



Fire Facts

Fatal fires in Greater London

2019

About this publication

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This document was produced by the London Fire Brigade Information Management Team.

For information about this publication contact:

Andrew Mobbs
LFB Information Management
169 Union Street
London SE1 0LL

Tel: 020 8555 1200
email: data@london-fire.gov.uk

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Greater London Authority (GLA) Group statistics

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The London Fire Brigade

The London Fire Brigade is run by the London Commissioner (LFC) who is the fire and rescue authority for London.

For more information about LFB/LFC and the work of the London Fire Brigade visit www.london-fire.gov.uk.

Other publications in this series

The London Fire Brigade has other publications in the Fire Facts series:

Fires incident response time – [here](#)

Fires in Greater London – [here](#)

Other data available

The LFB publishes a range of data on the London Datastore. Much of these data are updated on a monthly basis. Go to the LFB page on the datastore to see what is available – <https://data.london.gov.uk/publisher/lfb>

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Information about fatal fires in inner and outer London (Table 2.3 and Table 2.4) was amended on 9th December 2021.

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Introduction

This *Fire Facts* report sets out the key information on the fires we attend where there are fatal casualties. We have a continuous record of the number of all fires and fire deaths since 1966 after the creation of the Greater London area. More detailed records on the numbers of fire deaths start in 2000 when electronic recording systems were introduced by LFB.

A brief history of the London Fire Brigade

The roots of a single fire service responsible for London start in 1833 when, under the leadership of James Braidwood, the LONDON FIRE ENGINE ESTABLISHMENT was formed. The London Fire Engine Establishment was a private enterprise, funded by the insurance companies and as such was responsible mainly for saving material goods from fire.

In June 1861, a huge conflagration at Cotton's Wharf, a riverside warehouse in Tooley Street, Southwark, claimed the life of James Braidwood, and resulted in insurance claims for more than £2 million (£1.6bn at today's value). The subsequent increase in insurance premiums caused many of the merchants of the City to protest to the Lord Mayor. A Select Committee of the House of Commons was appointed 'to enquire into the existing state of legislation and of any existing arrangements for the protection of life and property against fire in the Metropolis'.

In 1865, the Metropolitan Fire Brigade Act was passed, placing responsibility for the fire service in the metropolis upon the Board of Works. The London Fire Establishment continued to function until 1 January 1866, on which date the new METROPOLITAN FIRE BRIGADE formally came into existence. Captain Sir Eyre Massey Shaw, who had been appointed as the Superintendent of the London Fire Establishment after Braidwood's death, remained in charge of the newly formed brigade.

On 21 March 1889, by virtue of the Local Government Act 1888, the Metropolis, including the City, was converted into the Administrative County of London; the Metropolitan Board of Works went out of

existence and its functions taken over by the London County Council (LCC). In 1904, the London County Council changed the name of the service from the Metropolitan Fire Brigade to the LONDON FIRE BRIGADE.

In March 1938, ahead of the start of the Second World War, recruitment started in London for an Auxiliary Fire Service. Heavy air raids during the Blitz (1940/1941) had shown that regional firefighting resources were insufficient and the Government decided to unify the services. On 18 August 1941 the NATIONAL FIRE SERVICE (NFS) came into being.

The NFS continued to provide a service in peacetime after the war until 1 April 1948 when the Fire Service Act 1947 placed responsibility for fire brigades on county and 'county borough' councils. At this time the London Fire Brigade was once more under of the London County Council.

The local government of London changed again in 1965 when the Greater London area was formally defined and created by the London Government Act 1963, which came into force on 1 April 1965. This new area replaced the former administrative counties of Middlesex and London (the LCC), adding the City of London and absorbing parts of Kent, Surrey, Essex, a small part of Hertfordshire and the county boroughs of Croydon, East Ham and West Ham. This new area was governed by the newly formed GREATER LONDON COUNCIL (GLC). The GLC took over running the London Fire Brigade in 1965 which was expanded with the fire stations, fire appliances and fire staff from the areas absorbed into Greater London from surrounding counties, including most of the former county of Middlesex, and parts of Essex, Kent, Surrey, and a small part of Hertfordshire.

In 1986 the Greater London Council was abolished and the Local Government Act 1985 transferred the functions of fire service and civil defence to a newly formed LONDON FIRE AND CIVIL DEFENCE AUTHORITY (LFCDA) which took over on the 1 April 1986.

On 7 May 1998 Londoners voted in a referendum asking whether there was support for Greater London Authority, made up of an elected mayor and a separately elected assembly. Londoners voted 72 per cent in favour and the new governance structure was set out in the Greater London Authority Act 1999. On the 3 July 2000 the LFCDA was reconstituted as the LONDON FIRE AND EMERGENCY PLANNING AUTHORITY.

From 1 April 2018 under the Police and Crime Act 2017 LFEPA was abolished and the LONDON FIRE COMMISSIONER (LFC) was established as a corporation sole, reporting to the Mayor of London. The LFC is the head of the London Fire Brigade and is the fire and rescue service for the Greater London area.

The Mayor has appointed a Deputy Mayor for fire and resilience. The London Assembly provides scrutiny of the new arrangements via a Fire, Resilience and Emergency Planning Committee.

The Brigade sets out how its prevention, protection and response activities will best be used to mitigate the impact of risk on communities in its Integrated Risk Management Plan (IRMP). The Brigade's IRMP is known as the London Safety Plan; the most recent of which was the London Safety Plan 2017 agreed in March 2017. LSP2017 runs for four years from April 2017 to March 2021.

Scope of this document

In this report we focus on those incidents that happen within the boundaries of Greater London since 1966.

Recording fire incidents and casualties

In 1966, fires were recorded using Fire Report forms K433 and K433H. Fire Report form K433 was introduced by the Home Office and Scottish Home Department in 1953 for recording every fire with the exception of chimney fires confined to (did not spread beyond) chimneys. Casualty information was recorded in Part 5.

The Fire Damage Report (FDR1) was introduced in January 1978 as a new recording method. The FDR1 was revised in 1994. The FDR1 form included details of fire casualties, including fatal casualties.

Fire recording changed again in 2008 when the government introduced a national Incident Recording System (IRS) which was the first fully electronic fire recording system (prior to which records were submitted to government on paper and the national statistics from these based on sampling). Again, the IRS records full details of fire casualties.

LFB electronic data collection

LFB started collecting incident data electronically in April 1999 via its Incident Recording Information System (IRIS). This included fire incidents although not FDR1 data, like the details of casualties. FDR1 data was captured electronically from 1 January 2005. LFB began supplying data to the new national IRS on 3 November 2008 via its Incident Management System (IMS), which replaced the IRIS. More comprehensive and consistent recording of fire deaths happened from this date, so 2009 is the first full calendar year for which we have consistently recorded data.

Categories of fire

A reportable fire is '*an event of uncontrolled burning involving flames, heat or smoke which was attended by a fire and rescue authority, or which was a late fire call*'.

The categories of fire have remained unchanged since the introduction of the FDR1. Fires are categorised as either Primary, Secondary, Chimney or Late Call.

Primary fires are more serious fires that harm people or cause damage to property. More information is collected about primary fires than other types of fire. In the changes to the FDR1 in 1994 the definition for primary fires was broadened to include a small number of fires where there was no fire damage but there was damage from heat and smoke.

Primary fires have one or more of the following characteristics:

- (a) all fires in buildings and vehicles that are not derelict or in outdoor structures,
- (b) any fires involving casualties or rescues,
- (c) any fire attended by five or more appliances.

A **late call** is when a fire and rescue service is called to a fire when it is known, prior to the call, that the fire has already been extinguished. In this report, late calls are included in the totals for primary fires. There are typically less than 20 late calls per year. As a result of a late call, a casualty can be discovered. In such cases, the fire will be recorded as a primary fire.

Secondary fires are less serious fires and less information is recorded about these fires. If there is a casualty at a fire that would otherwise be determined to be a secondary fire (e.g. as a result of an outdoor fires including grassland and rubbish fires, or in a derelict building), the fire will be recorded as a Primary Fire in accordance with the recording protocol outlined above.

Where fire crews record the motive for a fire they are categorised as follows:

- (a) Accidental fires, including those where the cause was not known or unspecified.
- (b) Deliberate fires, including those where deliberate ignition is merely suspected.

Deaths in fires and fire as the cause of death (role of the Coroner)

Fire fatalities include any fatal casualty which is the direct or indirect result of injuries caused by a fire incident. Even if the fatal casualty dies subsequently, any fatality whose cause is attributed to a fire is included in the Brigade's and government published statistics.

There are also occasional cases where a Coroner may rule that the fire was not the cause of death. As a Coroner's inquest will not have been held for all fire fatalities in the latest year reported here, the number of fatalities is subject to revision.

A person who dies as a result of a fire is a relatively rare event. Often, it is simple to determine that fire (and the effects of fire, like smoke) was the cause of death; our specialist fire investigators will make an initial judgement for statistical recording purposes. However, it will be for a Coroner to determine the cause of death.

Following an inquest, and associated autopsy (or post-mortem examination), it is sometimes determined that a heart attack, stroke or another pre-existing medical condition, was the cause of death and the fire occurred subsequently.

The data for fire deaths included in this report will reflect the view of the Coroner that fire was the cause of death, except for some fire deaths in the most recent year, where a Coroner's inquest is outstanding. For 2017, the Coroner's inquest into the Grenfell Tower fire deaths has opened and has been adjourned until the Grenfell Tower Public Inquiry has concluded.

Fire investigation work

Where there are 'persons reported' or fatal or non-fatal casualties at a fire, then the Brigade's Fire Investigation Team will attend the incident scene. As necessary, they will work with the Police and other agencies to investigate the fire. The Brigade's experienced fire investigators will determine the cause of a fire and, where there is a fatality, how they think a person has died. The data from these investigations is captured as part of the LFB's incident recording process and will be the Brigade's definitive view of the fire.

Symbols and conventions used

Inner and outer London

Where we have made reference to inner and outer London, we are using the classification used by the Office of National Statistics (ONS).

Based on the classification used by ONS, there are 14 inner London Boroughs and 19 outer London boroughs, as follows:

Inner London boroughs: Camden, City of London, Hackney, Hammersmith and Fulham, Haringey, Islington, Kensington and Chelsea, Lambeth, Lewisham, Newham, Southwark, Tower Hamlets, Wandsworth and Westminster.

