the sad and dreadful fire which happened in the borough of Southwark on the 22 of September, 1689 … and the manner of seizing a notorious papist, printed for T.R. (London, 1689)

Great news from Kensington giving a particular relation of the late fire which happened in their Majesties palace on Wednesday the 11th instant, between the hours of two and three in the morning … (1691)

Inquest after blood … (1670)

The Lamentation of a bad market, or, The drownding of three children on the Thames. With this fantastick tragy comedy, tis like that one or other pleas'd will be; because the method carrie, mirth theren, or else the subject were not worth a pin: howe're you'l say it is no laughing matter, to see poor children drowned in the water ..., printed for F. Coles, T. Vere, J. Wright, and J. Clarke (c.1677)

On The Memory of Mr. Caleb Skinner, and Mr. Hezekiah Middleton; merchants. Who were drowned at Black-wall, coming from on board a ship the 5th of May 1688, printed for JH (1690)

A Modest account of that most dreadful fire which happened at Wapping on Sunday night the nineteenth of this instant Novemb. Between 10 and 11 a clock with a true account as near as yet can be given …, printed by D. Mallet (London, 1682)

A More full and exact account of that most dreadful fire which happened at Wapping on Sunday night the nineteenth of this instant Novemb. Between 10 and 11 a clock also a true and full account of the damages sustained by that dreadful fire …, printed by D. Mallet (London, 1682)

Most true but dreadful account from Shoreditch, or a full and true relation how one John Thomson a hemp-dresser, and an inhabitant of the place before mentioned, being at work on Tuesday the 18th of this instant May in the great tempest was strook for dead …, (1680) [Note that the *English Short Title Catalogue* mistakenly attributes the date of this publication to 1703]

News from Bishopsgate Street, being a true relation of a most barbarous and bloody murder committed by one Jacob Turner …, printed for Stephen Draper (London, 1689)

Sad and deplorable news from Oxfordsheir and Barksheir being a lamentable and true relation of the drowning of about sixty persons, men, women and children, in the lock, near Goring in Oxfordsheir; as they were passing by water from Goring Feast, to Stately in Barksheir …, printed for R. Vaughan (London, 1674)

Sad and dreadful news from the Strand giving an account of a most dreadful fire which happened there last night and consumed to ashes four persons …, printed by W.D. (London, 1698)

A Sad and lamentable account of the dreadful fire that happened on the fourteenth of this instant April, 1690 in the Mews near Whitehall …, printed for E. Smith (London, 1690)

Sad and lamentable news from Wapping: giving a true and just account of a most horrible and dreadful fire, which happened on Sunday the 19th Nov. 1682 …, printed for J. Clarke (London, 1682)

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