



# **STATISTICAL NEWS FOR FIRE SAFETY AND ORGANISATIONAL STATISTICS**

**30 August 2019**

---

We have changed our practice of publishing a new downloadable workbook each year to a policy of updating a single workbook which contains all statistics in this series, accessible either as a time series table or with slicers. Revisions and corrections will be published in this workbook only, users are encouraged to source all statistics from the most recent version of the downloadable workbook.

We have changed the addressing of the published tables from a system of numbering to a system of content based addressing with a reference code published alongside each table. This aims to address the issue of table numbers changing as the content of this publication changes. There are other nomenclature and presentation changes throughout the workbook which aim to benefit accessibility of the statistics and related details.

Alongside the statistical publications for 2018-19 we are running a user consultation which aims to both seek views on proposed methodology changes and determine areas where we can improve what is published.

---

## Corrections

The following corrections have been made. Please see the relevant section below for details.

### Home Fire Safety Visits

- Smoke Alarms figures published since 2013-14 had included double counting leading to an overestimation of 29% on average.

### Fire and Rescue Vehicles

- A small number of 'Prime Mover' vehicles were allocated to the wrong local authority in 2017-18. This only affected the table publishing according to the historic CIPFA standard but not the new standard.
- 'Four Wheel Drive' vehicles were incorrectly allocated to 'Non-operational' rather than 'Other Appliance' in 2016-17 according to the historic CIPFA standard but not the new standard.

## Changes by Section

### Fire Stations

#### Experimental statistics

We have introduced a table on SFRS stations by crewing model. This aims to provide a further breakdown on station crewing which goes beyond the statistics provided on primary crewing. The table on primary crewing will be maintained to preserve the historic series.

### Fire and Rescue Vehicles

#### Corrections

An error in allocating 'Prime Movers' to local authorities impacted on the resilience column of the historic CIPFA standard which was published in 2017-18. This error did not impact the modern CIPFA standard table and was due to a scripting oversight where a quality assurance intervention was incorrectly implemented for one of the local authority breakdown tables.

There was an error in counting vehicles in the 'Four Wheel Drive' category in 2016-17 where they were counted as 'Non-operational' but should be counted as 'Other Appliances'. This impacted only the historic CIPFA standard.

#### Other notable changes

We have merged the two fleet tables published last year to maintain the historic CIPFA data while publishing to the current standard. This required that a small methodology difference in allocating the single vehicle in the 'Tractor' category, this is now included in the counting rules and has been backdated to 2016-17.

## **Workforce**

### **Withdrawn statistics**

In 2017-18 we introduced experimental statistics on workforce by service length, while the table remains suitable for uniformed staff we have concerns about the quality of the data for support staff and so have withdrawn that column. For both uniformed and support staff it is possible to join another service in the public sector and transfer with them their continuous service length, however this is not consistently applied for support staff and so we are not convinced that the statistics are of sufficient standard for publication.

### **Experimental statistics**

We have introduced statistics on staff who have left SFRS by the reason for their leaving. We have also introduced statistics on staff who have joined SFRS by gender, age, ethnicity and disability.

Comparisons between the snapshot taken for workforce statistics in 2017-18 and that taken for 2018-19 were used to quality assure the statistics produced on those who have left SFRS and those who have joined. Please note that these record people who have joined or left and the difference is not the same as the annual change in headcount. Internal structure changes where people are already in a post are not counted.

## **Attacks on Fire and Rescue Personnel**

### **Withdrawn statistics**

In 2015-16 there was a methodology change in this series where the primary dataset changed and the count changed from a sum of injured personnel to a count of incidents where personnel were injured. We continued to publish the historic figures alongside the new figures separated by a dotted line, however we believe it is no longer appropriate to publish these side by side and so have withdrawn the historic figures. Statistics were formerly presented on the rate of attacks as a percentage of operational incidents attended both nationally and at a local authority level. We believe this is not an appropriate metric for measuring the variation in the number of attacks at operational incidents either geographically or over time and so have withdrawn this.

## **Home Fire Safety Visits**

### **Corrections**

A long standing error has been uncovered in our view of the home fire safety visit dataset where the total number of smoke alarms installed in a home fire safety visit was incorrectly aggregated from lower level categories. The extent of this error is to have overestimated alarms installed by an average of 29% since 2013-14. To ensure the published figures are consistent we have revised all home fire safety statistics this year.

This error stems from ambiguity in the questions asked in the system where the data services team staff had a different interpretation than the intentions of the community safety team. While guidance is provided by community safety staff to those completing home fire safety visits, recording issues due to variation in interpretation have occurred. It is not possible to quantify this error margin. Effort has been made to ensure the best possible estimate is provided in these statistics however the corrected figures should be interpreted

as a lower estimate of alarms installed. It should also be noted that there are other methods by which SFRS provide smoke alarms but it is not possible to publish figures of these routes as a full accounting of alarms does not take place.

## **Experimental statistics**

We have introduced new tables on the number of distinct properties visited in home fire safety visits over a one year, three year and five year period. The intention of this is to provide figures on the extent of this community safety intervention. Tables on alarms installed are also provided using the same methodology. We have also introduced a table on the number of repeat visits which have occurred in a financial year, which counts premises that were not visited in the previous three financial years.

A demographic table has been introduced presenting the number of residents in defined age brackets aggregated by year. Using figures published by National Records of Scotland we are able to present the proportion of the Scottish population living in households which had home fire safety visits by age.

New tables on home fire safety visits by the Scottish Index of Multiple Deprivation Quintiles and Urban-Rural 6-Fold Index allow us to discuss the variation in home fire safety visit rates by deprivation and rurality. These were both dependent on the allocation of premises data to datazone geography which has been possible for over 99.8% of records. We aim to resolve the remaining records in the coming year and will revise these statistics accordingly next year.

## **Withdrawn statistics**

We have withdrawn the tables on home fire safety visits by risk rating due to concerns around the methodology used both in relation to the risk data and relating to the conversion into bandings from 'Well Below Average' to 'Well Above Average'. Internally SFRS use a heuristic method which is not robust enough on its own as a replacement.

## **Other notable changes**

We have changed the metric used in the rates provided from 'per 1000 dwellings' to 'per 100 households'. This makes comparisons in percentage terms simpler to achieve. Using a rate for households also removes a small potential bias that a rate for dwellings involves, as the count of dwellings includes properties that are unoccupied, and such properties are out of scope for home fire safety visits.

## **Non-domestic Fire Safety**

### **Update to Experimental Statistics**

In the experimental statistics table on notices issued which was introduced last year. We have found three recording errors in the counts for 2015-16 and 2016-17. These were discovered through additional quality assurance and have been corrected, ongoing quality assurance minimises the chance of such errors in future.

# A Statistics Publication from the Scottish Fire and Rescue Service

## Correspondence and enquiries

Lead statistician for this bulletin and associated documents:  
Gregor Welsh.

For enquiries or feedback please contact:  
[National.Statistics@firescotland.gov.uk](mailto:National.Statistics@firescotland.gov.uk)



SCOTTISH  
FIRE AND RESCUE SERVICE

Working together for a safer Scotland

[www.firescotland.gov.uk](http://www.firescotland.gov.uk)