Home Office

Fire and Rescue Incident Statistics: England, April 2016 to March 2017

Statistical Bulletin 13/17

10 August 2017

Contents

1 Key facts

This release presents statistics which cover the financial year 2016/17 (1 April 2016 to 31 March 2017) for fire and rescue services (FRSs) in England. These statistics do not cover the tragic events at Grenfell Tower on 14 June 2017. The results show:

- There were **558,963 incidents attended** by FRSs in 2016/17. This was a six per cent increase compared with the previous year (529,504 in 2015/16) but a 35 per cent decrease compared with ten years ago (854,371 in 2006/07). The total number of incidents was on a downward trend for around a decade before it was relatively flat between 2012/13 and 2014/15. Since then there have been two annual increases mainly driven by increases in non-fire incidents attended.

- For the first time, in 2016/17 **FRSs attended more non-fire incidents than fires**. Thirty-one per cent of all incidents attended by FRSs in 2016/17 were non-fire incidents compared with 29 per cent that were fires. In 2006/07 these percentages were 39 per cent (fires attended) and 19 per cent (non-fire incidents). The largest incident type continues to be fire false alarms (40 per cent in 2016/17).

- FRSs attended **173,579 non-fire incidents** in 2016/17. This was a 14 per cent increase compared with the previous year (152,813 in 2015/16). For around a decade, there was a general decline in the number of non-fire incidents. However the last two years have shown two large increases.

- In 2015/16, fire-related fatalities increased for the first time for several years, but this increase did not continue in 2016/17. There were **261 fire-related fatalities** in 2016/17 compared with 303 in 2015/16 (a decrease of 14 per cent). Fatality figures can fluctuate between years because the numbers are relatively small.

- There were **3,133 non-fatal casualties requiring hospital treatment**[1] in 2016/17. This was a five per cent decrease compared with the previous year (3,282 in 2015/16) and a 27 per cent decrease compared with five years ago (4,299 in 2011/12). It appears that the downward trend in non-fatal casualties in fires has slowed in the last few years.

- There were **7,081 non-fatal casualties in fires**[1] in 2016/17. This was an eight per cent decrease compared with the previous year (7,664 in 2015/16) and a 34 per cent decrease compared with ten years ago (10,783 in 2006/07).

- FRSs attended **161,770 fires** in 2016/17. This was virtually unchanged compared with the previous year (162,267 in 2015/16), but less than half compared with ten years ago (336,233 in 2006/07). The total number of fires attended by FRSs has been broadly stable since 2012/13.

[1] Casualty figures include casualties whether the injury was caused by the fire or not. Fatalities are only included if they are fire-related.

2 Introduction

In order to improve the timeliness and clarity of the Home Office's fire statistics, the annual and six-monthly Fire Statistics Monitors are being replaced by a quarterly Fire and Rescue Service Incident Statistics publication. The first of these new releases covers trends in incidents and fire-related casualties and fatalities for the financial year 2016/17. This will be updated and published on a quarterly basis with the next release due for publication in November covering the year July 2016 to June 2017.

More detailed statistics on fires, fire-related fatalities, casualties and false alarms and, for the first time non-fire incidents, will be published in two new statistical releases later in the year. These replace the previous Fire Statistics England publication.

Each time an FRS attends an incident in England, details of that incident are uploaded to the Home Office's Incident Recording System (IRS) by the FRS. The IRS is used as the source for all the statistics in this publication. More information on the IRS can be found in the IRS Guidance.

The IRS is a continually updated database, with FRSs adding incidents on a daily basis. The figures in this release refer to records of incidents that occurred up to 31 March 2017 (so it does not cover the tragic events at Grenfell Tower in June 2017) that had reached the IRS by 7 June 2017 when the database was "frozen" for the purpose of analysis. Because of the dataset being "frozen" on 7 June 2017 the statistics published may not match those held locally by FRSs and revisions may occur in the future. This can be particularly apparent for statistics with small numbers, such as fire-related fatalities[2].

This publication is accompanied by fire data tables, which can be found on the fire statistics data tables page which contains all data table on fire published by the Home Office.

The following tables have been updated and added as part of this publication:

Incidents attended: 0101, 0102, 0103 and 0104.

Dwelling fires attended: 0201, 0202 and 0205.

Non-dwelling fires attended: 0301, 0302, 0303 and 0306.

Deliberate fires: 0401 and 0402.

Fatalities and casualties: 0501 and 0502.

Non-fire incidents: 0901 and 0902.

Population: 1401.

[2] 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.