Outer London boroughs: Barking and Dagenham, Barnet, Bexley, Brent, Bromley, Croydon, Ealing, Enfield, Greenwich, Harrow, Havering, Hillingdon, Hounslow, Kingston upon Thames, Merton, Redbridge, Richmond upon Thames, Sutton and Waltham Forest.



Seasons

In this report, months are grouped into seasons in the following way:

- Winter – Dec, Jan, Feb
- Spring – Mar, Apr, May
- Summer – Jun, Jul, Aug
- Autumn – Sep, Oct, Nov

Times of the day

In this report, the hours of the day are grouped into periods in the following way:

- Night – 12am to 6am
- Morning – 6am to 12pm
- Afternoon – 12pm to 6pm
- Evening – 6pm to 12am

Symbols

The following symbols have been used throughout:

.. = not available or not applicable.

– = nil.

Data tables

Some tables in this publication have been truncated in the number of years presented so that the tables remain readable. The full tables with all years data is available to download from the London Datastore at data.london.gov.uk.

Chapter 1 | Long term trends

This chapter looks at the long-term time-series data for fire deaths at fires attended by the London Fire Brigade in Greater London since 1966. The only year since 1966 when data for fire deaths isn't available is 1977 when, due to the fire service national strike that year, data was only available up until October.

Fire deaths in Greater London

(Table 1.1)

In 1966 the total number of fire deaths was 164. During the following 20 years, the number of fire deaths each year fluctuated around 150 and peaked in 1980 at 196 that year and at 193 in 1987.

For 26 years between 1966 and 1992, the total number of fire deaths fluctuated between 125 and just under 200 deaths a year. From 1993 to 2019, the number of deaths has fluctuated between 29 (in 2014) and 103 in 2017 (including the 71 fatalities at the Grenfell Tower fire).

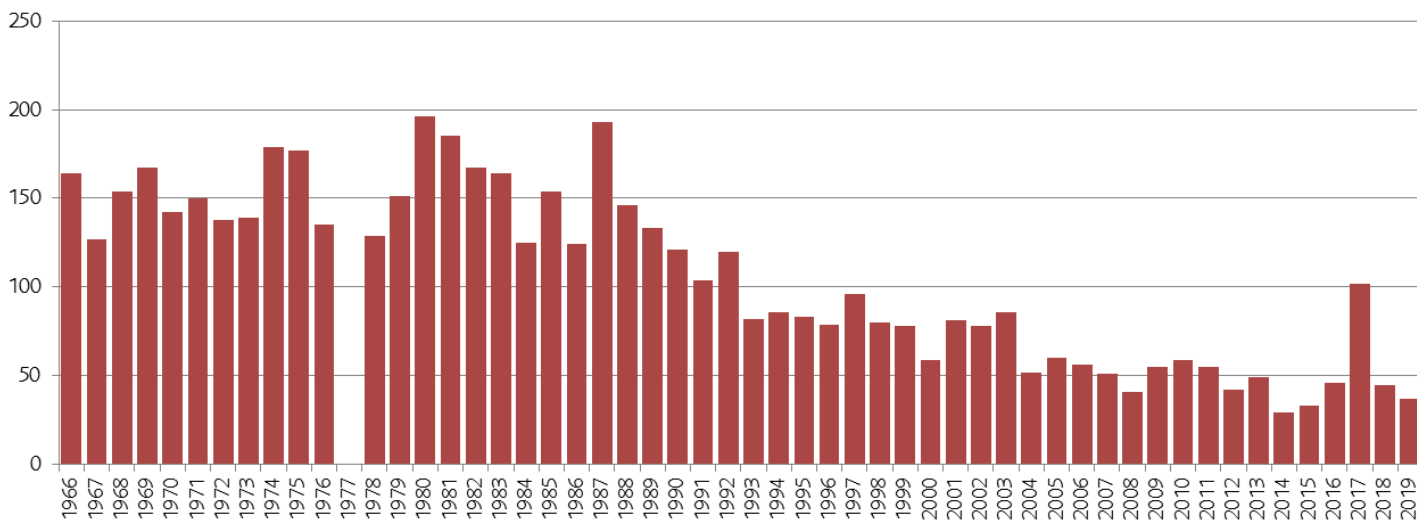
The years with the highest numbers of fire deaths have been:

- 1981 – 196 fire deaths
- 1987 – 193 fire deaths
- 1974 – 179 fire deaths
- 1975 – 177 fire deaths
- 1969 – 167 fire deaths
- 1982 – 167 fire deaths

The overall changes in the numbers of fire deaths each year have been influenced when there has been a significant change in law or policy.

One of the main causes for the high number of fire deaths in the late 1980's (nationally) was furniture containing polyurethane (PU) foam which was considered responsible for one in every 13 house fires and 35 per cent of all deaths from fire. Government responded to this trend by introducing the *Furniture and furnishings (Fire) (Safety) Regulations*, which first came into effect in 1988.

Chart 1: Total number of fire deaths in Greater London, since 1966

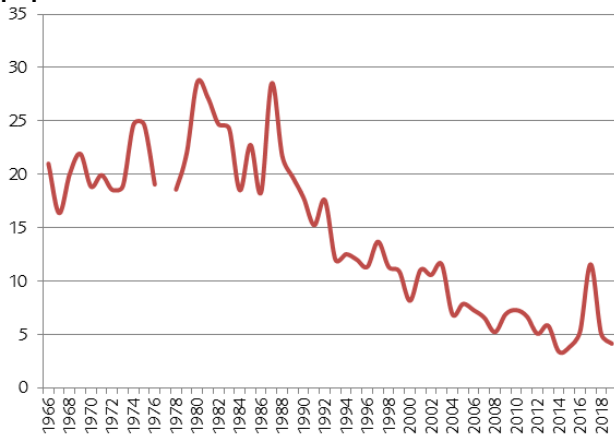


Fire deaths by head of population

(Table 1.1)

The number of fire deaths in London have been falling steadily since the early 1990s. Numbers increased in 2017 because of the multiple deaths from the Grenfell Tower fire.

Chart 2: Fire related fatalities per million resident population, since 1966



Legislative changes impacting on the number of fire deaths

As well as work on fire prevention and an increase in smoke alarm ownership, legislative change has also contributed to the reduction in fire deaths. Most notably the Furniture and Furnishings (Fire Safety) Regulations 1988 which improved the fire retardants of home furniture and reduced the amount of fatally toxic smoke when ignited.

The reduction in fires since 2001 is linked to the introduction of the first Community Safety Strategy which the former LFEPA approved in September 2000¹. This strategy changed the focus of the London Fire Brigade from being a mainly reactive emergency response service to a proactive service with fire prevention at the core of its activities.

By 2016/17, an estimated 95 per cent of homes in England had a smoke alarm fitted².

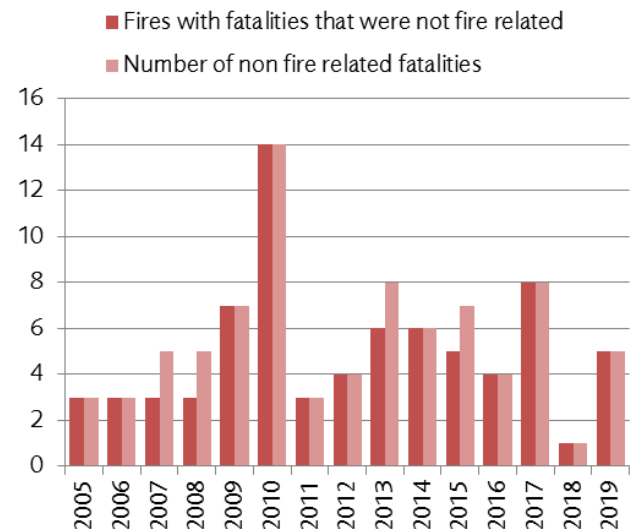
Fires with fatalities which are not fire-related

A few of the fatalities at fires are not caused by the fire. Sometimes, people die (from events such as heart attacks or strokes) and the fire starts as a result of their death; for example a person who had started cooking at the time of their heart attack may go on to have a cooking fire because it is unattended.

As outlined earlier, the Coroner will determine whether fire, or the effects of the fire (like smoke) was the cause of death.

Typically, since 2005, there have been about five fires each year at which a fatality was discovered, where later it was determined (by the Coroner) that fire was not the cause of death.

Chart 3: Fires attended by LFB with fatalities that were not fire related



¹ Community Fire Safety Strategy; LFEPA report FEP9, 14 September 2000

² English Housing Survey 2016/2017 (fire and fire safety)

Multiple fire fatalities

(Table 1.2)

Fire deaths are rare and relatively randomly occurring events. But sometimes circumstances can lead to multiple fatalities at a single fire.

Multiple fatality fires are very rare - LFB records show that there have been 25 fires between 1966 and 2019 (53 years) where four or more people died.

Table 1.2 details the 25 fires where four or more people died. Data for these fires from 2000 onwards is taken from LFB electronic records; data before this may be less reliable and relies on published sources.

Any additional information that can be provided to ensure completeness should be emailed to data@london-fire.gov.uk.

Fires with fire related fatalities

(Tables 1.3 and 1.4)

It is useful for analysis purposes to make a distinction between the number of fires in which one or more people died (a 'fire with fire related fatalities'), and the numbers of actual fatalities arising from fires.

Some of the tables in this Fire Facts report are based on the analysis of 'fatal fires' and some are based on the numbers of fatal casualties. In all cases, the charts and tables will make this clear.

Over the ten years to 2019, 95 per cent of fires with fatalities had a single casualty; 4 per cent had two casualties, with less than one per cent having three or more casualties.

