



SCOTTISH
FIRE AND RESCUE SERVICE

Working together for a safer Scotland

Fire and Rescue Incident Statistics (Scotland)

2020-21

An Official Statistics
publication for Scotland

29 October 2021

Working together for a safer Scotland

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This publication and associated statistics are now designated as Official Statistics.

This means that it is produced to high professional standards set out in the [Code of Practice for Official Statistics](#). It is produced free from any political interference.

In 2019 the Scottish Fire and Rescue Service was named in legislation as a Producer of Official Statistics which allows us to classify this series.

This publication is accompanied by the following documents:

- Tables and Charts Workbook
- Guidance Notes on Statistics
- Statistical News 2020-21

1. Main Points

All incidents

- **85,582** incidents attended, of which:
 - **55.8%** were false alarms
 - **29.4%** were fires
 - **14.8%** were non-fire incidents

Fires

- **25,147** fires attended, up 2.6% on last year
 - **4,661** dwelling fires, down 4.7%
 - **4,141** of these were accidental, down 5.1%
 - **60.9%** of accidental dwelling fires started with a cooking appliance
 - **71.7%** of dwelling fires were confined to the original item
 - **1,816** vehicle fires, down 13.5%
 - **9.2%** increase in outdoor fires (excluding road vehicles)

Non-fire Incidents

- **12,693** non-fire incidents attended, down 11.8%, of which:
 - **3,735** were for effecting entry or exit to a property, down 6.4%
 - **1,596** were road traffic collisions, down 32.7%

False Alarms

- **47,742** false alarms, down 10.2%
- **46,820** false fire alarms, down 10.5%, of which:
 - **35,809** were due to detecting apparatus, down 13.6%
 - **9,517** were due to good intentions, up 10.2%
 - **1,494** were malicious, down 32.0%

Fatal Fire Casualties

- **53** fatal fire casualties, up from 27 last year
 - Over ten years, up 2.0%
 - **44** of these occurred in dwelling fires
- **75.5%** of fatal fire casualties were male
- **Over 5** times higher rate of fatal casualties in the most deprived areas than in the least deprived over the last 8 years

Non-fatal fire Casualties

- **1,017** non-fatal fire casualties, down 1.0%
- **366** casualties per 1,000 fires when alcohol or drugs is a suspected factor in the fire and 139.5 without (ten-year averages)
- **5.4 times** higher rate of non-fatal casualties in most deprived areas compared with the least deprived areas over the last 8 years

Non-fire Casualties

- **323** fatal casualties (down from 438), of which:
 - **60** were in road traffic collision attendances, down from 82
 - **34** were suicides, down from 51
- **1,864** non-fatal casualties, down 42.0%

2. Summary

The Scottish Fire and Rescue Service (SFRS) attended 85,582 incidents in 2020-21. This is a reduction of 7.0% from 2019-20 (92,072). This change is largely associated with societal and economic changes during the Covid-19 pandemic.

Factors such as national lockdowns and changes in the operation of business have had an impact on many of our incident categories and will be discussed throughout this report.

There were 25,147 fire incidents in 2020-21. This is a 2.6% increase on last year (up from 24,498). Fire incident categories are close to historic averages, with the exception of road vehicle fires, which decreased by 13.5%. The change also comprises of a decrease of 4.7% in dwelling fires and a 9.2% increase in outdoor fires (excluding road vehicles).

False alarms make up the largest share of incidents attended. This has decreased from 53,177 last year to 47,742 in 2020-21 (10.2% reduction).

False alarm incidents were substantially lower during national lockdowns where businesses were closed and people were encouraged to work from home.

Non-fire incidents attended in 2020-21 decreased from 14,397 last year to 12,693 (11.8% reduction). During the Covid-19 pandemic, some categories of non-fire incidents decreased to below what would be expected in an average year.

For instance, SFRS attended 32.7% less road traffic collisions in 2020-21 than last year. This is likely to have been caused by travel restrictions throughout the pandemic and fewer people commuting to places of employment.

The breakdown of incidents shifted over a ten-year period from 2009-10 to 2019-20. Due to changes in non-fire incidents and false alarm incidents during the Covid-19 pandemic, this breakdown appears to have shifted even further for 2020-21.

The percentage of non-fire incidents has risen from 11.1% in 2009-10 to 14.8% in 2020-21. Fires have decreased from 37.3% of incidents attended in 2009-20 to 29.4%, while false alarms have increased as a share of activity from 51.6% to 55.8%.

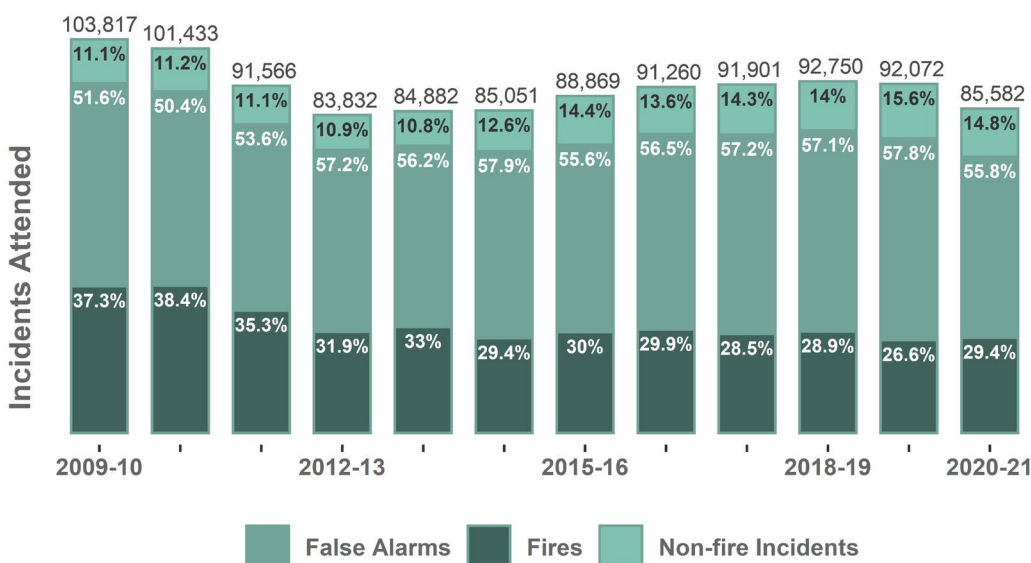


Figure 1: Total number of incidents attended with percentage share by type

Fatal Casualties Attended

There were 382 fatal casualties in incidents attended by SFRS in 2020-21, an 18.6% reduction on last year. The number of fire fatalities has increased from 27 last year to 53 this year. Although this appears to be a large increase, figures vary considerably between years.

There has been a decrease in the number of fatalities in all types of non-fire incidents, with 2019-20 having a total of 438 fatal casualties in non-fire incidents and 2020-21 having a total of 323 fatal casualties.

