Fire and rescue incident statistics, England: year ending December 2018

This release contains statistics about incidents attended by fire and rescue services (FRSs) in England for the year ending December 2018. The statistics are sourced from the Home Office’s online Incident Recording System (IRS) and include statistics on all incidents, fire-related fatalities and casualties from fires.

Key results

FRSs attended 576,586 incidents in the year ending December 2018. This was a two per cent increase compared with the previous year (565,777). Of these incidents, there were 177,844 fires. This was a five per cent increase compared with the previous year (170,007) and was driven by an 11 per cent increase in secondary fires.

There were 261 fire-related fatalities in the year ending December 2018 compared with 338 (including 71 from the Grenfell Tower fire) in the previous year (a decrease of 23%).

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1 Incident summary

Incidents that FRSs attend are categorised into three main types - fires attended, non-fire incidents and fire false alarms.

Key results

In the year ending December 2018:

- **576,586 incidents were attended** by FRSs. This was a two per cent increase compared with the previous year (565,777). This was driven by an increase in the number of fires attended, and in particular, in secondary fires. (Source: FIRE0102)

- FRSs attended **231,122 fire false alarms**. This was a three per cent increase compared with the previous year (224,034). Fire false alarms ‘due to apparatus’ accounted for two thirds (66%) of fire false alarms. (Source: FIRE0104)

- Of all incidents attended by FRSs, **fires accounted for 31 per cent, fire false alarms 40 per cent and non-fire incidents 29 per cent.** (Source: FIRE0102)

The number of incidents attended by FRSs in England peaked in 2003/04, at over one million incidents. For around a decade, there was a general decline in all three categories of incidents attended and between 2012/13 and 2015/16 there were around half a million a year. Since 2015/16 this number has risen to around 577,000 incidents in the year ending December 2018.

In contrast to the earlier decreases (caused by a reduction in fire and fire false alarm incidents), the increase in total incidents between 2014/15 and the year ending December 2018 has been predominantly driven by a 34 per cent increase in non-fire incidents over this time. This was mainly due to an increase in FRSs attending medical co-responding incidents. However, from September 2017 these incidents started to show a decrease (described further below).

Chart 1: Total incidents attended by type of incident, England; year ending December 2018

Source: FIRE0102
Notes:
1. Non-fire incidents include non-fire false alarms
2 Fires attended

Fire incidents are broadly categorised as primary, secondary or chimney fires depending on the location, severity and risk levels of the fire, and on the scale of response needed from FRSs to contain them.

- **Primary fires** are those that meet at least one of the following criteria – occurred in a (non-derelict) building, vehicle or outdoor structure or involved a fatality, casualty or rescue or were attended by five or more pumping appliances.

- **Secondary fires** are generally small outdoor fires, not involving people or property.

**Key results**

In the year ending December 2018:

- **FRSs attended 177,844 fires.** This was a five per cent increase compared with the previous year (170,007). This increase can be attributed to the **greatest number of secondary fires in any quarter since 2011/12 Q1 – Apr to Jun** (42,945 in 2017/18 Q2 – Jul to Sept 2018) linked to the hot, dry summer in 2018. There were 11 per cent more secondary fires in the year ending December 2018 (100,871) than in the year ending December 2017 (91,159). Secondary fires display seasonality, with more occurring during the hotter and drier months, as highlighted in Chart 2 below. (Source: FIRE0102)

- There were **73,260 primary fires** (41% of the 177,844 fires attended). This was a two per cent decrease compared with the previous year (74,916). The main driver for this decrease was in road vehicle fires (5% decrease) and the smaller category of other building fires (6% decrease). Other outdoor fires\(^1\) increased by 19 per cent, linked to the hot, dry summer in 2018, as with secondary fires, but these are a relatively small category of primary fires. (Source: FIRE0102)

- **Total deliberate fires decreased by five per cent** from 83,080 to 79,335. This reflected large decreases in relatively small categories (23% for other buildings, 12% for road vehicles) and a small decrease (2%) in the relatively large deliberate secondary fires category which makes up three-quarters (75%) of all deliberate fires. (Source: FIRE0401)

- Of the 29,956 primary dwelling fires attended by FRSs, three-quarters (75%) were in houses, bungalows, converted flats and other properties, whilst a quarter (25%) were in purpose-built flats. When looking at fires in purpose-built flats in more detail, 16 per cent of all dwelling fires were in purpose-built low-rise (1-3 storeys) flats/maisonettes; six per cent were in purpose-built medium-rise (4-9 storeys) flats and three per cent were in purpose-built high-rise (10+ storeys) flats. FRSs attended 809 fires in purpose-built high-rise (10+ storeys) flats, an eight per cent increase compared with the previous year (748). (Source: FIRE0205)

The total number of fires attended by FRSs decreased for around a decade – falling by two thirds from a peak of around 474,000 in 2003/04 to around 154,000 in 2012/13. The total number of fires has fluctuated since 2012/13, although the year ending December 2018 showed the highest figure over this time (177,844).

