

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 Incident Recording System (IRS) was adopted by 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 National IRS guidance.

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 the legislative and administrative statutory public body that oversees an FRS. As a tier of local government, FRAs are funded through central government grants and small levies on local council tax. Depending on the structure of local government beneath an FRA, they can be organised as either: Greater London Authority, a unitary authority, a joint authority, a combined authority or a county council.

Fires

Primary fires are generally more serious fires that harm people or cause damage to property. Primary fires are defined as fires that cause damage by fire/heat/smoke 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 include 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 on public roads, 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 other outdoor 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.

Accidental fires include those where the motive for the fire was presumed to be either accidental or not known (or unspecified).

Deliberate fires include those where the motive for the fire was 'thought to be' or 'suspected to be' deliberate. This includes fires to an individual's own property, others' property or property of an unknown owner. Despite deliberate fire records including arson, deliberate fires are not the same as arson. Arson is defined under the Criminal Damage Act of 1971 as 'an act of attempting to destroy or damage property, and/or in doing so, to endanger life'.

Late fire calls are fires attended by a FRS which were known to be extinguished when the call was made (or to which no call was made) and the fire came to the attention of the FRS by other means (e.g. press report or inquest). Such fires are reported if an attendance is made (even if for inspection only) but are not reported if no attendance is made.

Cause of fire

- **Cause** the event of action that resulted in the fire.
- **Defect** fault or flaw.
- **Act** by person/persons to cause fire.
- **Omission** something not done which led to the fire.
- **Source** from which something originates.

The Incident Recording System collects information on:

- **Cause of fire** a defect, act or omission giving rise to ignition e.g. fault in equipment or appliance;
- **Source of ignition** appliance, installation or other source giving rise to fire e.g. smokers' materials;
- **Item responsible for the fire** item responsible for any fire spread e.g. Clothing/textiles;
- **Other factors** including ignition power (e.g. gas), item mainly responsible for spread of fire (e.g. furniture/furnishings), cause of rapid fire growth (e.g. chemicals), dangerous substances involved (e.g. fireworks) and cause of explosion, if any (e.g. gases).

Fatalities and Casualties

Fire-related fatalities are, in general, 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, sometimes following road traffic collisions. 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 fatalities; thus excluding only those that were recorded as 'not fire-related'.

Non-fatal casualties have, since the introduction of the IRS, been split into four sub-categories, defined as:

- **Hospital severe** – at least an overnight stay in hospital as an in-patient
- **Hospital slight** – attending hospital as an outpatient (not a precautionary check)
- **First Aid given** – first aid given at scene (by anyone), including after a precautionary check
- **Precautionary check** – a precautionary check (to attend hospital or to see a doctor) was recommended (by anyone).

Extent of fire damage

The **average area of fire damage** is calculated from estimates of the horizontal area damaged by flame and/or heat in square metres. The estimates are made in the following size bands:

None;
Up to 5m²;
6 – 10 m²;
11 – 20 m²;
21 – 50 m²;
51 – 100 m²;
101 – 200 m²;
201 – 500 m²;
501 – 1,000 m²;
1,001 – 2,000 m²;
2,001 – 5,000 m²;
5,001 – 10,000 m²; and
Over 10,000 m²

Weighted means are calculated from these values to produce the figures in tables FIRE0204 and FIRE0305.