The number of fatal casualties at suicide incidents attended by SFRS decreased considerably from 51 in 2019-20 to 34 in 2020-21 (33.3% reduction).

The number of fatal casualties at road traffic collisions attended by SFRS decreased from 82 in 2019-20 to 60 this year (26.8% reduction).

At 'Effecting Entry or Exit' incidents, there was a 16.7% reduction of fatal casualties, with 150 incidents recorded in 2019-20 and 125 recorded in 2020-21.

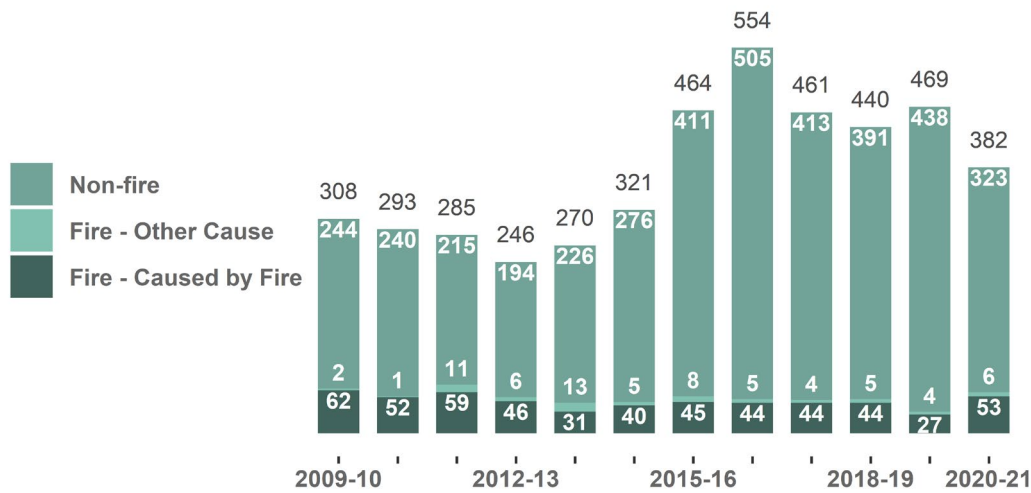


Figure 2: Fatal Casualties Attended

Non-fatal Casualties Attended

There was a notable reduction (32.0%) in the number of non-fatal casualties attended by SFRS crews from 2019-20 (4,238) to 2020-21 (2,881).

There were 1,017 non-fatal casualties in fires (1.0% reduction on last year) and 1,864 non-fatal casualties in non-fire incidents (42.0% reduction on last year).

The number of non-fatal casualties in road traffic collisions attended by SFRS decreased considerably from 1,642 last year to 895 this year (45.5% reduction).

Furthermore, there was a decrease of 33.7% in the number of non-fatal 'Effecting Entry or Exit' incidents from last year, with 624 recorded in 2019-20 and 414 recorded in 2020-21.

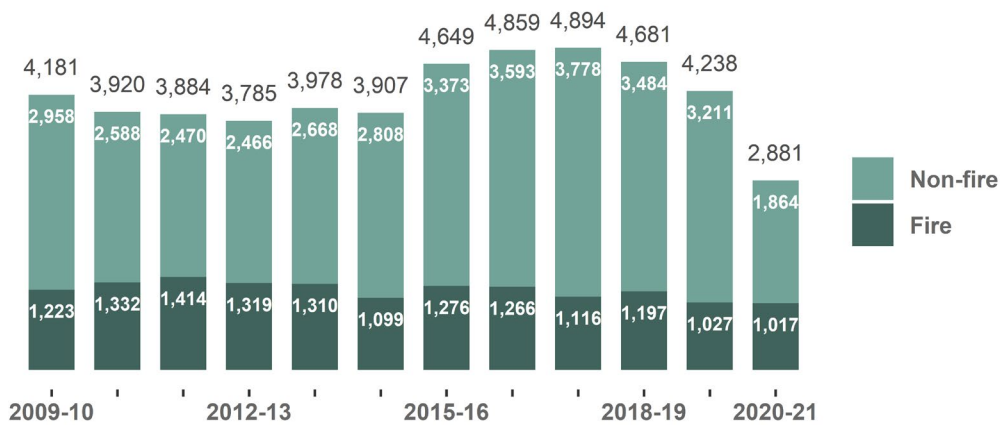


Figure 3: Non-fatal Casualties Attended

3. Fires

There was an increase of 2.6% in the number of fires attended in 2020-21, increasing from 24,498 last year to 25,147.

The term 'primary fire' is used to describe fires which result in harm to people, require five or more fire appliances, or fires which take place in buildings, vehicles and some outdoor locations. The total number of primary fires has reduced by 4.4%, with 9,852 recorded last year and 9,416 in 2020-21. This figure has steadily reduced since this series began. Over the last ten years, the number of primary fires has reduced by 28.4%.

Dwelling¹ fires have also been consistently reducing over the last ten years, with a 25.9% reduction since 2010-11. There has been a 4.7% reduction in dwelling fires from last year (4,890) to this year (4,661). Fires in other buildings have decreased by 13.2% from 1,980 last year to 1,718 in 2020-21.

Vehicle fires have decreased from last year, with 2,099 recorded in 2019-20 and 1,816 recorded this year. This is a 13.5% reduction.

During the Covid-19 pandemic, travel restrictions meant that there were less vehicles on the road and so, a reduction in vehicle fires was to be expected.

While primary fires have reduced, the number of secondary fires has increased slightly from 14,090 in 2019-20 to 15,130 this year (7.4% increase).

Secondary fire incidents can be influenced by a number of socioeconomic and environmental factors meaning incidents tend to fluctuate each year, with no clear overall trend. The number appears to have levelled off within the past five years and over a ten-year period, this figure has reduced by 37.5%.

The total number of outdoor fires (excluding road vehicles) increased by 9.2% from 14,973 to 16,351 in 2020-21.

Outdoor fires vary considerably each year and are often dependent on weather conditions. There is no overall trend in outdoor fires over the last ten years.