Whilst primary fires decreased by two per cent compared with the year ending December 2017, secondary fires increased by 11 per cent. This was mainly because the number of secondary fires\(^1\) Fires in either primary outdoor locations (that is, aircraft, boats, trains and outdoor structures such as post or telephone boxes, bridges, tunnels etc.), or fires in non-primary outdoor locations that have casualties or five or more pumping appliances attending.
Attended in 2018/19 Q2 (42,945) was the fourth highest quarterly figure since the IRS was introduced in April 2009 and the highest since 2011/12 Q1. This can be attributed to the hot, dry summer experienced in much of England in 2018.

The number of secondary fires attended throughout the year shows seasonality due to the weather, with hotter and drier weather, generally in quarters one and two (April to September), showing more secondary fires compared to the colder and wetter months in quarters three and four (October to March).

The exceptional figures (the wet summer of 2012 and the hot summer of 2018) are highlighted on Chart 2 below. The moving quarterly average has been relatively flat since 2013/14 Q1.

Chart 2: Total secondary fires attended, England; 2009/10 Q1 to 2018/19 Q3

Source: FIRE0102
Notes: 1. A “moving quarterly average” takes the mean of the previous four quarterly figures to show the trend of the series which removes seasonality.
3 Non-fire incidents attended

FRSs attend many types of incident that are not fires or fire false alarms, these are known as non-fire incidents or special service incidents. Examples include flooding incidents, responding to road traffic collisions, animal assistance and release type incidents such as lift releases and effecting entry/exit (a complete list can be found in fire data table FIRE0902).

Key results

There was a general decline in the number of non-fire incidents attended between 2007/08 and 2014/15. Over the next two years there was a large increase of almost two-fifths, taking the total to above that in 2007/08, before stabilising in 2017/18.

In the year ending December 2018:

- FRSs attended 167,620 non-fire incidents. This was a two per cent decrease compared with the previous year (171,736). This small decrease was a mixed picture with a large decrease in medical incidents being offset by increases in other non-fire incident types. (Source: FIRE0901, FIRE0902)

- The five largest non-fire incident types were road traffic collisions (30,872 up 4% from 29,744 in the previous year), effecting entry/exit (24,876, up 7% from 23,291 in the previous year), medical incidents (22,784 down 39% from 37,317 in the previous year), flooding incidents (16,333 up 29% from 12,674 in the previous year) and assisting other agencies (14,521 up 14% from 12,728 in the previous year). (Source: FIRE0901, FIRE0902)

- FRSs attended 22,784 medical incidents. This was a 39 per cent decrease compared with the previous year (37,317). The removal of support for the emergency medical responding trials by the Fire Brigades Union in September 2017 (described further below) is likely to be driving this decrease. (Source: FIRE0901, FIRE0902)

- When excluding medical incidents, FRSs attended 144,836 other non-fire incidents, an eight per cent increase compared with the previous year (134,419). This increase was driven by flooding incidents but also assisting other agencies and effecting entry/exit. (Source: FIRE0901, FIRE0902)
Non-fire incidents attended

Chart 3: Total non-fire incidents attended by FRSs, England; year ending December 2011 to year ending December 2018

Source: FIRE0901
Notes: Consistent detailed non-fire incident information was only available from April 2010.

From 2014/15 to 2016/17 around two-thirds (61%) of the increase in non-fire incidents was accounted for by a further rise in the number of medical incidents attended. The large increase in the number of medical incidents attended coincided with the introduction, in 2015, of the National Joint Council (NJC) supported trials of emergency medical responding (EMR) where FRSs formed agreements with ambulance trusts to undertake health and care related work, in particular, co-responding. The number of such incidents peaked in 2016/17, but on 18 September 2017 the Fire Brigades Union, who represent the employees' side of the NJC, removed their support for the EMR trials. As a result, some of this work has now stopped and it is likely that this is driving the recent decrease in such incidents.

For more detailed information on EMR incidents, see FIRE0902 and ‘Detailed analysis of non-fire incidents’.
Fire-related fatalities and casualties

As the Incident Recording System (IRS) is a continually updated database, the statistics published in this release may not match those held locally by FRSs and revisions may occur in the future (see the revisions section for further detail). This may be particularly relevant for fire-related fatalities where a coroner’s report could lead to revisions in the data some time after the incident. It should also be noted that the numbers of fire-related fatalities are prone to year-on-year fluctuations due to relatively low numbers.

Fire-related fatalities are those that would not have otherwise occurred had there not been a fire. For the purpose of publications, a fire-related fatality includes those that were recorded as ‘don’t know’.