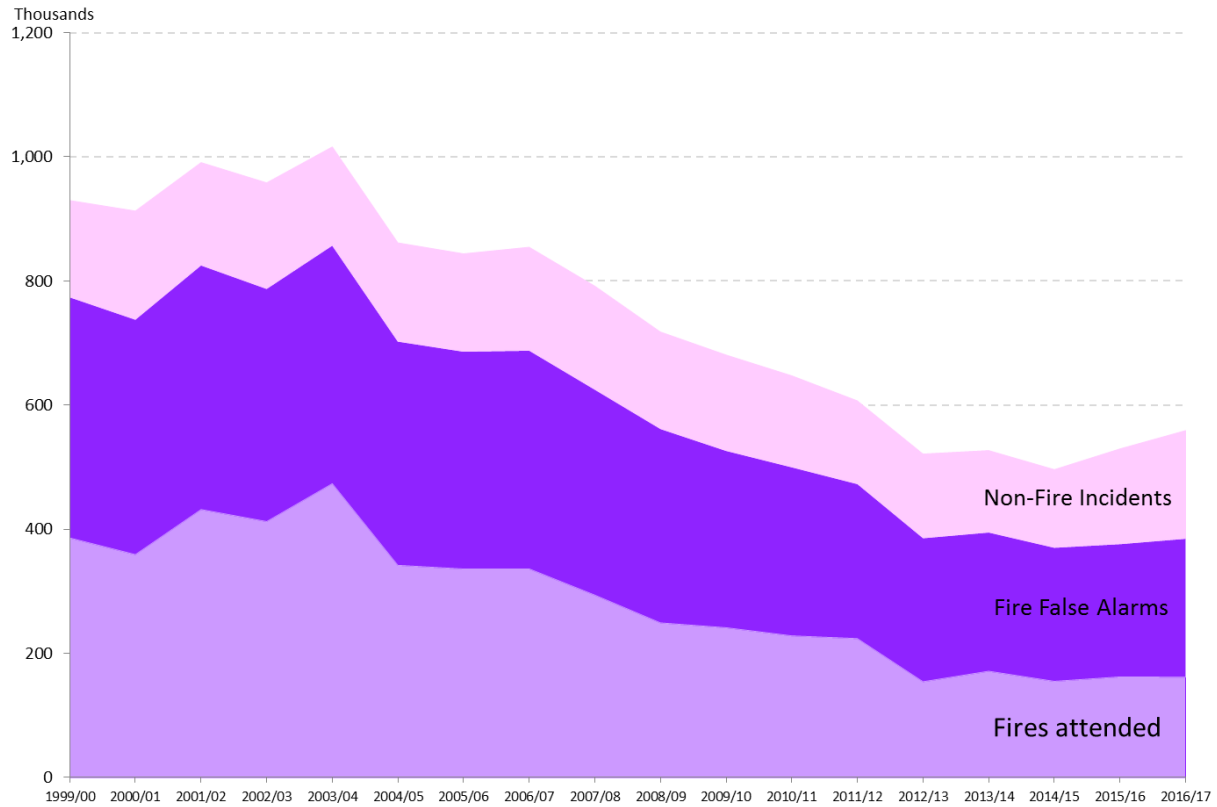
3 Types of incident

All incidents attended

The number of incidents attended by fire and rescue services (FRSs) in England, as shown in Figure 3.1, peaked in 2003/04, at over one million incidents. For around a decade, there was a general decline in all three categories of incidents (fires, fire false alarms and non-fire incidents) attended and by 2012/13 there were around half a million incidents attended (521,000). Since then the number has fluctuated but has been broadly stable, with a low of 496,000 incidents attended in 2015/16 and a high of 559,000 in 2016/17.

In contrast to the earlier decreases, the increases in total incidents in the past two years have been almost solely driven by a 39 per cent increase in non-fire incidents over this time, which is mainly down to an increase in FRSs attending medical co-responding incidents.