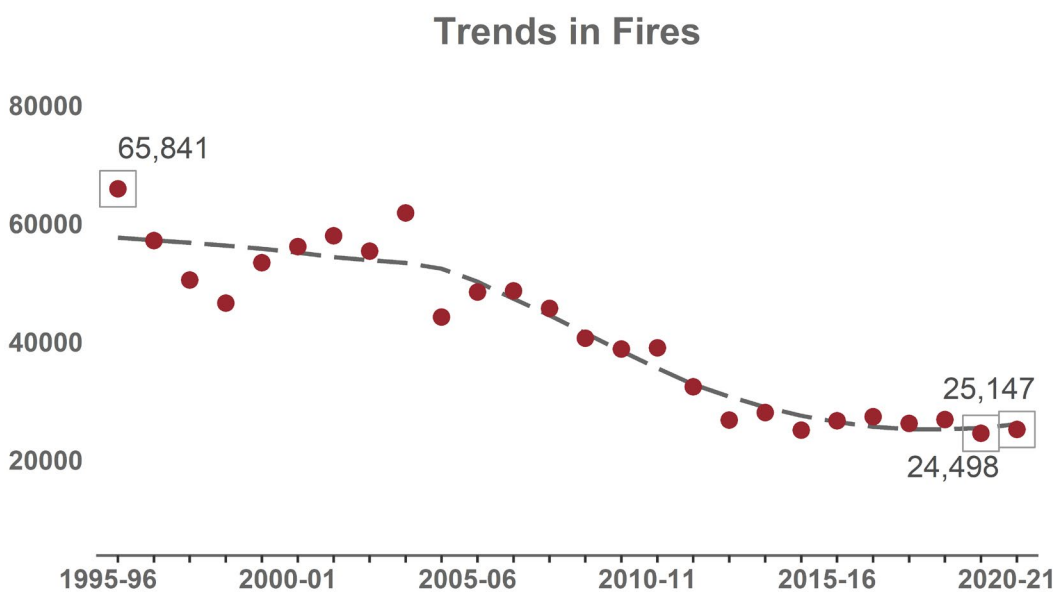


Figure 4: Long-term trend in the number of fires. Values displayed in boxes on chart represent the maximum, minimum and most recent values.

¹ Dwellings are properties that people ordinarily live in such as houses and apartments, please see the guidance notes document for a full definition.

Trends in Primary Fires

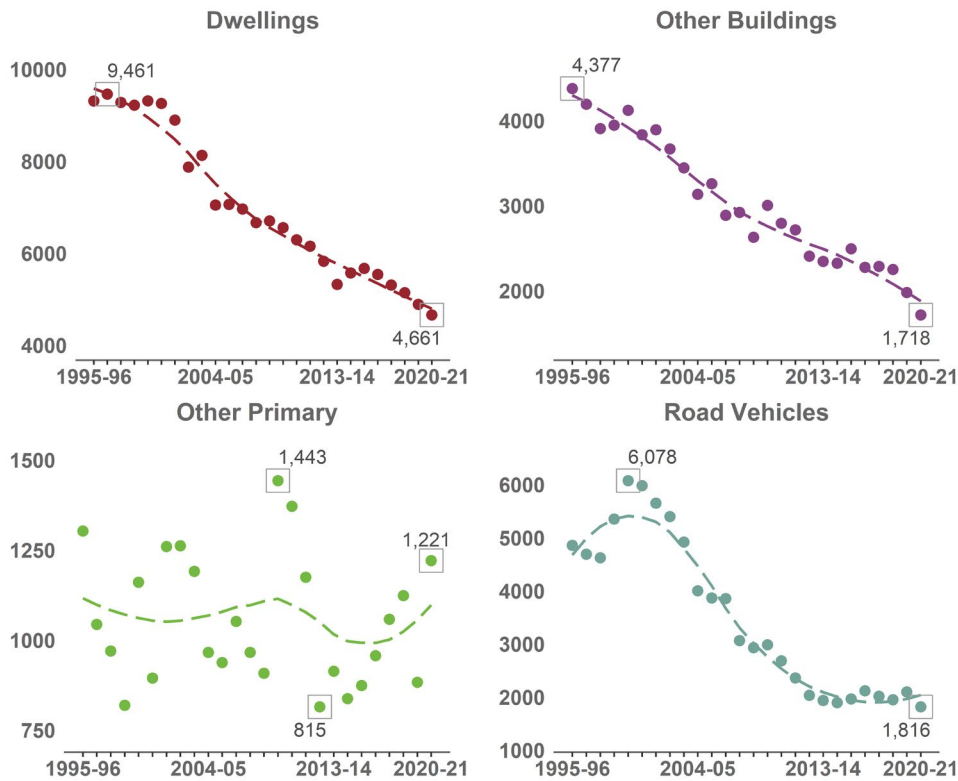


Figure 5: Primary fire trends. Values displayed in boxes on chart represent the maximum, minimum and most recent values. There are instances where the most recent value is also the minimum value.

Trends in Secondary and Chimney Fires

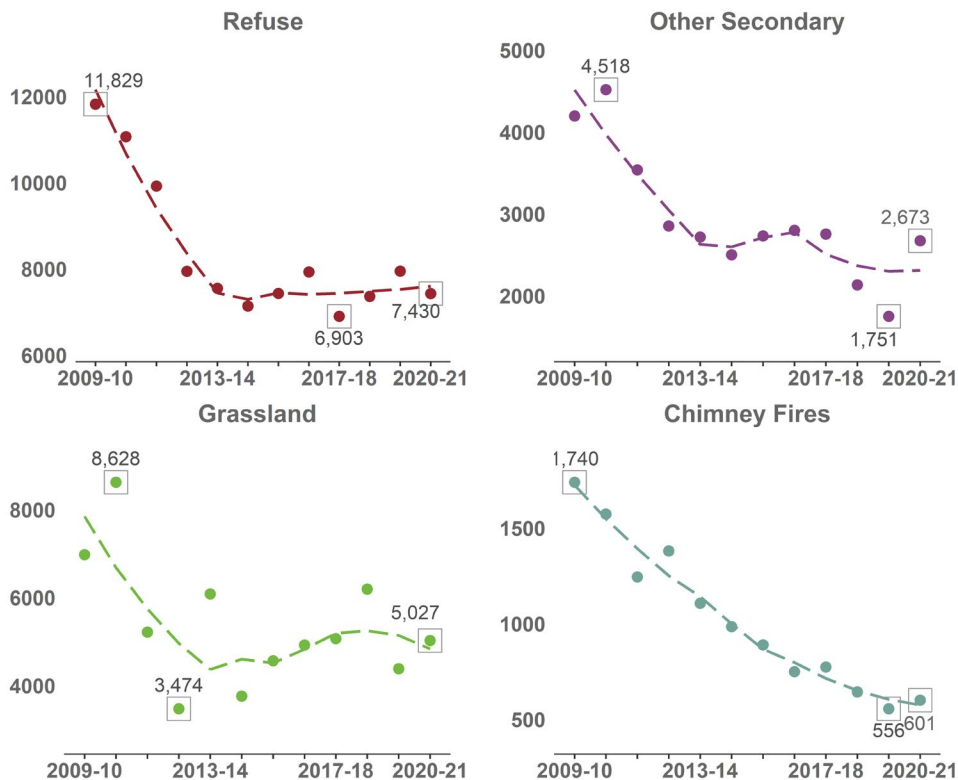


Figure 6: Secondary fire trend. Values displayed in boxes on chart represent the maximum, minimum and most recent values.