Chart 4: Fires and the proportion of multiple fatality fires, ten year average to 2018

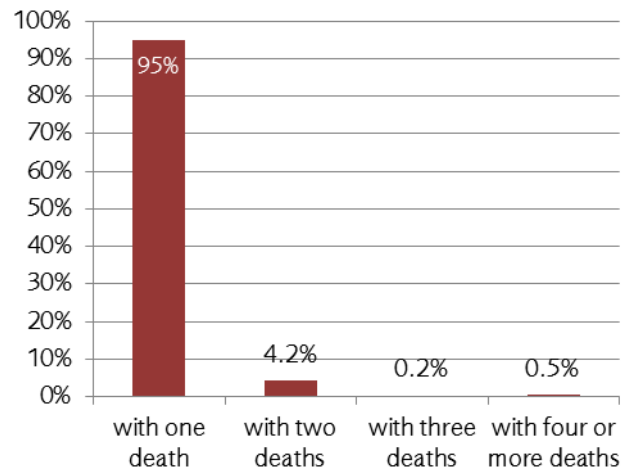


Table 1.1 Time series; number of primary fires and fatalities in Greater London, since 1966

	<i>number</i>		<i>rate</i>	
	Primary fires	Fatalities	Population estimates	Fatality rate per million pop
1966	14 825	164	7 810 000	21.0
1967	15 059	127	7 761 000	16.4
1968	13 550	154	7 693 000	20.0
1969	14 076	167	7 619 000	21.9
1970	15 306	142	7 530 000	18.9
1971	14 975	150	7 529 400	19.9
1972	15 963	138	7 442 800	18.5
1973	16 132	139	7 362 400	18.9
1974	15 397	179	7 263 600	24.6
1975	11 679	177	7 179 000	24.7
1976	14 387	135	7 089 100	19.0
1977	(a) ..		7 012 000	
1978	(b) ..	129	6 946 800	18.6
1979	20 370	151	6 887 600	21.9
1980	19 571	196	6 850 600	28.6
1981	19 790	185	6 805 600	27.2
1982	20 551	167	6 765 100	24.7
1983	20 869	164	6 753 000	24.3
1984	21 133	125	6 754 700	18.5
1985	22 202	154	6 767 000	22.8
1986	22 119	124	6 774 200	18.3
1987	21 963	193	6 765 600	28.5
1988	22 550	146	6 729 300	21.7
1989	22 199	133	6 751 600	19.7
1990	21 635	121	6 798 800	17.8
1991	21 050	104	6 829 300	15.2
1992	20 684	120	6 829 400	17.6
1993	20 025	82	6 844 500	12.0
1994	19 080	86	6 873 500	12.5
1995	19 892	83	6 913 100	12.0
1996	20 414	79	6 974 400	11.3
1997	20 148	96	7 014 800	13.7
1998	19 677	80	7 065 500	11.3
1999	20 411	78	7 153 900	10.9

Table 1.1 Time series; number of primary fires and fatalities in Greater London, since 1966 (continued)

<i>number</i>		<i>number</i>	<i>rate</i>	
	Primary fires	Fatalities	Fatality rate per million pop	
2000	22 334	59	7 236 700	8.2
2001	22 655	81	7 336 909	11.0
2002	20 271	78	7 381 870	10.6
2003	20 081	86	7 448 221	11.5
2004	17 788	52	7 542 613	6.9
2005	16 167	60	7 642 969	7.9
2006	15 373	56	7 701 603	7.3
2007	14 115	51	7 773 547	6.6
2008	13 372	41	7 869 882	5.2
2009	14 178	55	7 991 239	6.9
2010	13 522	59	8 107 073	7.3
2011	12 911	55	8 217 475	6.7
2012	11 678	42	8 308 369	5.1
2013	11 289	49	8 416 535	5.8
2014	10 676	29	8 556 566	3.4
2015	10 820	33	8 673 713	3.8
2016	10 587	46	8 787 892	5.2
2017	10 756	102	8 825 001	11.6
2018	10 209	45	8 908 081	5.1
2019	9 678	37	8 961 989	4.1

Source: Population figures ONS mid-year estimates

(a) Data is only available until 31 October 1977 (36, 151 fires and 700 chimney fires) due to a fire service national strike

(b) There is no data available on the split between primary and secondary fires for 1978

Table 1.2 Fires where four or more people died, since 1965

<i>Year</i>	<i>Date</i>	<i>Location</i>	<i>Fatalities</i>
1969	17 July	Dudgeons Wharf, Manchester Road, London E14	5
1971	11 May	New Langham Hotel, Bayswater	9
1974	10 November	Brays Transport Hotel, Liverpool Road, Islington	8
1974	13 December	Worsley Hotel, 3-19 Clifton Gardens, Maida Vale, London W9	7
1978	5 January	Brathway Road, Wandsworth	5
1980	15 August	The Spanish Club and Rodo's, 18 Denmark Place, Soho, W1	37
1981	(December)	25-29 Clanricarde Gardens, Notting Hill	8
1981	18 January	439 New Cross Road, Deptford	13
1982	12 April	Stockwell, south west London	4
1984	23 April	Frensham Drive, New Addington, Croydon	4
1985	10 January	Newnham House, Manor Fields Estate, Putney	8
1985	13 July	Oakwood Gardens, Ilford, Essex	4
1987	18 November	Kings Cross underground station	31
1994	26 April	Dream City, 7 St John Street, Clerkenwell, London	10
1995	30 January	Hartley House, Southwark, south east London	5
1995	19 November	116 Uxbridge Road, London W12	4
1997	23 February	82 Aldermans Hill, London N13 4PP	5
1997	6 June	Moore House, Lukin Street, London E4 9N	4
1999	6 March	Bellamy Road, Chingford, E4	7
2001	3 November	10 Deptford Wharf, Lewisham, London SE8 3PA	4
2002	17 July	South Crescent, Newham, London, E16 4TL	5
2005	17 December	16 Willenhall Drive, Hillingdon, London, UB3 2UT	5
2009	3 July	Lakanal House, Sceaux Gardens, London, SE5 7DP	6
2011	24 September	12 Sonia Gardens, Neasden, London, NW10 1AH	6
2017	14 June	Grenfell Tower, Lancaster West Estate, W11 1TG	71

Note 1: Data from 2000 onwards taken from LFB electronic records; data prior to 2000 is taken from published sources and may be incomplete. Any additional information that can be provided to ensure completeness should be emailed to data@london-fire.gov.uk.

Table 1.3 Fatal fires and the number of fire deaths, since 2005

<i>number</i>											
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fires with one or more deaths	54	58	46	40	45	28	32	46	29	42	36
with one death	51	57	41	38	41	27	32	46	26	39	35
with two deaths	2	1	4	2	4	1	-	-	1	3	1
with three deaths	-	-	-	-	-	-	-	-	1	-	-
with four or more deaths	1	-	1	-	-	-	-	-	1	-	-

Table 1.4 Fatal fires and the number of fire deaths, by property type, since 2005

<i>number</i>											
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fires with one or more deaths	54	58	46	40	45	28	32	46	29	42	36
Dwelling fires with one or more deaths	47	49	37	37	35	25	23	38	27	36	30
with one death	44	48	32	36	31	24	23	38	24	34	29
with two deaths	2	1	4	1	4	1	-	-	1	2	1
with three deaths	-	-	-	-	-	-	-	-	1	-	-
with four or more deaths	1	-	1	-	-	-	-	-	1	-	-
Non residential fires with one or more deaths	4	5	-	-	5	1	2	4	-	2	2
with one death	4	5	-	-	5	1	2	4	-	2	2
with two deaths	-	-	-	-	-	-	-	-	-	-	-
with three deaths	-	-	-	-	-	-	-	-	-	-	-
Other residential fires with one or more deaths	1	3	1	-	1	-	2	1	-	2	-
with one death	1	3	1	-	1	-	2	1	-	2	-
Outdoor fires with one or more deaths	1	1	6	1	1	1	1	3	1	1	3
with one death	1	1	6	-	1	1	1	3	1	1	3
with two deaths	-	-	-	1	-	-	-	-	-	-	-
Transport deaths with one or more deaths	1	-	2	2	3	1	4	-	1	1	1
with one death	1	-	2	2	3	1	4	-	1	-	1
with two deaths	-	-	-	-	-	-	-	-	-	1	-

Chapter 2 | When and where fire deaths happen

This chapter looks at the property types where fire deaths occur, the reason for fire and the number of fires in each London borough. This chapter looks at the data since 2000 - where more detailed electronic records are available.

Fire motive

(Table 2.1 and 2.2)

Firefighters record the suspected motive (reason) for the start of a fire. Fires are categorised as: accidental, deliberate or unknown, according to the probable cause, as observed at the scene. For fires where there is a fatal or non-fatal casualty, a specialist fire investigator would attend and then confirm the fire motive.

Deliberate fires are those where a fire is suspected to have been started deliberately (but not always with a malicious intent), for example some fires are started by children. Deliberate fires, where someone dies, may also include suicides.

The motive reflects the nature of the '*uncontrolled burning*'. For example, whilst a bonfire will be started deliberately, if it gets out of control and sets light to a nearby shed, the motive will be recorded as accidental; the uncontrolled shed fire was an accidental consequence of the deliberate bonfire.

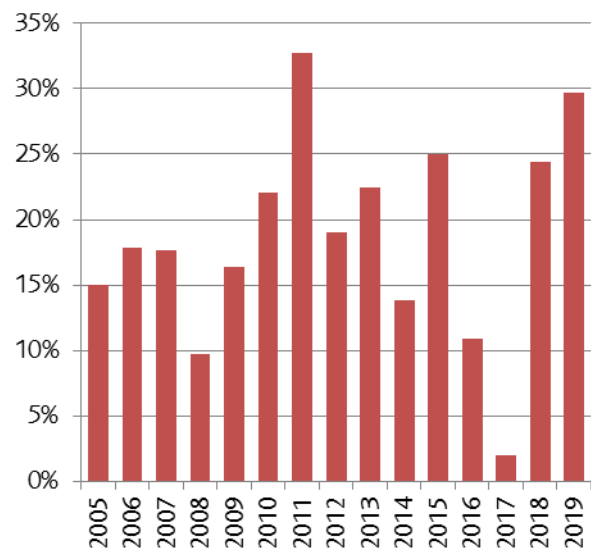
Arson is the criminal act associated with deliberate fire setting. However, fires with a deliberate motive will not always be arson; for example, a person may choose to set fire to their own property in a controlled way and this would not be arson. Arson is related to criminal intent and a Police definition and not a fire service categorisation.

Sometimes, it is not possible to determine a motive, particularly where a fatality is involved. In such cases, the motive may be recorded as 'not known'. As a general rule, fires and fire deaths where the motive is 'not known' are usually counted with accidental fires. So, accidental dwelling fires will include a small number of fires where the motive cannot be determined with any reliability.