Figure 3.1 Total incidents attended by type of incident, England; 1999/00 to 2016/17

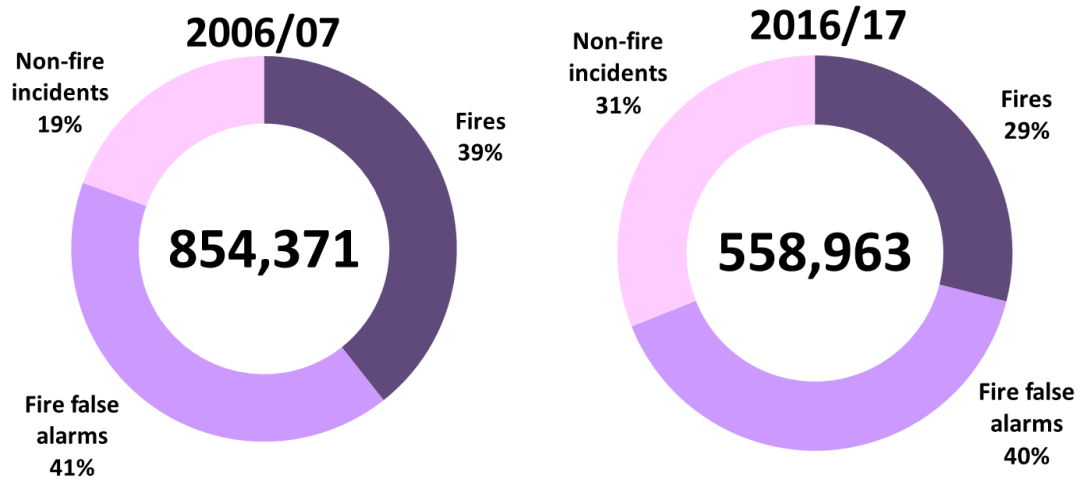


Source: FIRE0102

Of the total incidents attended in 2016/17, fires accounted for 29 per cent, non-fire incidents for 31 per cent and false alarms for 40 per cent (see Figure 3.2). Since 2004/05 false alarms have consistently been the most common type of incident attended, this has remained fairly constant over time ranging from 40 per cent in 2016/17 to 44 per cent in 2012/13. In contrast, over the past decade the proportion of fire incidents attended decreased from 39 per cent in 2006/07 to 29 per cent in 2016/17, whilst the proportion of non-fire incidents attended

increased from 19 per cent in 2006/07 to 31 per cent in 2016/17. In 2016/17, for the first time, FRSs attended more non-fire incidents than fires.

Figure 3.2 Total incidents attended by type of incident, England; 2006/07 and 2016/17



Source: FIRE0102

Specifically:

- **558,963 incidents were attended** by FRSs in 2016/17. This was a six per cent increase compared with the previous year (529,504 in 2015/16), in contrast to an eight per cent decrease compared with five years ago (606,875 in 2011/12) and a 35 per cent decrease compared with ten years ago (854,371 in 2006/07).

- For the first time since 1999/00 (when comparable records are available) **FRSs attended more non-fire incidents in 2016/17 than fires**. Thirty one per cent of all incidents attended by FRSs in 2016/17 were non-fire incidents compared with 29 per cent that were fire incidents. The proportion of non-fire incidents has continued to increase over the past decade from 19 per cent of all incidents in 2006/07, to 22 per cent in 2011/12 and 29 per cent in 2015/16.

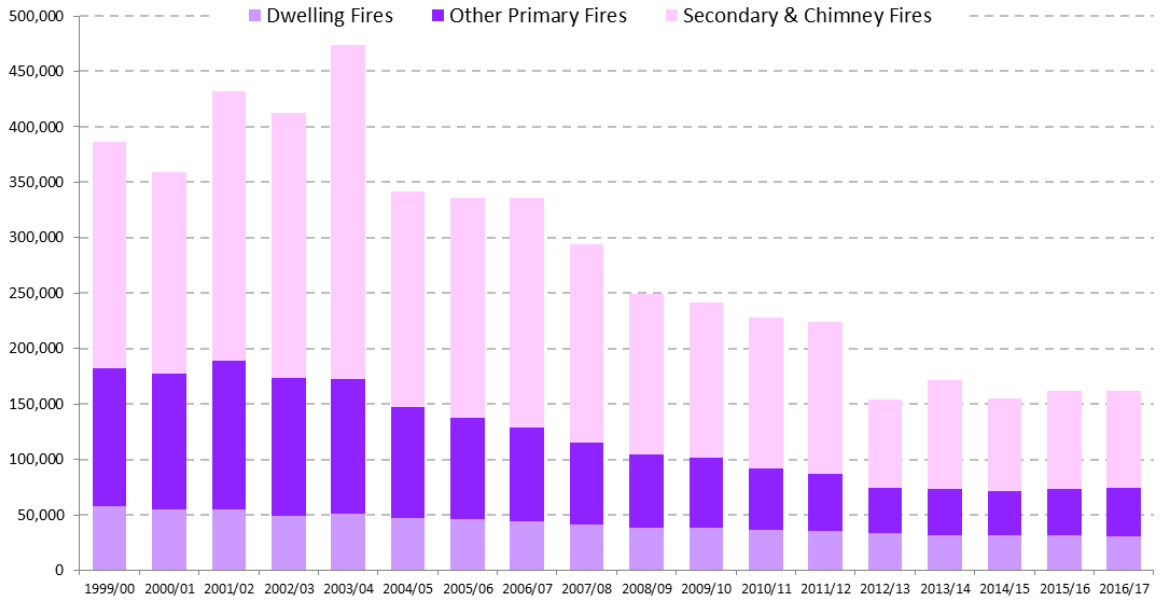
- Forty per cent of all incidents attended by FRSs in 2016/17 were **fire false alarms** – the largest category of incident. This is similar to figures over the past decade.