Great Britain Comparisons

Across Great Britain², there have been similar trends in the number of fires since the early 2000s, with there being a consistent decline in the number of fires per million population in each nation.

This trend appears to have levelled off since the early 2010s. In 2020-21, there were 4,601 fires per million population in Scotland. This figure is substantially higher compared to England (2,672 fires per million population) and Wales (3,258 fires per million population).

Primary fire rates have continued to decrease in each nation. In 2020-21, Scotland has recorded 1,723 primary fires per million, compared with England which has reported 1,095 and Wales which has reported 1,198.

Similarly, dwelling fires have consistently reduced each year in each nation. However, Scotland recorded 375 more dwelling fires per million population than England in 2020-21 and 379 more than Wales.

Two of the most relevant factors influencing fire rates at a national level are the urban-rural profile and the relative deprivation of communities, which goes some way to explaining the differing rates.

[See pages 12 and 13 for more details on these factors.](#)

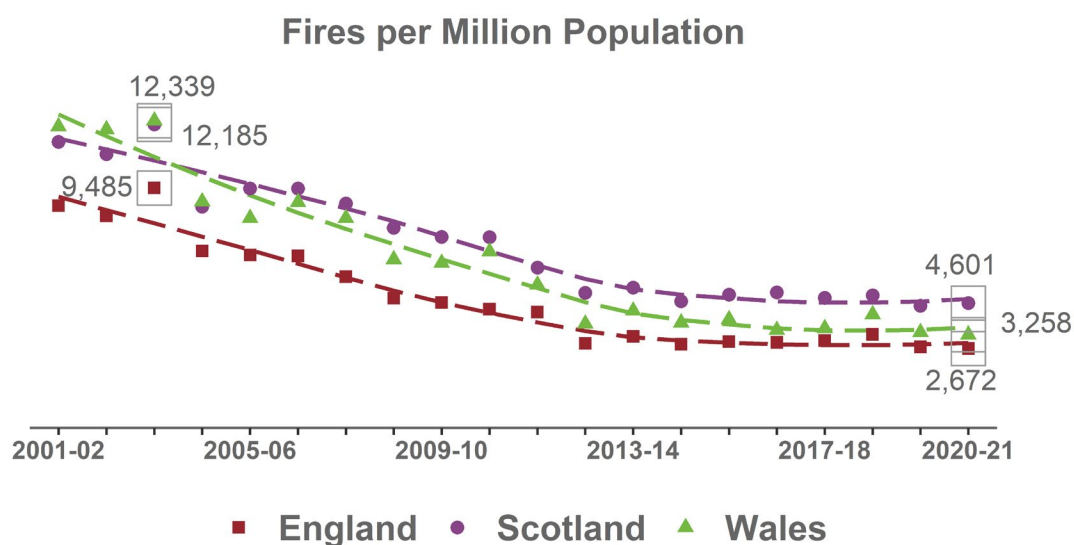


Figure 7: Fires per million population in Great Britain. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent values are also the minimum values.

² Scottish population figures used throughout this document were sourced from National Records of Scotland. Fire statistics for England and Wales were sourced from the Home Office and the Welsh Government. Comparable statistics for Northern Ireland are not available.

Primary Fires per Million Population

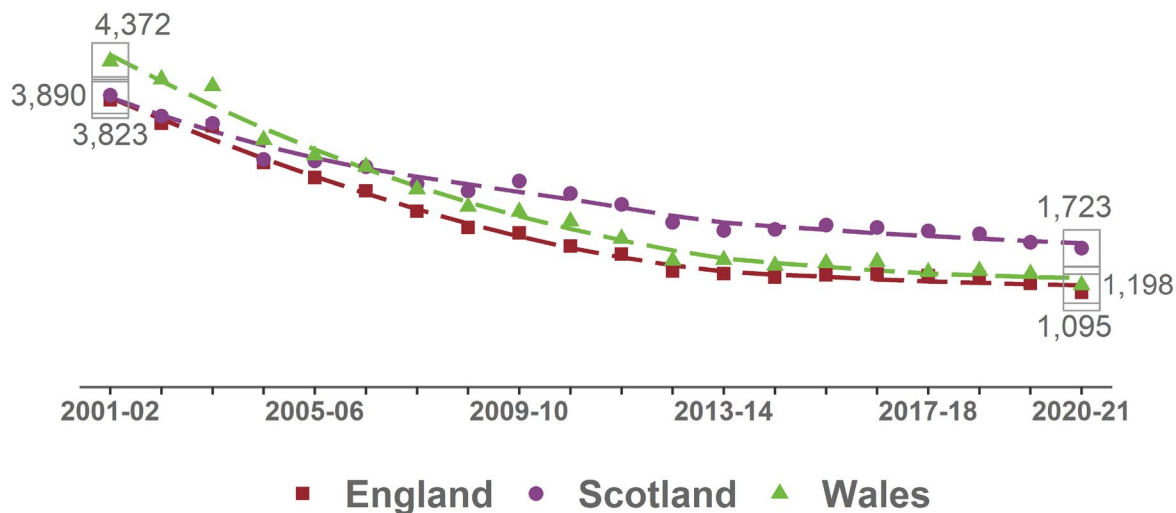


Figure 8: Primary fires per million population in Great Britain. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent values are also the minimum values.

Dwelling Fires per Million Population

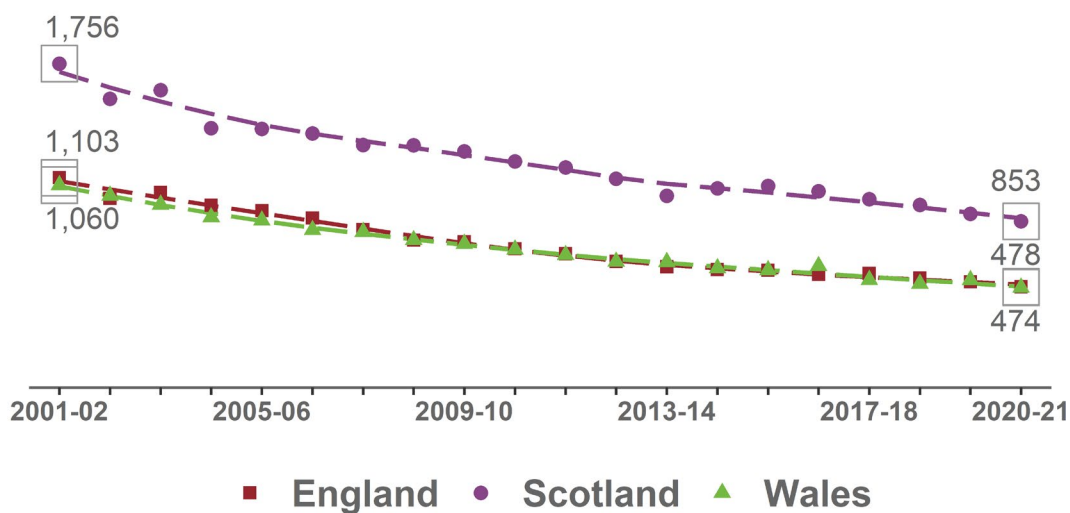


Figure 9: Dwelling fires per million population in Great Britain. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent values are also the minimum values.