For fires where there were fire related fatalities, around three quarters (75 per cent) of these fires

(based on the average over the ten years to 2019) were of accidental motive. Only 18 per cent were of deliberate motive. The numbers vary each year. In 2011, for example, fires with a fire related fatality of deliberate motive peaked at a third (33 per cent) of all fatal fires, 2019 then has the second highest proportion at 30 per cent.

Chart 5: Fires with a fire related fatality which were of deliberate motive, since 2005



Fire deaths in the London boroughs

(Tables 2.3, 2.4, 2.5 and 2.6)

The trend in the number of fire deaths in individual boroughs may vary from the London-wide downward trend. Fire deaths are relatively indiscriminate events; there is no discernible pattern by borough.

Inner and outer London

(Tables 2.3 and 2.4)

Looking at the number of fires with fire related fatalities, there are slightly more in outer London than in inner London. Over the five years to 2019, 53 per cent of fires were in outer London with 47 per cent in inner London.

The position over the same period for fire fatalities, is that 60 per cent were in inner London and 40 per cent in outer London. However, this was a result of the large number of casualties at the Grenfell Tower fire (Kensington & Chelsea). For the five years to 2016, as with fatal fires, there were slightly more in outer

London than in inner London at 53 percent and 47 per cent respectively.

(Tables 2.5)

There is a relatively indiscriminate pattern of fire deaths across individual London boroughs. The boroughs with the largest and fewest numbers of fires with fire related fatalities are set out in the tables below.

Table A: London boroughs with the most fatal fires, five years to 2019

Borough	Fires with fire related fatalities
Haringey	10
Ealing	10
Greenwich	9
Enfield	8
Waltham Forest	8
Wandsworth	8
Camden	8

Table B: London boroughs with the fewest fatal fires, five years to 2019

Borough	Fires with fire related fatalities
City of London	0
Bexley	1
Hillingdon	2
Merton	2
Tower Hamlets	3
Barnet	4
Westminster	4
Richmond Upon Thames	4

(Table 2.6)

The picture for fire deaths in individual boroughs is dominated by the large number of deaths at the Grenfell Tower fire in Kensington and Chelsea.

Table C: London boroughs with most fire related fatalities, five years to 2019

Borough	Fire related fatalities
Kensington and Chelsea	78
Wandsworth	11
Ealing	11
Haringey	10
Camden	9
Brent	9
Lambeth	8
Hammersmith and Fulham	8

Table D: London boroughs with the fewest fire related fatalities, five years to 2019

Borough	Fire related fatalities
City of London	0
Hillingdon	2
Hillingdon	2
Merton	3
Tower Hamlets	3
Westminster	3
Harrow	3
Lewisham	3
Hackney	4
Richmond Upon Thames	4

Property types

(Table 2.7)

Primary fires where people die are categorised as those in buildings (dwellings, other residential or non-residential), outdoor or transport:

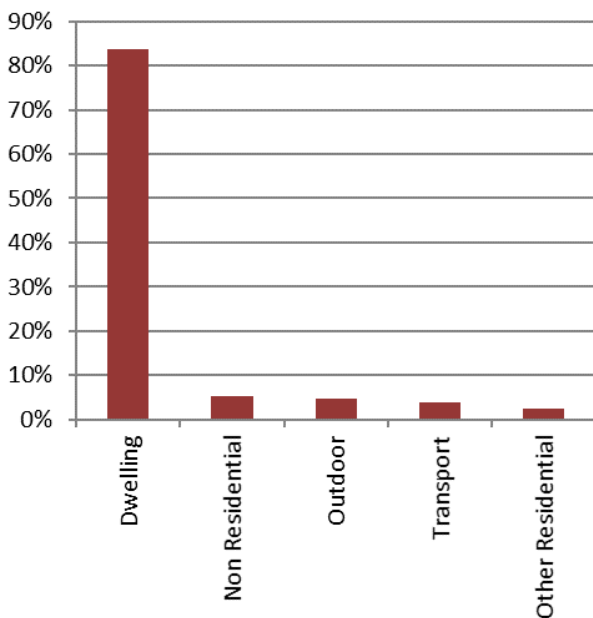
- **Dwellings** include all types of private residences and homes. It covers houses, flats, houses in multiple occupation (HMOs) and self-contained sheltered housing.

- **Other residential** covers places of communal living and where people receive care, like residential care homes. It also includes short term accommodation residential accommodation like student halls, hostels and hotels.
- **Non-residential** includes all types of commercial building as well as private outdoor structures and outhouses.
- **Outdoor** includes grass, open land and woodland.
- **Transport** includes motor vehicles, boats, trains and aircraft.

Where a building has one or more uses, we record the property type for the area where the fire started; for example, where a fire occurs in a shop with a flat above, we would record a fire in a shop.

Most people who die in a fire die in their home. The number of dwelling fire deaths outnumbers fire deaths in other locations by a significant margin. This drives our focus on community safety work to help keep people safe in their homes.

Chart 6: Fire deaths by property type, ten year average to 2019



Accidental dwelling fires with fire related fatalities

(Table 2.8)

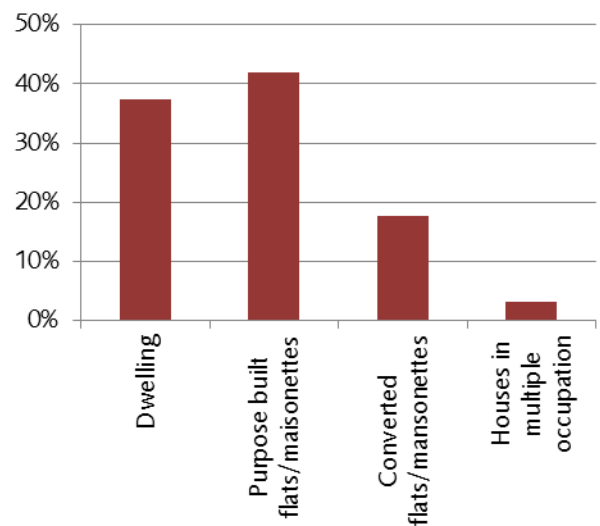
Accidental dwelling fires are categorised into four property types:

- **Dwellings** which includes single occupancy house or bungalow, self contained sheltered housing, caravan/mobile home.
- **Purpose built flats or maisonettes**, which are designated by how tall the building is (up to three storeys, between 4 and 9 storeys, and 10 or more storeys).
- **Converted flats and maisonettes**, of either up to 2 storeys or 3 storeys or more.
- **Houses in multiple occupation**, by how many storeys and whether licensed or unlicensed.

Dwellings and Purpose built flats/maisonettes accounted for 37 and 42 per cent respectively of accidental dwelling fires with fire related casualties.

Around half of the population of London live in flats³.

Chart 7: Proportion of accidental dwelling fires with fire related casualties, by dwelling type, five years to 2019



³ HOUSING IN LONDON 2015
The evidence base for the Mayor's Housing Strategy

When fire deaths happen

Season/Month of the year

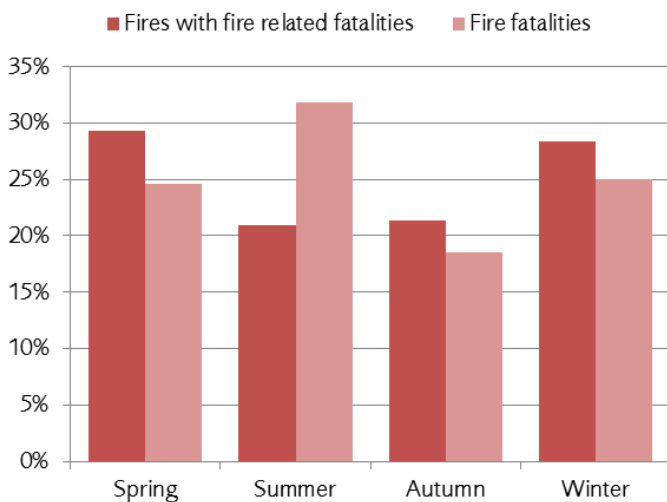
(Table 2.9)

Primary fires vary little throughout the year, with slightly more in the Spring and Winter months compared to Autumn and Summer. Fires with fire related casualties have a slightly different pattern (looking over the last ten years) with slightly more in Spring (29 per cent) and Winter (28 per cent), compared to Autumn (21 per cent) and Summer (also 21 per cent).

(Table 2.10)

Over the ten years to 2019, there were slightly more fatalities in Summer, although this proportion is impacted by the Grenfell Tower fire in June 2017 (Summer).

Chart 8: Proportion of fires with fire related fatalities and fatalities (%) by season, ten years to 2019



Hour of the day

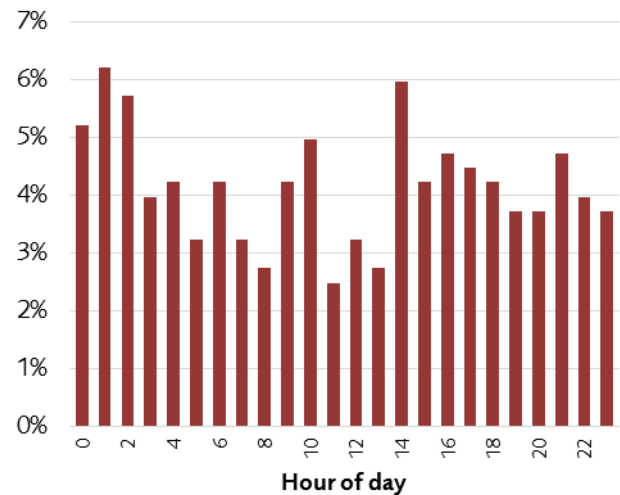
(Table 2.11 and 2.12)

We do not consistently capture the actual time of death from a fire. We can say when we were notified about a fire and the times in this section are based on 'time of call' to the fire. Someone injured in a fire may not die at the time, and a death may be some days or weeks after the fire.