Further information on all incidents attended can be found in fire data tables 0101 and 0102.

Fires attended

The total number of fires attended by FRSs, as shown in figure 3.3 below, decreased for around a decade – falling from 474,000 in 2003/04 to 154,000 in 2012/13. Since then the total number of fires has been broadly stable ranging from 155,000 (in 2014/15) to 171,000 (in 2013/14) - it was 162,000 in 2016/17, a similar level to 2015/16.

Figure 3.3 Total fires attended by incident type, England; 1999/00 to 2016/17



Source: FIRE0102

The total number of fires attended in a single year can often be affected by the weather, as outdoor primary and secondary fires make up a large share of all fires (over half in 17 of the 18 years since these data became available in 1999/00). Over the past decade, secondary fires and road vehicles have shown the greatest decreases in fire incident types (59 and 51 per cent decreases respectively) while dwelling fires and chimney fires showed the smallest decreases (32 and 24 per cent decreases respectively).

Whilst the total number of fires was virtually unchanged between 2015/16 and 2016/17 there was a two per cent increase in primary fires and a two per cent decrease in secondary fires. The increase in primary fires covers a mixed story with decreases in dwelling fires (three per cent), other building fires (one per cent) and other outdoor fires (one per cent) being outnumbered by an increase in road vehicle fires of 13 per cent. Over the same time, total accidental fires[3] decreased by three per cent while deliberate fires increased by three per cent. The increase in deliberate fires was driven by a 25 per cent increase in deliberate road vehicle fires.

Specifically:

- **161,770 fires** were attended by FRSs in 2016/17. This was virtually unchanged compared with the previous year (162,267 in 2015/16), but a 28 per cent decrease compared with five years ago (223,923 in 2011/12) and a 52 per cent decrease compared with ten years ago (336,233 in 2006/07).

- Of these 161,770 fires in 2016/17, **74,803 were primary fires**[4]. Primary fires are more serious fires that harm people or cause damage to property. This was a two per cent increase compared with the previous year (73,477 in 2015/16), but a 14 per cent decrease compared with five years ago (86,975 in 2011/12) and a 42 per cent decrease compared with ten years ago (129,134 in 2006/07).

[3] The motive for a fire is collected as accidental, deliberate or unknown in the IRS, those marked as unknown are included in accidental fires in this case.
[4] Primary fires are those that meet one of the following criteria – a) occurs in a (non-derelict) building, vehicle or outdoor structure, b) involve a fatality, casualty or rescue or c) attended by five or more pumping appliances.

- Primary dwelling fires made up 41 per cent of primary fires and 19 per cent of all fires in 2016/17. **30,296 primary dwelling fires** were attended in 2016/17. This was a three per cent decrease compared with the previous year (31,377 in 2015/16), a 14 per cent decrease compared with five years ago (35,401 in 2011/12) and a 32 per cent decrease compared with ten years ago (44,422 in 2006/07).

- Of the 30,296 primary dwelling fires attended in 2016/17, **27,201 were accidental dwelling fires**. This was a four per cent decrease compared with the previous year (28,359 in 2015/16), a 12 per cent decrease compared with five years ago (30,789 in 2011/12) and a 26 per cent decrease compared with ten years ago (36,660 in 2006/07).

- Of the 161,770 fires attended in 2016/17, **82,746 were secondary fires**[5]. This was a two per cent decrease compared with the previous year (84,588 in 2015/16), a 37 per cent decrease compared with five years ago (131,118 in 2011/12) and a 59 per cent decrease compared with ten years ago (201,551 in 2006/07).

- Of the 161,770 fires attended in 2016/17, **4,221 were chimney fires**[6]. This was virtually unchanged compared with the previous year (4,202 in 2015/16), a 28 per cent decrease compared with five years ago (5,830 in 2011/12) and a 24 per cent decrease compared with ten years ago (5,548 in 2006/07).