Motive

In 2020-21, 57.5% of fires in Scotland were recorded as having been deliberately³ set. Figure 10 shows how the proportion of deliberately set fires varies by incident category.

Deliberate dwelling fires are relatively rare at 11.2% of the total, whereas secondary fires have 79.7% classed as deliberate fires in 2020-21.

There were 6,220 deliberate refuse fires, which is 83.7% of total refuse fires in 2020-21. Similarly, 3,725 grassland fires were classed as deliberate, which is 74.1% of the total.

The number of accidental dwelling fires has decreased from 4,365 to 4,141 (5.1% reduction) from 2019-20 to 2020-21, which is the lowest in this series and 20.5% lower than ten years ago (5,209 in 2010-11).

Deliberate dwellings fires have decreased slightly from last year, with 525 recorded in 2019-20 and 520 recorded in 2020-21 (1.0% decrease).

Over the last ten years, there has been a notable reduction in the number of deliberate dwelling fires, with a 52.0% reduction from 2010-2011 to this year.

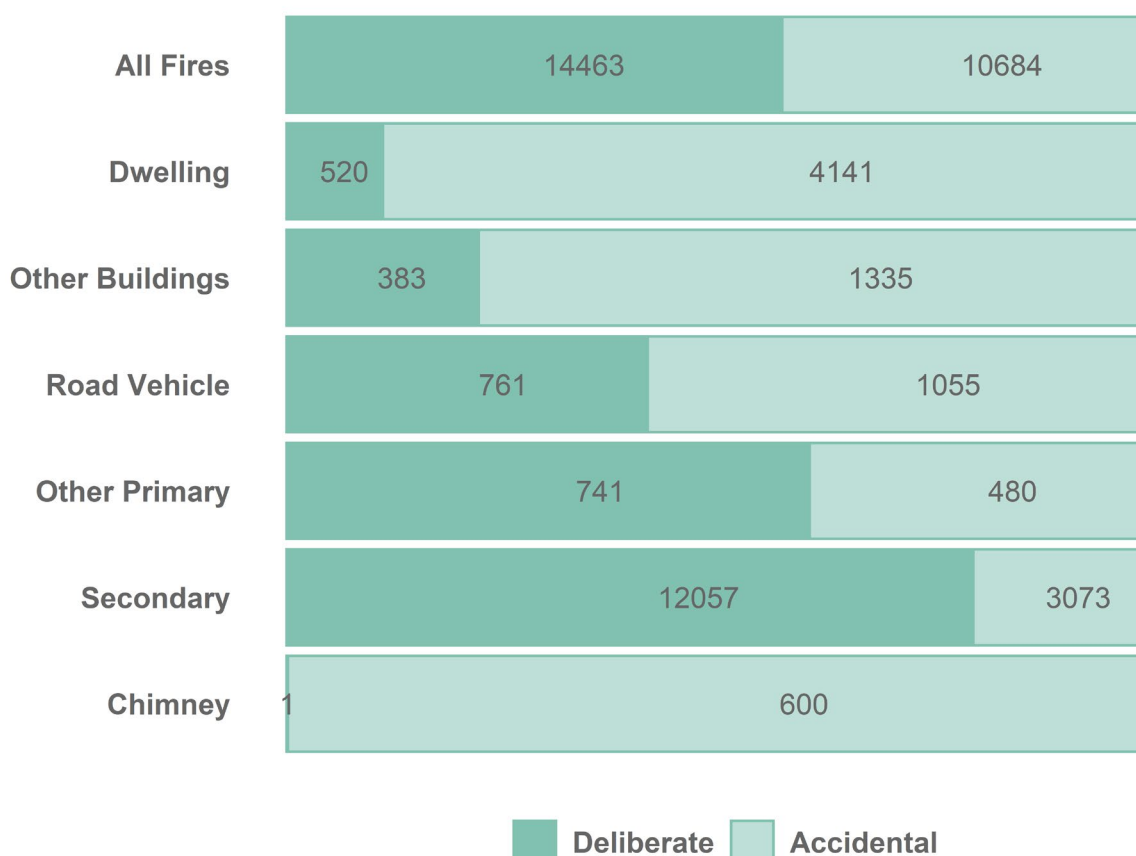


Figure 10: Fires by motive, 2020-21. Written values represent the number of fire incidents in each category.

³ Fires classed as 'Deliberate' should not be interpreted as necessarily resulting from arson or criminal intent.

Dwelling Fires

In 2020-21, 44 out of 53 (83.0%) fatal fire casualties and 876 out of 1,017 (86.1%) non-fatal casualties occurred in dwelling fires and so, it is important that we understand the factors relating to safety in dwelling fires.

Ignition Source

Similar to previous years, the main source of ignition for accidental dwelling fires was cooking appliances, with 60.9% resulting from this source.

Electricity supply was the second highest source (7.5%) and other domestic style appliance (excluding cooking and heating appliances) was the third highest (7.1%). A further 6.4% were smoking related.

Impairment

In 16.1% of accidental dwelling fires in 2020-21, impairment through use of alcohol or drugs was suspected to have been a contributing factor. Such incidents have a much higher casualty rate, [see page 24 for details](#).

Spread of Fire

In 2020-21, 45.1% of dwelling fires resulted in smoke or heat damage only and 26.6% were confined to the item first ignited. 8.4% of dwelling fire incidents involved the fire spreading beyond the initial room. Incidents where dwelling fires had an area of damage greater than 5 square meters accounted for 12.4% of dwelling fires.

Smoke Alarms

1,163 dwelling fires occurred in a property without a smoke alarm (down from 1,290 in 2019-20), which amounts to 25.0% of the total (down from 35.9% ten years ago). Incidents where there was a smoke alarm present which raised the alarm has risen from 40.9% of incidents ten years ago to 52.2% in 2020-21.

This will be largely due to a higher uptake of smoke alarms across the time period. Out of the 541 incidents where a smoke alarm was present but did not operate, 56.7% were due to the detector not being close enough to the fire.



Deprivation (SIMD⁴)

As shown in figure 11, deprivation is strongly associated with the rate of dwelling fires. The 20% most deprived areas of Scotland have a rate of dwelling fires 4.6 times higher than the 20% least deprived and just over double the Scotland average rate.

Dwelling fire rates have reduced over time for each deprivation quintile resulting in relatively similar proportions seen in the last eight years.