The pattern by hour of day is variable with a dip in the number of fires with fire related fatalities at 7am to 8am and between 11am and 1pm (data for ten years to 2019). Fires now peak at around midnight to 2am,

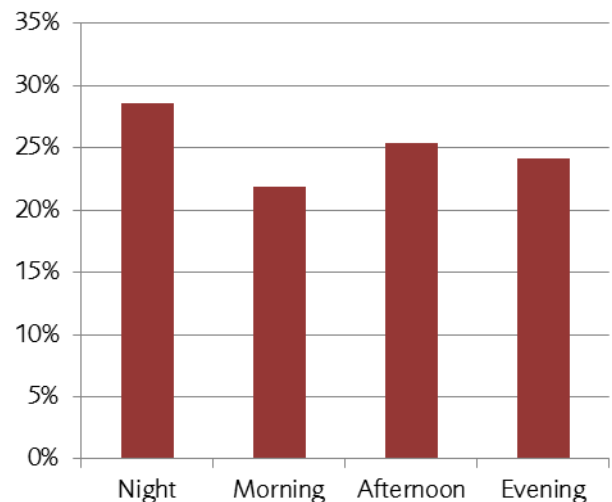
late morning between 9am to 10am and in the late afternoon around 2pm.

Chart 9: Proportion of fires with fire related fatalities (%) by hour of the day, ten years to 2019



Looking over the last ten years, there are more fires with fire related casualties at night (29 per cent) and in the afternoon (25 per cent) compared to the evening or morning 24 and 22 per cent respectively.

Chart 10: Proportion of fires with fire related fatalities (%) by time of the day, ten years to 2019



Where fires with fatalities start

We record the point within the location where a fire starts. This may not be where a casualty dies (for example a fire might start in the kitchen, but the resulting fire causes a fatality in a bedroom).

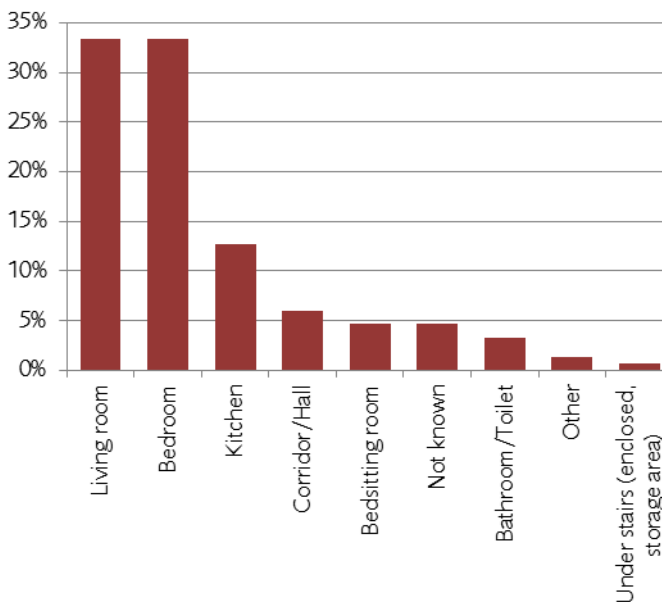
Room in dwelling where fatal fires started

(Table 2.13)

Our report *Fires in Greater London, 2017* showed that most of the dwelling fires in recent years happen in the kitchen.

Whilst most fires start in a kitchen, these fires are less likely to be fatal. Most dwelling fires with fatalities happen in a living room, followed by the bedroom. However, in some of these incidents, the living room was also being used as a bedroom. Over the last five years to 2019, bedrooms and living rooms resulted in 33 percent each of all fatal fires in dwellings.

Chart 11: Fires with fire related deaths in dwelling fires by location of fire start, five year average to 2019



Other locations where fatal fires started

(Table 2.14)

Although there are very few fires resulting in fire related fatalities outside the home, there is a relatively wide spread across different locations with only, perhaps, garages as a place where fires involving fire fatalities occur repeatedly.

Source of ignition

(Tables 2.15 and 2.16)

The predominant source of ignition at fires where there is a fire related casualty is smoking related. This source of ignition accounts for 35 per cent of all fatal fires, with a further 16 per cent involving matches and

candles. The proportions for dwelling fires are similar at 36 per cent, and 18 per cent respectively. The next highest identified source of ignition was naked flame (15 per cent of all fatal fires and 12 per cent of fatal dwelling fires). Heating and cooking equipment accounted for less than ten per cent each as the source of ignition for fires where there are fire related fatalities (including in dwelling fires).

Chart 12: Top seven source of ignition for fires with fire related fatalities, five years to 2019

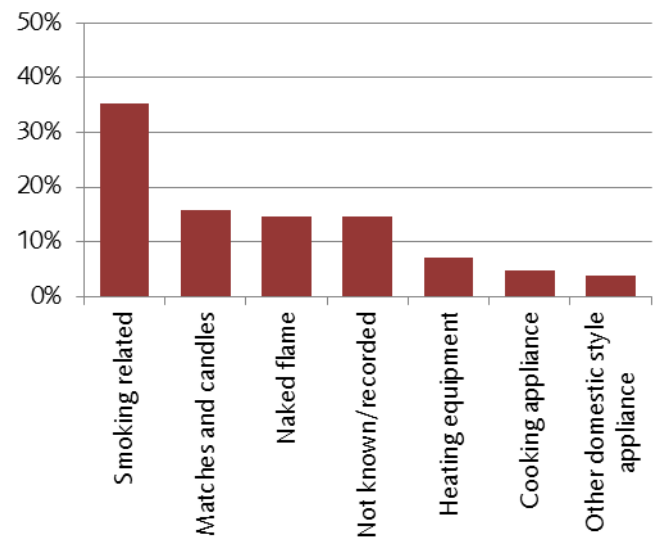


Chart 13: Top seven source of ignition for fires in dwellings with fire related fatalities, five years to 2019

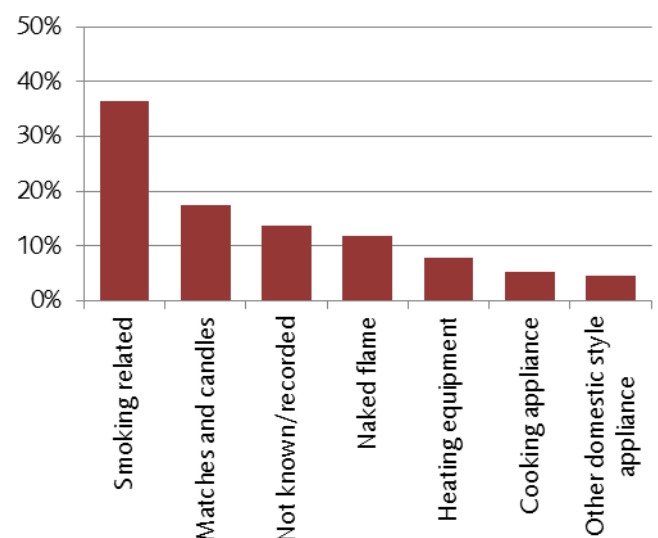


Table 2.1 Fire deaths, by motive, since 2005

	<i>number</i>											<i>percentage</i>
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	60	59	55	42	49	29	32	46	102	45	37	
Accidental	49	45	34	32	33	23	23	37	97	29	21	75%
Dwelling	43	40	33	30	28	22	18	34	96	27	20	70%
Non Residential	3	2	-	-	2	1	2	1	-	-	-	2%
Other Residential	1	2	-	-	-	-	1	-	-	-	-	1%
Outdoor	1	1	-	2	1	-	1	2	1	-	-	2%
Transport	1	-	1	-	2	-	1	-	-	2	1	1%
Deliberate	9	13	18	8	11	4	8	5	2	11	11	18%
Dwelling	8	9	11	6	6	2	4	3	2	8	7	12%
Non Residential	1	3	-	-	3	-	-	-	-	1	1	2%
Other Residential	-	1	1	-	1	-	1	1	-	1	-	1%
Outdoor	-	-	5	-	-	1	-	1	-	1	3	2%
Transport	-	-	1	2	1	1	3	-	-	-	-	2%
Not Known	2	1	3	2	5	2	1	4	3	5	5	6%
Dwelling	2	1	2	2	5	2	1	1	2	3	3	4%
Non Residential	-	-	-	-	-	-	-	3	-	1	1	1%
Other Residential	-	-	-	-	-	-	-	-	-	1	-	0%
Outdoor	-	-	1	-	-	-	-	-	-	-	-	0%
Transport	-	-	-	-	-	-	-	-	1	-	1	0%

Note: Average distribution is over the ten years to 2019

Table 2.2 Fires with fire related deaths, by motive, since 2005

	<i>number</i>											<i>percentage</i>
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	54	58	46	40	45	28	32	46	29	42	36	
Accidental	43	44	27	31	30	22	24	37	24	26	21	71%
Dwelling	37	39	26	30	25	21	19	34	23	25	21	65%
Non Residential	3	2	0	0	2	1	2	1	0	0	0	2%
Other Residential	1	2	0	0	0	0	1	0	0	0	0	1%
Outdoor	1	1	0	1	1	0	1	2	1	0	0	2%
Transport	1	0	1	0	2	0	1	0	0	1	0	1%
Deliberate	9	13	16	8	11	4	8	6	2	11	10	22%
Dwelling	8	9	9	6	6	2	4	3	2	8	6	14%
Non Residential	1	3	0	0	3	0	0	1	0	1	1	2%
Other Residential	0	1	1	0	1	0	1	1	0	1	0	1%
Outdoor	0	0	5	0	0	1	0	1	0	1	3	3%
Transport	0	0	1	2	1	1	3	0	0	0	0	2%
Not Known	2	1	3	1	4	2	0	3	3	5	5	7%
Dwelling	2	1	2	1	4	2	0	1	2	3	3	5%
Non Residential	0	0	0	0	0	0	0	2	0	1	1	1%
Other Residential	0	0	0	0	0	0	0	0	0	1	0	0%
Outdoor	0	0	1	0	0	0	0	0	0	0	0	0%
Transport	0	0	0	0	0	0	0	0	1	0	1	0%

Note: Average distribution is over the ten years to 2019

Table 2.3 Fires with a fire related fatality, inner and outer London, since 2000

	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	53	54	58	46	40	45	28	32	46	29	42	35
Inner London	22	27	26	18	17	25	9	16	23	16	16	15
Outer London	31	27	32	28	23	20	19	16	23	13	26	20