On 27 June 2017, following the Grenfell Tower fire on 14 June 2017, the Home Office published an ad hoc statistical release focusing on fires in purpose-built flats. The release included provisional figures for 2016/17 and this release confirms or updates those figures. The detailed information can be found in fire data table FIRE0205.

- Of the 30,296 dwelling fires attended by FRSs in England in 2016/17 around three-quarters (75 per cent) were in houses, bungalows, converted flats and other[7] properties and a quarter (25 per cent) were in purpose-built flats. Of these, 16 per cent were in purpose-built low-rise flats[8]; six per cent in purpose-built medium-rise flats[8] and **two per cent were in purpose-built high-rise flats**[8].

- FRSs attended **714 fires in purpose-built high-rise flats** in England in 2016/17, compared with 757 in 2015/16 (a decrease of six per cent) and 1,063 in 2011/12 (a decrease of 33 per cent).

Further information on fires attended can be found in tables 0102, 0103, 0201, 0202, 0205, 0301, 0302, 0303, 0401 and 0402.

Non-fire incidents attended

FRSs attend many types of incidents that are not fires, for example flooding incidents, responding to road traffic collisions, rescuing animals and effecting entry/exit (a complete list can be found in fire data table FIRE0902).

From 2006/07 to 2014/15, there was a general decline in the **number** of non-fire incidents attended and by 2014/15 FRSs attended the lowest figure of 125,000 such incidents. By

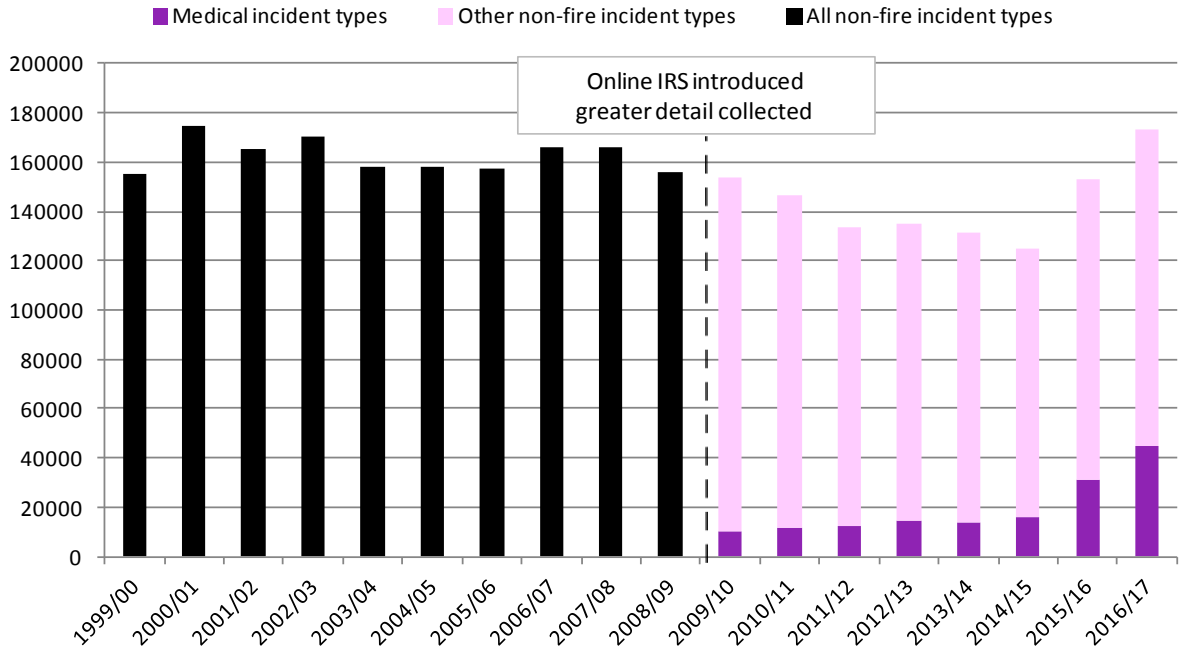
[5] Secondary fires are fires that are not primary or chimney fires. They mainly occur outdoors.
[6] Chimney fires are fires in domestic-style buildings where the flame was contained within the chimney structure, did not involve casualties and fewer than five appliances attended.
[7] Other includes sheltered accommodation, caravan/mobile home, HMO (House in Multiple Occupation) etc.
[8] In the IRS low-rise is defined as 1 to 3 storeys, medium rise 4 to 9 storeys and high rise as 10 storeys or more.

contrast over the same time the **proportion** of all incidents that were non-fire incidents showed a slow but steady increase from 19 per cent to 25 per cent. This is because the decrease in non-fire incidents was not as great as for other incident types.