In the eight-year period, 2013-14 to 2020-21, there has been a 12.1% reduction in the most deprived areas and a 20.3% reduction in the least deprived areas. These figures vary each year as the totals can fluctuate.

Similarly, for secondary fires, the most deprived 20% have a rate 4.3 times higher than the least deprived 20% and 1.9 times higher than the Scotland average.

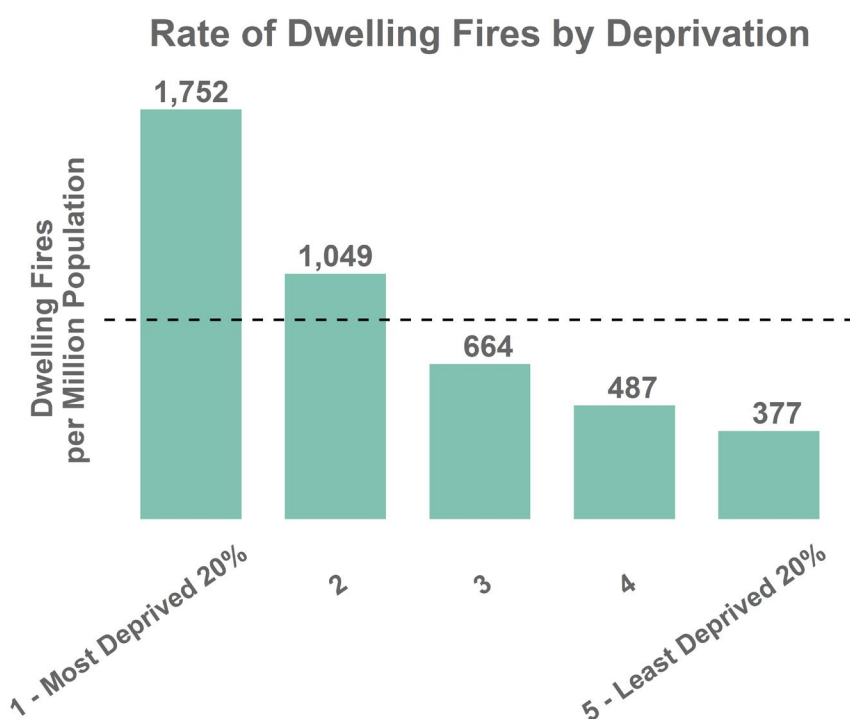


Figure 11: Rate of dwelling fires per million population by level of deprivation, 2020-21. The Scotland average is 853.

⁴Scottish Index of Multiple Deprivation 2020

Urban-Rural⁵

Large urban areas of Scotland have a rate of dwelling fires per million population that is 1.8 times higher than remote rural areas and 1.3 times higher than the Scotland average.

Other urban areas have a rate just above the Scotland average, whereas the four more rural areas have a rate below the Scotland average.

Dwelling fire rates are decreasing much faster in urban areas than in rural areas and so, these urban-rural proportions have gradually changed over time. In the last eight years, the average Scotland rate has decreased from 999 to 853 (14.6% reduction).

The rate for large urban areas has reduced by 22.4% and the rate for accessible rural areas has reduced by 32.8%. It should be noted that accessible rural areas have decreased by 24.9% just in the last year. Reductions in other areas in the last eight years have been below average.

Other urban areas have reduced by 2.8%, accessible small towns by 7.2%, remote small towns by 8.9% and remote rural by 6.4%.

Annual figures fluctuate but long-term trends show that inner cities account for a large proportion of incidents as well as the reduction over time. Within the last year, accessible rural areas have also contributed to this reduction.

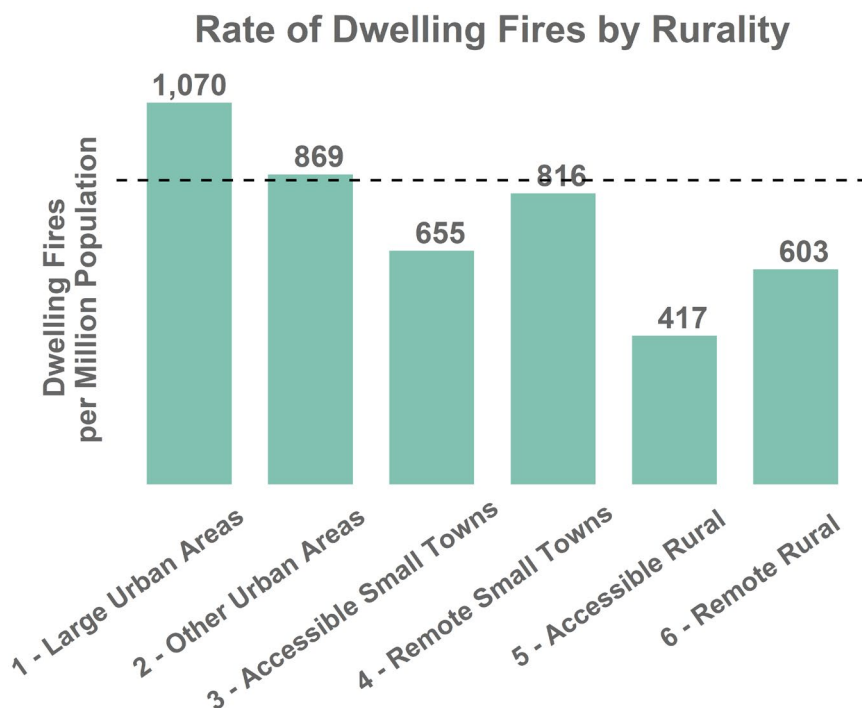


Figure 12: Rate of dwelling fires per million population by level of rurality, 2020-21. The Scotland average is 853.

⁵ Scottish Government Urban Rural Six Fold Classification

Local Authority Comparisons

The number of incidents and casualties vary across the 32 local authority areas of Scotland. We use rates adjusted for population or the number of dwellings to more fairly compare these areas.

Accidental Dwelling Fires

There was an average of 156.0 accidental dwelling fires per 100,000 dwellings in Scotland. Dundee City had the highest rate at 247.9 per 100,000 dwellings, followed by West Dunbartonshire at 225.9 and Inverclyde at 225.0. Orkney Islands had the lowest rate at 35.1.