Table 2.4 Fire fatalities, inner and outer London, since 2000

	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	59	60	59	55	42	49	29	32	46	102	45	36
Inner London	23	27	26	20	19	26	10	16	23	86	17	15
Outer London	36	33	33	35	23	23	19	16	23	16	28	21

Table 2.5 All fire deaths, by London borough, since 2000

	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	59	60	59	55	42	49	29	32	46	102	45	37
Barking and Dagenham	-	1	1	2	1	-	1	-	1	2	1	2
Barnet	3	1	3	2	1	1	1	-	-	1	2	2
Bexley	3	-	1	1	-	-	-	1	-	-	-	1
Brent	-	1	2	8	3	2	-	1	3	-	1	4
Bromley	5	-	4	2	3	-	1	1	2	1	1	2
Camden	3	2	4	-	2	2	-	1	2	3	2	1
City of London	-	-	-	-	-	1	-	-	-	-	-	-
Croydon	1	2	3	2	2	1	3	2	1	-	-	2
Ealing	2	2	5	2	2	1	2	4	3	1	-	3
Enfield	2	2	1	-	2	4	1	-	1	2	4	-
Greenwich	2	-	3	3	1	2	2	1	3	1	2	-
Hackney	5	4	2	1	2	1	2	1	1	1	-	1
Hammersmith and Fulham	1	1	2	2	2	4	-	2	1	-	3	2
Haringey	-	2	2	2	-	2	1	1	3	3	2	1
Harrow	6	1	2	-	-	-	2	-	-	-	3	-
Havering	-	-	-	1	2	1	-	-	1	4	-	1
Hillingdon	-	10	-	1	1	4	-	-	-	1	1	-
Hounslow	-	2	1	2	2	3	1	3	1	-	1	2
Islington	1	3	3	-	2	1	-	-	3	-	2	1
Kensington and Chelsea	3	-	-	1	1	-	-	-	2	72	3	1
Kingston upon Thames	2	1	-	2	-	-	1	1	1	1	2	-
Lambeth	1	5	1	1	4	2	-	2	1	3	1	1
Lewisham	-	3	3	2	1	1	4	-	2	-	1	-
Merton	1	-	1	-	-	1	-	-	1	-	1	1
Newham	3	1	2	2	-	4	1	4	1	1	-	1
Redbridge	3	1	2	2	-	-	1	1	1	-	2	1
Richmond upon Thames	1	2	-	-	2	-	-	-	1	-	3	-
Southwark	1	1	3	5	2	2	-	2	3	-	-	1
Sutton	2	2	2	-	-	2	-	1	1	1	2	-
Tower Hamlets	3	-	1	2	1	1	1	1	-	1	-	1
Waltham Forest	3	5	2	5	1	1	3	-	2	1	2	2
Wandsworth	2	3	2	1	-	3	-	2	3	1	2	3
Westminster	-	2	1	1	2	2	1	-	1	1	1	-

Table 2.6 Fires with a fire related fatality, by London borough, since 2000

	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	53	54	58	46	40	45	28	32	46	29	42	36
Barking and Dagenham	-	1	1	2	1	-	1	-	1	1	1	2
Barnet	3	1	3	2	1	1	1	-	-	1	2	2
Bexley	3	-	1	1	-	-	-	1	-	-	-	1
Brent	-	1	2	3	3	2	-	1	3	-	1	3
Bromley	3	-	4	2	3	-	1	1	2	1	1	1
Camden	3	2	4	-	2	2	-	1	2	3	2	1
City of London	-	-	-	-	-	1	-	-	-	-	-	-
Croydon	1	2	3	2	2	1	3	2	1	-	-	2
Ealing	2	2	5	2	2	1	2	4	3	1	-	3
Enfield	2	2	1	-	2	3	1	-	1	2	3	-
Greenwich	2	-	3	2	1	1	2	1	3	1	2	-
Hackney	5	4	2	1	1	1	2	1	1	1	-	2
Hammersmith and Fulham	1	1	2	2	2	4	-	2	1	-	3	2
Haringey	-	2	2	2	-	2	1	1	3	3	1	1
Harrow	5	1	2	-	-	-	2	-	-	-	3	-
Havering	-	-	-	1	2	1	-	-	1	2	-	1
Hillingdon	-	6	-	1	1	4	-	-	-	1	1	-
Hounslow	-	2	1	2	2	2	1	3	1	-	1	2
Islington	1	3	3	-	2	1	-	-	3	-	2	1
Kensington and Chelsea	3	-	-	1	1	-	-	-	2	2	3	1
Kingston upon Thames	1	1	-	2	-	-	1	1	1	1	1	-
Lambeth	1	5	1	1	3	2	-	2	1	3	1	1
Lewisham	-	3	3	1	1	1	3	-	2	-	1	-
Merton	1	-	1	-	-	1	-	-	1	-	1	1
Newham	2	1	2	2	-	4	1	4	1	1	-	1
Redbridge	3	1	1	2	-	-	1	1	1	-	2	1
Richmond upon Thames	1	2	-	-	2	-	-	-	1	-	3	-
Southwark	1	1	3	5	2	2	-	2	3	-	-	1
Sutton	2	1	2	-	-	2	-	1	1	1	2	-
Tower Hamlets	3	-	1	1	1	1	1	1	-	1	-	1
Waltham Forest	2	4	2	4	1	1	3	-	2	1	2	2
Wandsworth	2	3	2	1	-	2	-	2	3	1	2	3
Westminster	-	2	1	1	2	2	1	-	1	1	1	-

Table 2.7 Fires with fire related deaths, by property category, since 2005

<i>number</i>	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	54	58	46	40	45	28	32	46	29	42	36
Dwelling	47	49	37	37	35	25	23	38	27	36	30
Non Residential	4	5	-	-	5	1	2	4	-	2	2
Other Residential	1	3	1	-	1	-	2	1	-	2	0
Outdoor	1	1	6	1	1	1	1	3	1	1	3
Transport	1	-	2	2	3	1	4	-	1	1	1

Table 2.8 Accidental dwelling fires with fire related deaths, by dwelling type, since 2005

<i>number</i>	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	36	40	28	31	29	23	19	35	25	28	24
Dwelling	16	17	12	15	9	12	9	14	11	9	6
Bungalow - single occupancy	-	1	-	1	-	-	1	-	2	1	1
Caravan/Mobile home (permanent dwelling)	-	-	1	1	-	-	-	-	-	-	-
House - single occupancy	-	13	10	11	8	8	4	14	6	7	5
Other dwelling	-	-	1	-	-	-	-	-	-	-	1
Self contained Sheltered Housing	2	3	-	2	1	4	4	-	3	1	-
Purpose Built Flats/Maisonettes	17	18	11	13	16	9	3	15	12	13	12
Purpose Built Flats/Maisonettes - 10 or more storeys	-	3	5	2	2	1	1	1	1	-	3
Purpose Built Flats/Maisonettes - 4 to 9 storeys	-	6	2	4	7	3	2	6	6	5	1
Purpose Built Flats/Maisonettes - Up to 3 storeys	-	9	4	7	7	5	-	8	5	8	8
Converted Flats/Maisonettes	3	5	1	3	4	1	6	5	2	6	4
Converted Flat/Maisonette - Up to 2 storeys	-	3	-	1	-	1	1	4	1	4	0
Converted Flat/Maisonettes - 3 or more storeys	-	2	1	2	4	-	5	1	1	2	4
House in Multiple Occupation	-	-	4	-	-	1	1	1	-	-	2
House in Multiple Occupation - Up to 2 storeys	-	-	2	-	-	-	-	-	-	-	2
Licensed House in Multiple Occupation - 3 or more storeys	-	-	1	-	-	-	-	1	-	-	-
Unlicensed House in Multiple Occupation - Up to 2 storeys	-	-	1	-	-	1	1	-	-	-	-

Note: Accidental dwelling fires include dwellings fires with an unknown motive

Table 2.9 Fires with fire related deaths, by season, since 2005

	<i>number</i>											<i>percentage</i>
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	54	58	46	40	45	28	32	46	29	42	36	
Spring	15	19	14	10	13	8	14	17	5	11	7	29%
Mar	5	6	5	5	2	5	5	7	1	5	2	11%
Apr	9	5	5	3	3	2	3	6	3	4	3	9%
May	1	8	4	2	8	1	6	4	1	2	2	9%
Summer	8	8	10	11	12	9	6	7	6	8	7	21%
Jun	4	1	2	4	5	1	2	-	1	2	2	5%
Jul	1	5	5	2	3	6	1	3	4	1	4	8%
Aug	3	2	3	5	4	2	3	4	1	5	1	7%
Autumn	16	16	8	9	2	6	6	10	9	10	10	21%
Sep	7	7	3	-	-	2	1	2	3	3	1	5%
Oct	2	4	2	1	2	1	5	7	4	2	7	9%
Nov	7	5	3	8	-	3	-	1	2	5	2	7%
Winter	15	15	14	10	18	5	6	12	9	13	12	28%
Jan	4	6	6	5	4	1	4	3	4	4	6	11%
Feb	3	7	6	2	8	2	-	3	3	7	4	10%
Dec	8	2	2	3	6	2	2	6	2	2	2	7%

Note: average distribution is for the ten years to 2019

Table 2.10 Fire deaths, by season, since 2005

	<i>number</i>											<i>percentage</i>
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	60	59	55	42	49	29	32	46	102	45	37	
Spring	15	19	15	10	14	8	14	17	5	12	8	25%
Summer	9	8	11	12	14	9	6	7	76	8	7	32%
Autumn	16	16	13	10	2	6	6	10	9	10	10	19%
Winter	20	16	16	10	19	6	6	12	12	15	12	25%

Table 2.11 Fires with fire related fatalities, by hour of the day of fire start, since 2000