Over the past two years the **number** of non-fire incidents has increased by 39 per cent to 174,000 in 2016/17. The **proportion** of all incidents that were non-fire incidents increased from 25 per cent in 2014/15 to 31 per cent in 2016/17. In 2016/17 FRSs attended more non-fire incidents than fires for the first time.

This increase over the past two years reflects large increases in the number of medical co-responding incidents attended. This is largely accounted for by large increases in the number of medical co-responding incidents attended over the past two years. Of the 21,000 additional non-fire incidents in 2016/17 compared with the previous year, 14,000 were categorised as “Medical Incident – first responder” or “Medical Incident – co responder”. The proportion of medical incidents varies between FRSs, but 14 have shown increases in these incident types of over ten-fold over the past two years (although some of these are from a very small starting point) while only five have shown a decrease.

Figure 3.4 Non-fire incidents attended by broad incident type, England; 1999/00 to 2016/17



Source: FIRE0901

Specifically:

- FRSs attended **173,579 non-fire incidents** in 2016/17. This was a 14 per cent increase compared with the previous year (152,813 in 2015/16), a 30 per cent increase compared with five years ago (133,507 in 2011/12) and a five per cent increase compared with ten years ago (166,002 in 2006/07). Since annual data became available in 1999/00, only

2000/01 showed a higher non-fire incidents attended figure than the 2016/17 figure (174,481, which is 902 more incidents).

- The four quarterly figures for non-fire incidents in 2016/17 were the **four highest quarterly figures** since quarterly non-fire incidents figures became available in 2009/10.

Further information on non-fire incidents attended can be found in tables 0102, 0901 and 0902.

Fire false alarms attended

The total **number** of fire false alarms attended showed a downward trend for over a decade, reaching 214,000 in 2015/16. It should be noted that fire false alarms attended are where there was good intent but no fire, where apparatus such as fire alarms caused an attendance to a false alarm and malicious calls. They do not include false alarms to non-fire incidents which are included in the non-fire incidents total.

Throughout this decade the largest incident type was fire false alarms, ranging from 40 per cent to 44 per cent. Malicious calls have been the smallest category of fire false alarm since the information was first collected in 1999/00 and the **percentage** of fire false alarms that are malicious has also been on a downward trend since 1999/00. Specifically:

- FRSs attended **223,614 fire false alarms** in 2016/17. This was a four per cent increase compared with the previous year (214,424 in 2015/16), the first increase in fire false alarms since 2003/04, but a ten per cent decrease compared with five years ago (249,445 in 2011/12) and a 36 per cent decrease compared with ten years ago (352,136 in 2006/07).

- The increase in fire false alarms in 2016/17 compared with 2015/16 was almost entirely due to an **increase in fire false alarms 'due to apparatus'**. Over this time the number of fire false alarms 'due to apparatus' increased by six per cent (from 142,453 to 151,549), while 'good intent' fire false alarms and 'malicious' fire false alarm were both virtually unchanged.

Further information on fire false alarms attended can be found in tables 0102 and 0104.