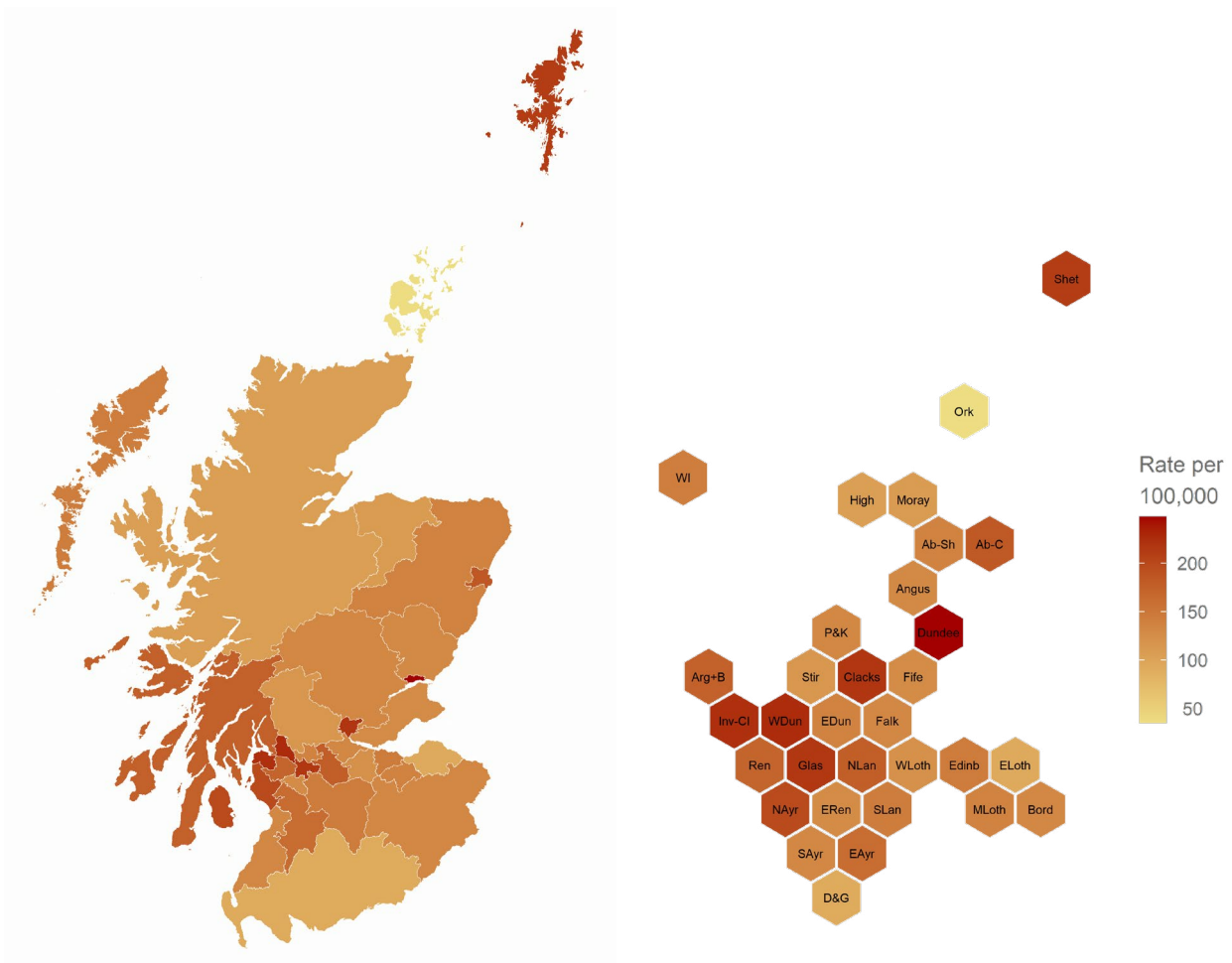


Figure 13: Accidental dwelling fires per 100,000 dwellings, choropleth and area normalised cartogram 2020-21

Deliberate Fires

Fires recorded as deliberately set varies considerably across Scotland, with the highest rate in Scotland being 578.8 deliberate fires recorded per 100,000 population in Inverclyde and the lowest rate being 26.8 in Orkney Islands.

In 2020-21, the Scotland average is 231.9 deliberate fires per 100,000 population. As can be seen from figure 14, deliberate fire setting is more frequent in the more urban local authority areas and west of the Central Lowlands.