<i>number</i>	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	53	54	58	46	40	45	28	32	46	29	42	36
0	2	3	3	3	1	4	1	1	3	1	2	2
1	-	1	2	6	2	3	2	2	2	2	2	2
2	5	4	1	5	2	2	2	2	2	2	3	2
3	2	3	3	2	2	1	-	2	2	1	2	1
4	1	3	6	1	1	2	1	2	1	1	2	-
5	5	-	3	1	2	-	1	1	-	2	2	1
6	4	1	1	1	1	3	-	2	3	2	3	1
7	1	1	3	1	1	-	1	-	-	3	-	4
8	2	3	-	1	1	2	1	-	3	1	2	-
9	1	3	5	2	-	1	1	-	2	2	-	4
10	3	2	1	3	2	3	2	3	4	-	2	-
11	1	1	1	-	2	1	-	-	1	2	2	1
12	3	-	-	-	4	2	1	-	2	2	1	1
13	1	-	1	1	2	-	-	1	-	2	1	3
14	2	1	2	1	1	5	2	3	5	1	4	-
15	-	2	3	3	1	4	1	2	1	-	2	-
16	2	5	3	3	3	1	1	4	2	-	1	1
17	6	2	1	2	3	1	3	-	3	1	2	2
18	-	1	5	-	2	2	-	-	4	-	1	3
19	4	4	2	-	1	1	3	-	2	3	1	2
20	4	2	1	4	1	3	1	2	1	-	2	-
21	1	3	3	1	1	3	1	3	1	1	3	2
22	2	4	5	2	4	1	1	1	1	-	1	-
23	1	5	3	3	-	-	2	1	1	-	1	4

Note: the hour is the time of call; when the brigade received a confirmed address for the incident

Table 2.12 Fire related fatalities, by hour of the day of fire start, since 2000

<i>number</i>	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	59	60	59	55	42	49	29	32	46	102	45	37
0	4	3	3	8	1	5	1	1	3	71	2	2
1	-	1	2	7	2	4	2	2	2	2	2	2
2	6	8	1	5	3	2	2	2	2	2	4	2
3	2	4	3	2	3	1	-	2	2	1	2	1
4	1	3	6	2	1	2	1	2	1	3	3	-
5	7	-	4	1	2	-	1	1	-	2	2	1
6	4	2	1	1	1	3	-	2	3	2	3	1
7	1	1	3	1	1	-	1	-	-	4	-	4
8	2	3	-	1	1	2	1	-	3	1	2	-
9	1	3	5	2	-	1	1	-	2	2	-	4
10	3	2	1	3	2	3	2	3	4	-	3	-
11	1	1	1	-	2	1	-	-	1	2	2	1
12	3	-	-	-	4	2	1	-	2	2	1	1
13	1	-	1	1	2	-	-	1	-	2	1	3
14	2	1	2	2	1	5	2	3	5	1	4	-
15	-	2	3	3	1	4	1	2	1	-	2	-
16	2	5	3	3	3	1	1	4	2	-	1	1
17	7	2	1	2	3	2	3	-	3	1	2	2
18	-	1	5	-	2	2	-	-	4	-	1	3
19	4	4	2	-	1	1	3	-	2	3	1	2
20	4	2	1	4	1	3	1	2	1	-	2	-
21	1	3	3	1	1	4	2	3	1	1	3	2
22	2	4	5	2	4	1	1	1	1	-	1	-
23	1	5	3	4	-	-	2	1	1	-	1	5

Note: the hour is the time of call; when the brigade received a confirmed address for the incident

Table 2.13 Location of fire start in accidental dwelling fires with fire related fatalities, since 2005

<i>number</i>	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	44	49	36	36	34	25	23	38	26	35	30
Living room	19	15	14	15	14	7	8	13	7	10	12
Bedroom	12	14	8	11	12	10	5	13	11	14	7
Kitchen	6	6	2	4	3	3	1	6	4	5	3
Bedsitting room	1	8	2	-	1	1	3	1	-	1	2
Other	1	0	4	3	2	2	-	1	1	-	3
Bathroom/Toilet	-	3	1	2	-	-	4	2	-	3	-
Corridor/Hall	3	2	2	-	1	-	1	-	-	-	1
Not known	2	1	2	-	-	-	1	1	1	2	2
Under stairs (enclosed, storage area)	-	-	1	1	1	1	-	-	1	-	-
Conservatory	-	-	-	-	-	1	-	1	1	-	-

Table 2.14 Location of fire start other property types (fires with fire related deaths), since 2005

<i>number</i>	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Other property types	2	9	9	3	8	3	8	6	2	5	5
Non Residential	-	5	-	-	3	1	1	2	-	2	1
Garage	-	4	-	-	-	-	-	2	-	-	-
Other	-	1	-	-	2	1	1	-	-	-	1
Office	-	-	-	-	-	-	-	-	-	2	-
External structures	-	-	-	-	-	-	-	-	-	-	-
Roof	-	-	-	-	-	-	-	-	-	-	-
Shop floor/Showroom/Display hall	-	-	-	-	-	-	-	-	-	-	-
Store room	1	-	-	-	1	-	-	-	-	-	-
External fittings	-	-	-	-	-	-	-	-	-	-	-
Kitchen	-	-	-	-	-	-	-	-	-	-	-
Other Residential	-	3	1	-	1	-	2	1	-	2	-
Bedroom	-	3	-	-	1	-	2	1	-	2	-
Living room	1	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-
Bedsitting room	-	-	1	-	-	-	-	-	-	-	-
Outdoor	-	1	6	1	1	1	1	3	1	1	3
Other	-	-	2	1	1	1	-	2	-	-	1
On or near tracks or paths	-	-	3	-	-	-	1	-	-	-	1
In open area next to housing	-	1	1	-	-	-	-	1	-	1	1
Transport	-	-	2	2	3	1	4	-	1	-	1
Driver/Passenger area	-	-	-	2	1	1	3	-	1	-	-
Not known	-	-	-	-	1	-	-	-	-	-	1
Other	-	-	1	-	-	-	1	-	-	-	-
Engine	-	-	1	-	1	-	-	-	-	-	-

Table 2.15 Fires with fire related deaths, by source of ignition, since 2005

<i>number</i>	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	54	58	46	40	45	28	32	46	29	42	36
Smoking related	15	20	10	15	23	12	14	22	11	9	9
Matches and candles	5	10	9	5	6	5	6	6	3	10	4
Naked flame	14	5	9	3	4	2	5	5	2	8	7
Not known/recorded	3	11	6	6	8	3	2	5	6	6	8
Heating equipment	3	4	3	4	1	1	2	1	2	3	5
Cooking appliance	6	4	2	3	1	2	-	4	1	2	2
Other domestic style appliance	3	2	4	-	1	1	-	1	4	1	1
Electric lighting	3	-	1	2	-	-	1	1	-	3	-
Electricity supply	1	1	-	2	-	2	-	-	-	-	-
Vehicles only	1	-	1	-	1	-	1	-	-	-	-
Fuel/Chemical	-	1	-	-	-	-	1	1	-	-	-
Industrial equipment	-	-	1	-	-	-	-	-	-	-	-

Table 2.16 Dwelling fires with fire related deaths, by source of ignition, since 2005

<i>number</i>	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	47	49	37	37	35	25	23	38	27	36	30
Smoking related	13	17	6	14	19	9	11	19	10	8	8
Matches and candles	5	9	6	5	4	5	6	6	3	9	3
Not known/recorded	3	7	6	5	6	3	2	3	5	4	7
Naked flame	10	4	8	2	3	2	2	4	2	6	4
Heating equipment	3	4	3	4	1	1	1	1	2	3	5
Cooking appliance	6	4	2	3	1	2	-	3	1	2	2
Other domestic style appliance	3	2	4	-	1	1	-	1	4	1	1
Electric lighting	3	-	1	2	-	-	1	1	-	3	-
Electricity supply	1	1	-	2	-	2	-	-	-	-	-
Fuel/Chemical	-	1	-	-	-	-	-	-	-	-	-
Industrial equipment	-	-	1	-	-	-	-	-	-	-	-

Chapter 3 | Characteristics of the people who die in the home

This chapter looks at the characteristics of people who die in the home.

Why people die in fires

The factors that influence the chances of a fire casualty becoming a fire fatality are complex. Some of the main contributors include:

- how able the person was to respond to the fire (i.e. were they mobile; were they awake; were they impaired by drugs or alcohol);
 - how early the fire is discovered;
 - how quickly the brigade is called;
 - the materials involved in the fire;
 - the size and construction of the room/building;
 - the proximity of the victim to the fire;
- as well as the arrival time and response of the brigade.

The Grenfell Tower fire

The fire at Grenfell Tower in June 2017 has changed the profile of the people who die in fires from the trends that have been seen in the years before. Most of the people who died at Grenfell were under 65 (years) and many were of black and minority ethnic origin. However, the information the LFB has recorded about the Grenfell victims has been supplied by the Metropolitan Police Service and is the only information that has been made publicly available. At this time, that includes the age of the victims, but not the specific detail of their ethnic origins. This information will be confirmed by the Grenfell Tower Public Inquiry and the LFB will update its records at that time.

Age of fire fatalities

(Table 3.1 and 3.2)

It is unusual for young children to die in fires. In the three years before the Grenfell Tower fire, there were no deaths of people aged 0 to 15. Most of the people who die in fires are usually over 65. In the three years before the Grenfell Tower fire, 56 per cent of those that died were age 65 or over. However, in 2019 this went down to 24 per cent, 20 per cent lower than the ten year average distribution. This is still disproportionately high when compared to the age demographic of London where around only 12 per cent of Londoner's are aged 65 and over.

Including those that died at Grenfell Tower, the average age distribution is 5 per cent 0-15 years; 50 per cent 16-64 years; and 44 per cent aged 65 years and over.

Do you know the next fire fatality?

This is an older person aged 65 or over who lives alone. Where they live, or the type of property, doesn't matter. However, their home will be unsafe from the risks of fire and without adequate fire detection. They will have reduced mobility and find it hard to walk unaided. As such, they will spend most of their time in one room of their home and often this can become a bed/sitting room. This person is a smoker, uses candles or has other naked flames in their home.

Other than a reduced mobility, this person also has other health implications (such as dementia or Parkinson's, for example) which affects the primary senses, they could also be at risk of neglect. They may have an impaired judgement or become forgetful or disorientated; either through a health issue, or as a result of their medication or from drinking. There may be signs of previous fire 'near misses'; this could be cigarette burn marks on clothing or furnishing, or scorch marks from cooking or using candles. This person either receives, or would benefit from, some care and support (from a local authority, relative or friend, or other care provider). Any combination of these factors can undermine the ability of a person to react to a fire.

If you know a person who fits this description, they would benefit from a home fire safety visit and you should contact your local fire service.