Non-fatal casualties are those resulting from a fire, whether the casualty was caused by the fire or not.

Key results

In the year ending December 2018:

- There were 261 fire-related fatalities (see key results for chart) compared with 338 (including 71 from the Grenfell Tower fire) in the previous year (a decrease of 23%). Fire-related fatalities had been on a downward trend since the 1980s but have plateaued in recent years. (Source: FIRE0502)

- There were 6,902 non-fatal casualties, a four per cent decrease compared with the 7,199 in the previous year. Of these, 3,129 were casualties requiring hospital treatment, also a four per cent decrease compared with the 3,259 in the previous year. (Source: FIRE0502)

- A very small proportion of fires resulted in a fire-related fatality: 236 out of the 177,844 fires (0.13%). This proportion was slightly lower than the previous year, when there were 245 fires with a fire-related fatality out of the 170,007 fires (0.14%). There were two fires which resulted in a fatality, from the 809 fires in purpose-built high-rise (10+ storeys) flats in the year ending December 2018.

The number of fire-related fatalities in England has been on a general downward trend since 1981/82, when comparable figures first became available, though the numbers have fluctuated due to the relatively small numbers involved.

The number of non-fatal casualties in fires in England had been on a downward trend since the mid-1990s, but it appears the downward trend has slowed in recent years.

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2 For more detailed technical definitions of fire-related and non-fatal casualties, see the Fire Statistics Definitions document. A further breakdown of the different types of non-fatal casualties is available in the published fire data tables.
Chart 4: Total non-fatal casualties in fires by injury severity, England; year ending December 2010 to year ending December 2018

Source: FIRE0502
Notes: These figures are for all casualties in fires, whether the fire caused the casualty or not.

The Grenfell Tower fire

This box contains information provided by London Fire Brigade\(^3\) on the fire that took place at Grenfell Tower on 14 June 2017. The data in this release includes records of incidents that had reached the IRS by 13 March 2019, when a snapshot of the database was taken. As such, figures on the Grenfell Tower fire may be revised in subsequent releases. When the snapshot of the database was taken London Fire Brigade reported:

- 71 fire-related fatalities
- 109 non-fatal casualties, of which:
  - 67 were ‘hospital severe’
  - 10 were ‘hospital slight’
  - 1 required ‘first aid’
  - 31 had ‘precautionary checks’

On 29 January 2018, a further victim, who had initially survived the fire, passed away in hospital. As a result, a figure of 72 fatalities from the Grenfell Tower fire has been widely cited in the media and the Grenfell Tower inquiry honoured her memory at the commemoration hearings. However, at the time of writing the Metropolitan Police had not yet added her to the official list of fatalities from the fire, pending the results of a coroner’s report which will determine whether her death was a direct result of the fire or caused by her pre-existing medical condition. She, therefore, remains counted in the list of non-fatal casualties pending a final decision from the coroner and the subsequent updating of any formal records in the police and fire systems regarding this case.

\(^3\) London Fire Brigade’s records of the number of fatalities are based on information provided by the Metropolitan Police Service. The fire-related fatalities figure of 80 was announced by the Metropolitan Police Service (MPS) on 10 July 2017. MPS have since revised this number to 71 fire-related fatalities on 16 November 2017. The non-fatal casualty numbers are derived from numbers published by the London Ambulance Service for people who attended hospital together with those recorded by the London Fire Brigade who received first aid or required a ‘precautionary check’.
5 Summary of changes over time

Below is a table comparing the year ending December 2018 with the year ending December 2017, five years previously in 2012/13 and ten years previously (where available) in 2007/08.

<table>
<thead>
<tr>
<th>Incident type</th>
<th>Year ending December 2018 compared with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year ending December 2017</td>
</tr>
<tr>
<td>576,586 all incidents</td>
<td>565,777 +2%</td>
</tr>
<tr>
<td>177,844 fires</td>
<td>170,007 +5%</td>
</tr>
<tr>
<td>73,260 primary fires</td>
<td>74,916 -2%</td>
</tr>
<tr>
<td>29,956 dwelling fires</td>
<td>30,455 -2%</td>
</tr>
<tr>
<td>26,926 accidental dwelling fires</td>
<td>27,204 -1%</td>
</tr>
<tr>
<td>100,871 secondary fires</td>
<td>91,159 +11%</td>
</tr>
<tr>
<td>231,122 fire false alarms</td>
<td>224,034 +3%</td>
</tr>
<tr>
<td>167,620 non-fire incidents</td>
<td>171,736 -2%</td>
</tr>
<tr>
<td>22,784 medical incidents</td>
<td>37,317 -39%</td>
</tr>
<tr>
<td>261 fire-related fatalities</td>
<td>338 -23%</td>
</tr>
<tr>
<td>198 fire-related fatalities in dwellings</td>
<td>268 -26%</td>
</tr>
<tr>
<td>6,902 non-fatal casualties</td>
<td>7,199 -4%</td>
</tr>
<tr>
<td>3,129 non-fatal casualties requiring hospital treatment</td>
<td>3,259 -4%</td>
</tr>
<tr>
<td>5,194 non-fatal casualties in dwellings</td>
<td>5,352 -3%</td>
</tr>
</tbody>
</table>