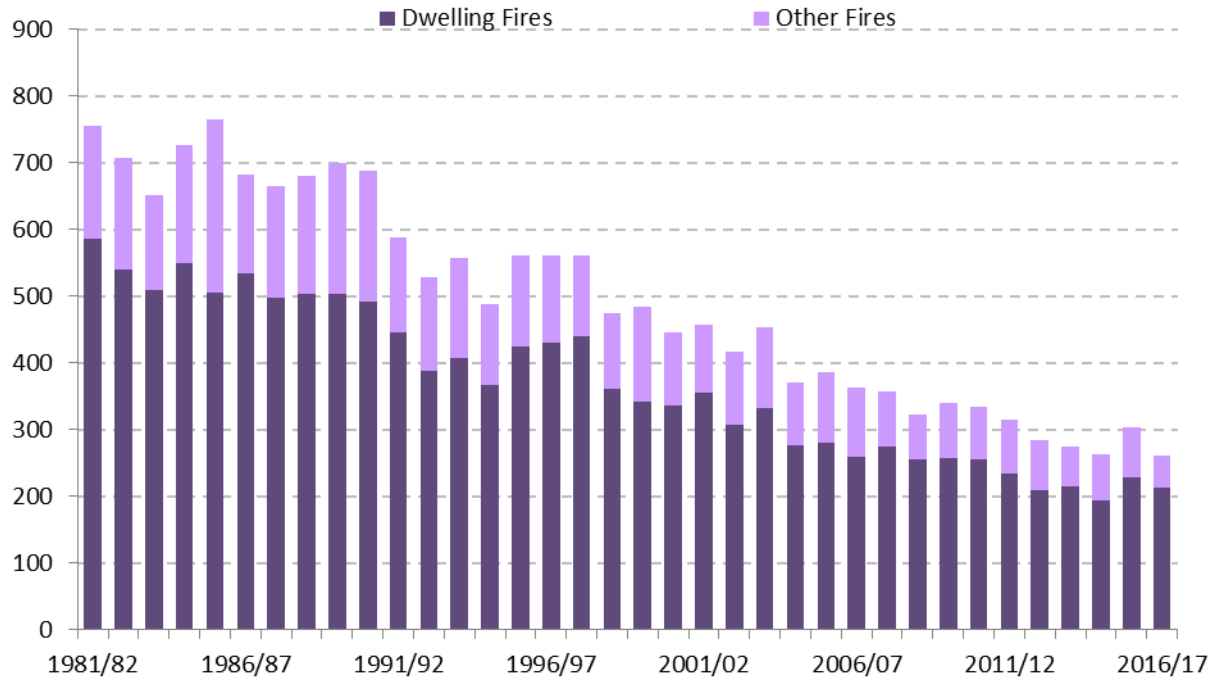
4 Fire-related fatalities and casualties

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 Introduction 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. The figures in this release refer to records of incidents had reached the IRS by 7th June 2017, when the database was "frozen".

Fire-related fatalities

The number of fire-related fatalities[9] in England has been on a downward trend since 1981/82 when comparable figures first became available. In 1981/82 there were 755 fire-related fatalities, but by 2014/15 this figure had reduced to 264 – a decrease of 65 per cent over 33 years. In 2015/16 fire-related fatalities increased for the first time for several years but this increase did not continue in 2016/17.

Figure 4.1 Total fire-related fatalities by dwelling or other fires, England; 1981/82 to 2016/17



Source: FIRE0502

Specifically:

- There were **261 fire-related fatalities in 2016/17**. This compared with 303 in 2015/16 (a decrease of 14 per cent), 315 five years previously (2011/12, a decrease of 17 per cent) and 364 ten years previously (2006/07, a decrease of 28 per cent). Fatality figures can fluctuate between years because the numbers are relatively small.

[9] For the purpose of publications a fire-related fatality includes the number of fatal casualties that were recorded as 'fire-related' or 'don't know' and only excludes those that were recorded as 'not fire-related'.

- Of these, **213 fire-related fatalities were in dwelling fires**. This compared with 229 in 2015/16, 234 five years previously (2011/12) and 259 ten years previously (2006/07).

Provisional figures on fire-related fatalities in fires in purpose-built flats were published in an ad hoc statistical release focusing on fires in purpose-built flats. This release confirms these figures, see below and detailed information in fire data table FIRE0205.

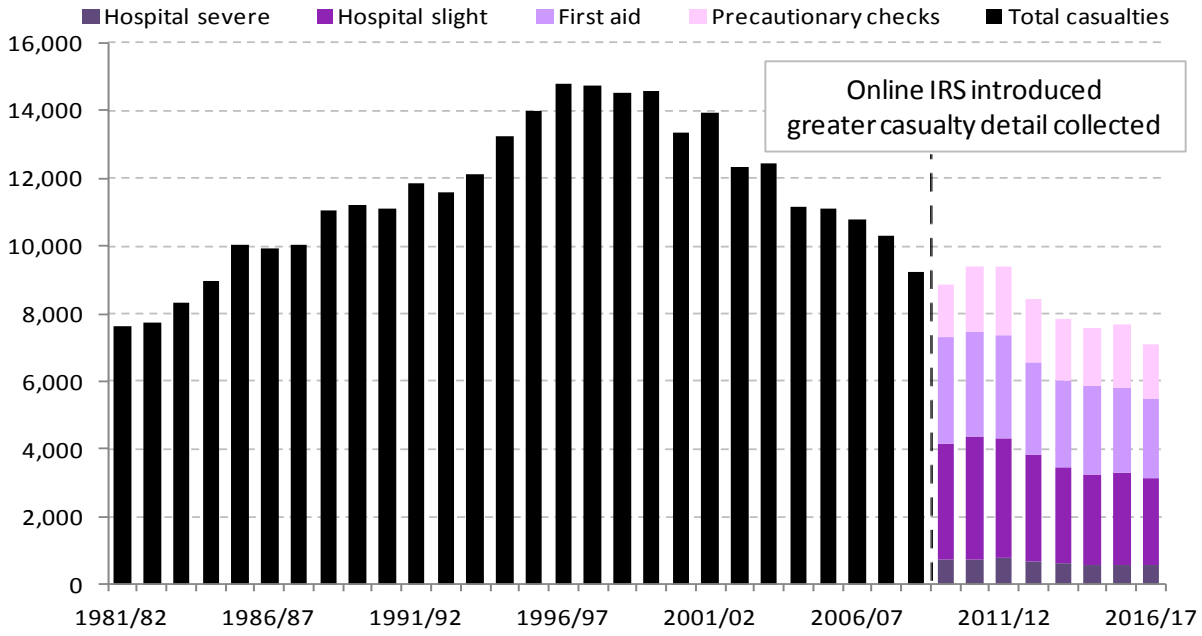
- There were **three fire-related fatalities in high-rise purpose-built flats** (defined as ten storeys or more) in England in 2016/17. In 2015/16, this figure was 3 while in 2011/12 this figure was 10. It should be noted that the number of fire-related fatalities fluctuates year-on-year due to the relatively low numbers.

