

Fire Statistics definitions

Incident Recording System (IRS)

The source of the data used for fire statistics publications is the record of incidents attended by fire and rescue services (FRSs). The online IRS was introduced in April 2009. Full details of the questions and categories used in the recording of incidents under the IRS are available in the document 'IRS Questions and Lists'. This can be downloaded from:

www.gov.uk/government/publications/incident-recording-system-for-fire-and-rescue-authorities.

The definitions within this document do not replace the [IRS manual](#) but are intended to help users of our statistics.

Fire and Rescue Service (FRS) is the local service providing emergency cover. As of 31st March 2017, there are 45 FRSs in England, one in Scotland and three in Wales.

Fire and Rescue Authority (FRA) is a publicly accountable body which manages its local fire and rescue service. Fire and Rescue Authorities are funded through central Government grant, locally retained business rates and council tax precept. In England, there are 45 fire and rescue authorities operating under a variety of different governance arrangements, including (but not exclusively) within the county council structure, the Mayoral combined authority structure and under a Police and Crime Commissioner.

Fires

Primary fires are generally more serious fires that harm people or cause damage to property and meet at least one of the following conditions:

- any fire that occurred in a (non-derelict) building, vehicle or (some) outdoor structures
- any fire involving fatalities, casualties or rescues
- any fire attended by five or more pumping appliances.

Primary fires are split into four sub-categories:

- **Dwelling fires** are fires in properties that are a place of residence i.e. places occupied by households such as houses and flats, excluding hotels/hostels and residential institutions. Dwellings also includes non-permanent structures used solely as a dwelling, such as houseboats and caravans.

- **Other buildings fires** are fires in other residential or non-residential buildings. Other (institutional) residential buildings include properties such as hostels/hotels/B&Bs, nursing/care homes, student halls of residence etc. Non-residential buildings include properties such as offices, shops, factories, warehouses, restaurants, public buildings, religious buildings etc.
- **Road vehicle fires** are fires in vehicles used for transportation, such as cars, vans, buses/coaches, motorcycles, lorries/HGVs etc. 'Road vehicles' does not include aircraft, boats or trains, which are categorised in 'other outdoors'.
- **Other outdoors fires** are fires in either primary outdoor locations, or fires in non-primary outdoor locations that have casualties or five or more pumping appliances attending. Outdoor primary locations include aircraft, boats, trains and outdoor structures such as post or telephone boxes, bridges, tunnels etc.

Secondary fires are generally small outdoor fires, not involving people or property. These include refuse fires, grassland fires and fires in derelict buildings or vehicles, unless these fires involved casualties or rescues, or five or more pumping appliances attended, in which case they become primary fires.

Chimney fires are fires in buildings where the flame was contained within the chimney structure and did not involve casualties, rescues or attendance by five or more pumping appliances. Chimneys in industrial buildings are not included.

Fatalities and Casualties

Fire-related fatalities are those that would not have otherwise occurred had there not been a fire.

This includes 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. For the purpose of publications, published figures include the number of fatal casualties which were either recorded as 'fire-related' or 'don't know', grouped together as fire-related deaths; thus excluding only those that were recorded as 'not fire-related'.

Non-fatal casualties: In order to be able to present a time series that is comparable over time, the non-fatal casualty data in this publication include all non-fatal casualties who went to hospital, but exclude first aid cases and

where there was no obvious injury, but a precautionary check was recommended.

Response Times

A response time measures the minutes and part minutes taken from time of call to time of arrival at the scene of the first vehicle. The following incidents have been excluded from the average response time calculations:

- a. Where there was heat and smoke damage only.
- b. Where the road vehicle was abandoned.
- c. Where the location of the fire was derelict.
- d. Where an FRS learned of the fire when it was known to have already been extinguished. Such incidents are known as 'late calls'.
- e. Where the response time for an incident was over an hour or less than one minute.

The last two of these exclusions have been applied to avoid erroneous data or exceptional incidents from skewing the averages.

The Response Times publication focuses on primary and secondary fires only and therefore does not include chimney fires (see above).

Discontinuity of response times data before and after April 2009

There is a noticeable discontinuity in average response times between 2008/09 and 2009/10 of over half a minute for attendance to all types of fires (e.g. Dwellings, Other Buildings). While part of this increase may be genuine (the factors mentioned in [Fire and Rescue Response Times 2011/12](#) included increased traffic congestion), it appears likely that there is also a measurement discontinuity. Analysis of the change in average response times from 2008/09 to 2009/10 identified six FRSs whose reported average response time increased by 1.2 minutes or more. Discussion with these FRSs helped to identify the various factors described in [Fire and Rescue Response Times 2011/12](#). There is also the possibility of a further reason for the apparent discontinuity, namely that there may have been some inaccuracy in the largely paper-based Fire Data Report system which was in use until March 2009. Arrival times are now being recorded with more accuracy using a mobile data terminal on board the fire appliance once the appliance has arrived at the scene. Previously, arrival times were transmitted to control via radio when the appliance was in the vicinity of the incident, enabling fire-fighters to then be focussed on preparing to disembark from the vehicle. With

on-board data terminals and automatic recording of the nearest second under the Incident Recording System (since April 2009), incident response times should now be recorded consistently, with higher accuracy.

Review of the impact of periods of industrial action.

Throughout 2013/14 and 2014/15 there were several periods of industrial action where operational Firefighters were out on strike. More information on the effect of this on response times is discussed in the 2014/15 [release](#).

Uses of the data

Users of response time data should bear in mind that the data may fluctuate, as the locations of fires will vary from one period to another.

The spreadsheet tables accompanying the release show the numbers of incidents on which each response time average has been calculated. Averages based on smaller numbers of incidents will naturally tend to be more prone to fluctuation.