Source: Fire statistics data tables
Notes:
1. Medical incidents were first recorded in the IRS in 2009/10. This means a ten-year comparison is unavailable.
6 Further information

This release contains statistics about incidents attended by fire and rescue services (FRSs) in England. The statistics are sourced from the Home Office’s online Incident Recording System (IRS). This system allows FRSs to complete an incident form for every incident attended, be it a fire, a false alarm or a non-fire incident (also known as a Special Service). The online IRS was introduced in April 2009. Previously, paper forms were submitted by FRSs and an element of sampling was involved in the data compilation process.

Fire and Rescue Incident Statistics and other Home Office statistical releases are available from the Statistics at Home Office pages on the GOV.UK website.

Data tables linked to this release and all other fire statistics releases can be found on the Home Office’s ‘Fire statistics data tables’ page. The sections below state the most relevant tables for each section. The tables can be found here: https://www.gov.uk/government/statistical-data-sets/fire-statistics-data-tables


The information published in this release is kept under review, taking into account the needs of users and burdens on suppliers and producers, in line with the Code of Practice for Statistics. If you have any comments, suggestions or enquiries, please contact the team via email using firestatistics@homeoffice.gov.uk or via the user feedback form on the fire statistics collection page.

7 Revisions

The IRS is a continually updated database, with FRSs adding incidents daily. The figures in this release refer to records of incidents that occurred up to and including 31 December 2018. This includes incident records that were submitted to the IRS by 13 March 2019, when a snapshot of the database was taken for the purpose of analysis. As a snapshot of the dataset was taken on 13 March 2019, the statistics published may not match those held locally by FRSs and revisions may occur in the future. This is particularly the case for statistics with relatively small numbers, such as fire-related fatalities. For instance, this can occur because coroner’s reports may mean the initial view taken by the FRS will need to be revised; this can take many months, even years, to do so.

8 Changes to this release and future releases

This release has been published using an interim version of the new Home Office statistical release template. We welcome comments on the new format of release.
9 Other related publications

Home Office publish five other statistical releases covering fire and rescue services:

- **Detailed analysis of fires attended by fire and rescue services in England**: focuses on fires attended by fire and rescue services across England, and fire-related fatalities and non-fatal casualties in those fires; including analyses of the causes of fires and smoke alarms ownership and operation.

- **Detailed analysis of non-fire incidents attended by fire and rescue services, England**: focuses on non-fire incidents attended by fire and rescue services across England, including analysis on overall trends, fatalities and non-fatal casualties in non-fire incidents, and further detailed analysis of different categories of non-fire incidents.

- **Fire and rescue workforce and pensions statistics**: focuses on total workforce numbers, workforce diversity and information regarding leavers and joiners; covers both pension fund income and expenditure and firefighters’ pension schemes membership; and includes information on incidents involving attacks on firefighters.

- **Fire prevention and protection statistics, England**: focuses on trends in smoke alarm ownership, fire prevention and protection activities by fire and rescue services.

- **Response times to fires attended by fire and rescue services, England**: covers statistics on trends in average response times to fires attended by fire and rescue services.

The Ministry of Housing, Communities & Local Government publish one statistical release on fire:

- **English housing survey: fire and fire safety report**: focuses on the extent to which the existence of fire and fire safety features vary by household and dwelling type.

Fire statistics are published by the other UK nations:

Statistics for **Scotland** and **Wales** are published based on the IRS. **Northern Ireland** fire statistics are published by the Northern Ireland Fire and Rescue Service using data from a system similar to the Incident Recording System, which means that they are not directly comparable to English, Welsh and Scottish data.
Further information

National Statistics

These statistics have been assessed by the UK Statistics Authority to ensure that they continue to meet the standards required to be designated as National Statistics. This statistical bulletin is produced to the highest professional standards and is free from political interference. It has been produced by statisticians working in accordance with the Home Office’s Statement of compliance with the Code of Practice for Official Statistics, which covers Home Office policy on revisions and other matters. The Chief Statistician, as Head of Profession, reports to the National Statistician with respect to all professional statistical matters and oversees all Home Office National Statistics products with respect to the Code, being responsible for their timing, content and methodology. This means that these statistics meet the highest standards of trustworthiness, impartiality, quality and public value, and are fully compliant with the Code of Practice for Statistics.