This is the profile the LFB use to target its fire safety work in people's homes

Gender of fire fatalities

(Table 3.4 and 3.5)

On average, 58 per cent of those that died in fire are male and 42 per cent female. When compared to the 50/50 London gender demographic, this suggests that men are more likely to be victims of fatal fires than women.

Looking at the gender breakdown by age, shows that 45 per cent of those that die in fires are men over the age of 40.

Ethnicity of fire fatalities

(Table 3.6 and 3.7)

On average, 63 per cent of those that died in fire were white, while 38 per cent were from other minority ethnic groups. This compares with the London ethnic demographic which is around 59 per cent white and 41 per cent other ethnic origin.

2019 Case Study

The following incident took place in 2019 and highlights the key characteristics and issues that may contribute to a fatal fire.

Cause of fire:	Unsafe use of smoking materials
Name:	Mrs D
Age :	78
Lived alone:	Yes
Smoker:	Yes
Mobility issues:	Yes
Other medical conditions	Yes
Smoke detection	Yes - Hard wired single point smoke detection with a battery backup
Telecare	Yes - Not linked to smoke detection
Home oxygen user	Yes
In receipt of care	Yes

Mrs D met the criteria of a high-risk person vulnerable to fire; one of the most crucial was that she was a smoker. There was evidence of historical burns on furniture and some clothing, indicating prior near misses with cigarettes. Furthermore, an ashtray was found on the bed, which suggested Mrs D smoked in bed. This was made more hazardous as an oxygen concentrator was in the immediate vicinity. Mrs D had

several medical conditions, including COPD and hypertension. She also had mobility issues for which she required a Zimmer frame and required assistance from a carer to dress and wash. The cause of the fire was unsafe use of smoking materials, Mrs D accidentally dropped a cigarette and due to her mobility issues was unable to escape the resulting fire.

A telecare system was installed at the property in October 2010. This consisted of a lifeline unit, allowing activation of an alarm, pendant and a dialogue system with the call centre. The system was not linked to smoke detection. The pendant was found on a nearby table at the scene and was not activated on the day of the fire. Mrs D had previously had contact with the London Fire Brigade (LFB) in the form of Home Fire Safety Visits in April 2018 and August 2019. It was during the latter visit that fire-retardant bedding (FRB) was provided to her son as she was in hospital and not present. The FRB was discovered at the scene in a storage room on top of the laundry.

The Brigade was alerted to the fire by another resident of the building who smelt burning and could see smoke coming from Mrs D's flat. Upon investigation they found Mrs D standing behind the door with the aid of a Zimmer frame. They assisted her to a communal walkway outside the front door. The crews cared for her until the arrival of the London Ambulance Service (LAS). Mrs D was then transferred to hospital, where she died.

Following a review of Mrs D's death, the London Fire Brigade has taken steps to address the key issues with a view to preventing future deaths. This includes highlighting the need to take steps to record fire safety information, including information about fire-retardant bedding (FRB) in care plans. Work is also underway to promote the importance of linking smoke detection to telecare systems.

Table 3.1 Fire deaths, by age band, since 2000

	<i>number</i>												<i>percentage</i>
	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	59	60	59	55	42	49	29	32	46	102	45	37	
00 to 15	6	7	1	5	-	1	-	-	-	17	1	1	5%
16 to 64	27	33	30	29	20	26	14	13	20	54	20	24	50%
65 and over	25	20	28	21	22	22	15	19	26	31	24	9	44%
Unknown	1	-	-	-	-	-	-	-	-	-	-	3	1%

Note: average distribution is for the ten years to 2019

Table 3.2 Fire deaths, by age, since 2000

	<i>number</i>												<i>percentage</i>
	2000	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	59	60	59	55	42	49	29	32	46	102	45	37	
00 to 01	1	-	-	-	-	-	-	-	-	2	-	-	0%
01 to 04	1	3	1	1	-	1	-	-	-	5	-	-	2%
05 to 09	1	4	-	2	-	-	-	-	-	4	1	-	1%
10 to 14	2	-	-	2	-	-	-	-	-	6	-	1	2%
15 to 19	1	-	-	-	-	1	-	-	-	2	-	1	1%
20 to 24	3	2	-	3	1	2	-	-	2	4	-	-	2%
25 to 29	2	-	1	3	-	2	1	1	1	8	-	-	3%
30 to 34	5	4	4	2	4	5	1	1	2	8	-	1	6%
35 to 39	2	2	2	3	1	2	3	1	1	4	4	2	5%
40 to 44	4	3	5	4	2	2	-	3	1	4	4	5	6%
45 to 49	3	7	1	3	4	1	1	1	2	3	4	4	5%
50 to 54	6	6	5	3	4	5	1	5	5	5	2	5	8%
55 to 59	1	6	4	5	2	4	4	-	2	5	4	3	7%
60 to 64	1	3	8	3	2	2	3	1	4	11	2	3	8%
65 to 69	3	5	7	1	4	2	3	5	3	8	2	2	7%
70 to 74	3	2	5	2	3	5	2	3	8	8	4	1	8%
75 to 79	5	4	2	4	3	7	-	3	5	8	5	2	8%
80 to 84	3	4	7	5	6	3	3	3	3	4	9	1	9%
85 to 89	7	3	3	6	1	1	4	3	4	3	3	2	6%
90 plus	4	2	4	3	5	4	3	2	3	-	1	1	5%
Unknown	1	-	-	-	-	-	-	-	-	-	-	3	1%

Note: average distribution is for the ten years to 2019

Table 3.3 Fire deaths, by age and property type, since 2005

<i>number</i>											
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	60	59	55	42	49	29	32	46	102	45	37
Dwelling	53	50	46	38	39	26	23	38	100	38	30
00 to 15	7	1	5	-	1	-	-	-	17	1	1
16 to 64	29	24	21	17	17	11	8	15	53	14	19
65 and over	17	25	20	21	21	15	15	23	30	23	9
Unknown	-	-	-	-	-	-	-	-	-	-	1
Non Residential	4	5	-	-	5	1	2	4	-	2	2
00 to 15	-	-	-	-	-	-	-	-	-	-	-
16 to 64	3	5	-	-	5	1	-	3	-	2	1
65 and over	1	-	-	-	-	-	2	1	-	-	-
Unknown	-	-	-	-	-	-	-	-	-	-	1
Other Residential	1	3	1	-	1	-	2	1	-	2	-
00 to 15	-	-	-	-	-	-	-	-	-	-	-
16 to 64	-	1	-	-	1	-	1	-	-	1	-
65 and over	1	2	1	-	-	-	1	1	-	1	-
Unknown	-	-	-	-	-	-	-	-	-	-	-
Outdoor	1	1	6	2	1	1	1	3	1	1	3
00 to 15	-	-	-	-	-	-	-	-	-	-	-
16 to 64	-	-	6	2	1	1	1	2	-	1	3
65 and over	1	1	-	-	-	-	-	1	1	-	-
Unknown	-	-	-	-	-	-	-	-	-	-	-
Transport	1	-	2	2	3	1	4	-	1	2	2
00 to 15	-	-	-	-	-	-	-	-	-	-	-
16 to 64	1	-	2	1	2	1	3	-	1	2	1
65 and over	-	-	-	1	1	-	1	-	-	-	-
Unknown	-	-	-	-	-	-	-	-	-	-	1

Table 3.4 Fire deaths by gender, since 2005

<i>number</i>											
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	60	59	55	42	49	29	32	46	102	45	37
Female	30	26	19	22	23	9	5	14	51	22	17
Male	30	33	36	20	26	20	27	32	51	23	20

Table 3.5 Fire deaths by gender and age, since 2005

<i>number</i>												<i>percentage</i>
	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	60	59	55	42	49	29	32	46	102	45	37	
Female	30	26	19	22	23	9	5	14	51	22	17	42%
00 to 19	5	1	3	-	2	-	-	-	12	-	1	4%
20 to 39	5	2	2	3	5	2	-	-	17	2	2	7%
40 to 59	7	8	5	6	4	2	1	4	5	6	9	10%
60 to 79	8	8	3	5	8	2	2	5	16	6	3	12%
80 and over	5	7	6	8	4	3	2	5	1	8	1	9%
Unknown	-	-	-	-	-	-	-	-	-	-	1	0%
Male	30	33	36	20	26	20	27	32	51	23	20	58%
00 to 19	2	-	2	-	-	-	-	-	8	1	1	2%
20 to 39	4	6	10	3	7	3	4	6	7	2	1	10%
40 to 59	15	8	10	6	9	4	8	8	14	10	8	17%
60 to 79	7	14	7	8	6	7	11	13	16	6	5	19%
80 and over	2	5	7	3	4	6	4	5	6	4	3	9%
Unkown	-	-	-	-	-	-	-	-	-	-	2	0%

Table 3.6 Fire deaths, by BAME and non-BAME, since 2010

	<i>number</i>										<i>percentage</i>
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average distribution
	59	55	42	49	29	32	46	102	45	37	
Black and minority ethnic (BAME)	12	24	7	13	9	14	15	9	14	14	38%
White	43	28	34	33	19	18	30	22	28	12	63%
Not recorded	4	3	1	3	1	-	1	71	3	11	

The fatalities categorised as 'not recorded' in 2017 are from the Grenfell Tower fire and are awaiting categorisation
Average distribution is over five years, and excludes those 'not recorded'

Table 3.7 Fire deaths, by ethnicity, since 2010

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	59	55	42	49	29	32	46	102	45	37
Arab*	-	-	-	-	-	1	-	2	-	-
Bangladeshi	-	-	-	-	-	-	-	-	-	-
Black African	4	1	-	1	1	-	-	1	5	1
Black Caribbean	1	2	4	4	2	6	4	-	4	3
Black Other	1	1	1	-	2	1	1	1	1	2
Chinese	-	-	-	-	-	-	-	1	-	-
Indian	2	5	-	1	2	2	3	-	3	2
Latin American*	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	1	1	-	-	-
Other Asian	4	14	2	6	2	3	6	4	1	5
Pakistani	-	1	-	1	-	-	-	-	-	1
White	43	28	34	33	19	18	30	22	28	12
White - Gypsy or Irish Traveller	-	-	-	-	-	-	-	-	-	-
Not recorded	4	3	1	3	1	-	1	71	3	11

Ethnicity data only collected from 2009.

Categories of Arab and Latin American introduced from March 2015