Further information on fire-related fatalities can be found in tables 0501, 0502 and 0205.

Non-fatal casualties in fires

The number of non-fatal casualties[10] in fires in England has been on a downward trend since the mid-1990s, as shown in Figure 4.2 below. In 1996/97, there were almost 14,800 non-fatal casualties, but by 2014/15 this figure had decreased to just under 7,600 – a fall of almost a half in 19 years. The small upturn in non-fatal casualties in fires in 2015/16 to almost 7,700 did not continue in 2016/17, when it fell to just under 7,100. It appears that the downward trend in non-fatal casualties in fire has slowed in the last few years. While the fatality figures above are for those fatalities caused by the fire (i.e. fire-related) or when the cause was unknown, the casualties figures are for those sustained in a fire incident, whether the casualties were caused by the fire, something else or was unknown.

Figure 4.2 Total non-fatal casualties in fires by injury severity, England; 2009/10 to 2016/17



Source: FIRE0502

[10] For more detailed technical definitions of fire-related non-fatal casualties, see the Fire Statistics Definitions document. A further breakdown of the different types of non-fatal casualties are available in the published fire data tables.

Specifically:

- There were **3,133 non-fatal casualties requiring hospital treatment** in 2016/17. This was a five per cent decrease compared with the previous year (3,282 in 2015/16) and a 27 per cent decrease compared with five years ago (4,299 in 2011/12)[11].

- There were **7,081 non-fatal casualties in fires** in 2016/17. This was an eight per cent decrease compared with the previous year (7,664 in 2015/16), a 24 per cent decrease compared with five years ago (9,375 in 2011/12) and a 34 per cent decrease compared with ten years ago (10,783 in 2006/07).

- There were **5,358 non-fatal casualties in dwelling fires** in 2016/17. This was a seven per cent decrease compared with the previous year (5,763 in 2015/16), a 27 per cent decrease compared with five years ago (7,305 in 2011/12) and a 39 per cent decrease compared with ten years ago (8,716 in 2006/07).

This release confirms or updates figures published in an ad hoc statistical release focusing on fires in purpose-built flats. This release confirms these figures, see below and detailed information in fire data table FIRE0205.

- There were **63 non-fatal casualties requiring hospital treatment in purpose-built high-rise flats** (10 storeys or more) in 2016/17. This figure was 67 in 2015/16 and 100 in 2011/12.

Further information on non-fatal casualties can be found in tables 0501, 0502 and 0205.

[11] Non-fatal casualties in fires have only been categorised by "hospital – severe", "hospital – slight", "first aid given" and "precautionary checks recommended" since the introduction of the IRS in 2009. This means a ten year comparison is unavailable for this measure.

5 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), which allows fire and rescue services to complete an incident form for every incident attended, be it a fire, a false alarm or a non-fire (sometimes known as Special Service) incident. 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. The dates of forthcoming fire and rescue and other Home Office publications are pre-announced and can be found via the Statistics: release calendar. For further information about the statistics in this publication, email firestatistics@homeoffice.gsi.gov.uk.

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 above 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

Guidance for using these statistics and other fire statistics outputs are available on the fire statistics collection page, found here:
https://www.gov.uk/government/collections/fire-statistics

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

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