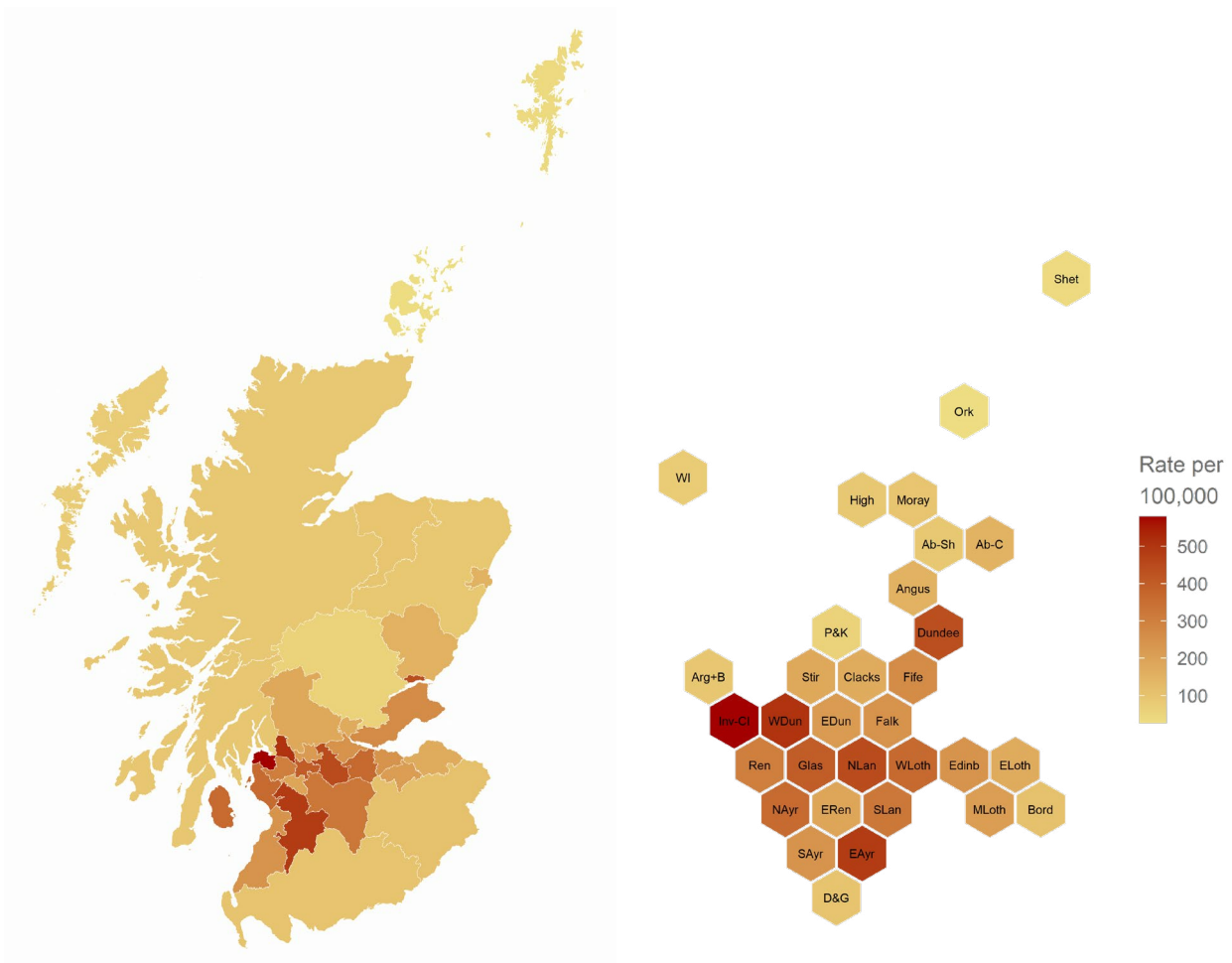


Figure 14: Deliberate fires per 100,000 population, choropleth and area normalised cartogram 2020-21

For more local authority graphs and statistics please see the [downloadable tables and charts workbook](#).

4. Casualties in Fires

There were 53 fatal fire casualties in 2020-21, up from 27 last year. Although this appears to be a large increase, annual totals have varied considerably in the past. The ten-year average for fatal fire casualties is 44. This figure in 2019-20 was unusually low compared to this average (1.6 times lower).



The figure for 2020-21 is 1.2 times higher than this average. Figure 15 shows the long-term decreasing trend in this total. Of the 53 fatal fire casualties, 44 (83.0%) occurred in dwelling fires, 2 (3.8%) in other buildings and 5 (9.4%) in road vehicles.

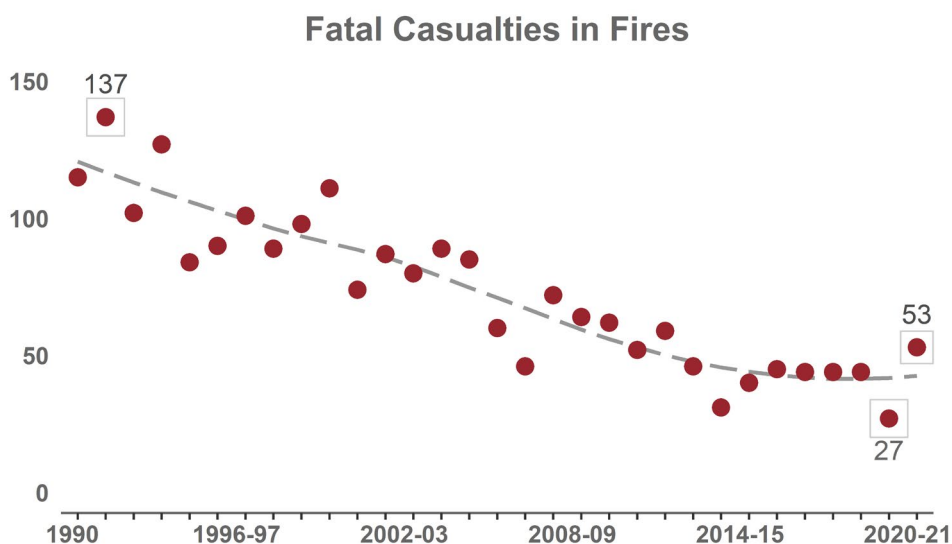


Figure 15: Long-term trend in the number of fatal fire casualties. Note that the series changed from calendar year to financial year after 1993. Values displayed in boxes on chart represent the maximum, minimum and most recent values.

Fire fatalities often appear in clusters throughout the years. This has occurred for many years and is not a new phenomenon. Due to this, total fire fatality figures appear to be volatile between years.

Figure 16 shows the 13-week rolling average of fire fatalities from 2015-16 to 2020-21. The peaks of the chart represent these clusters of fire fatalities.

The total fire fatality figure for a year is dependent on whether these peaks fall within that year. For instance, the chart shows that in 2019-20 there is a peak very close to the beginning of the fiscal year.

If this peak were to have occurred slightly earlier in the calendar year, it would have occurred at the end of the 2018-19 fiscal year.

Consequently, the total fire fatalities figure for 2019-20 would have been considerably lower and the total for 2018-19 would have been higher.

This highlights that clusters of fatalities have a large influence on the total fire fatality figure for a year and so, large variations between years are to be expected.

Fire Fatalities - 13-Week Rolling Average

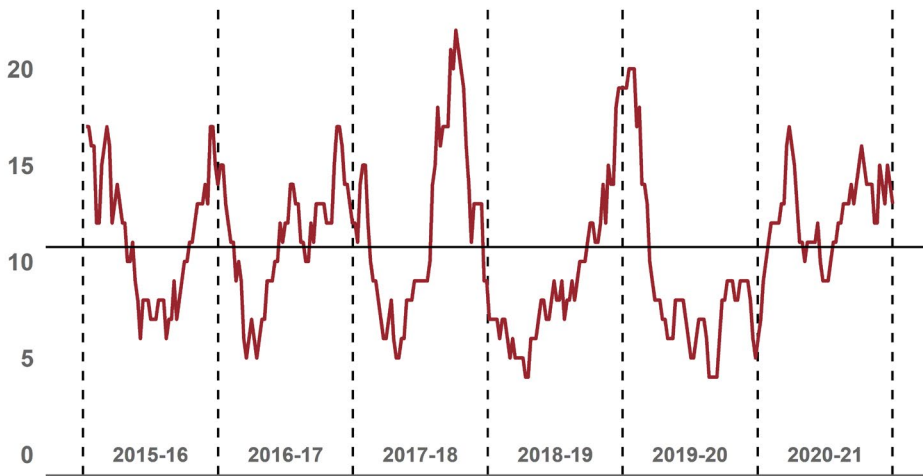


Figure 16: Fire Fatalities as a 13-week rolling average. The horizontal black line represents the average of the 13-week rolling values. Vertical dashed lines represent the change in fiscal year.

In 2020-21, there were 1,017 non-fatal fire casualties, down from 1,027 last year (1.0% reduction). This is the lowest number of non-fatal fire casualties recorded since this series began.

Over the last ten years, there has been a 23.6% reduction in the number of non-fatal casualties. Figure 17 highlights the decreasing trend in non-fatal fire casualties since the early 2000s.

876 (86.1%) of these casualties occurred in dwelling fires, 74 (7.3%) occurred in other building types and 22 (2.2%) occurred in road vehicles.

The number of non-fatal casualties in all deliberate fires decreased from 167 last year to 156 in 2020-21 (6.6% reduction). The number of non-fatal casualties in all accidental fires increased from 860 in 2019-20 to 861 this year (0.1% increase).

Non-fatal Casualties in Fires

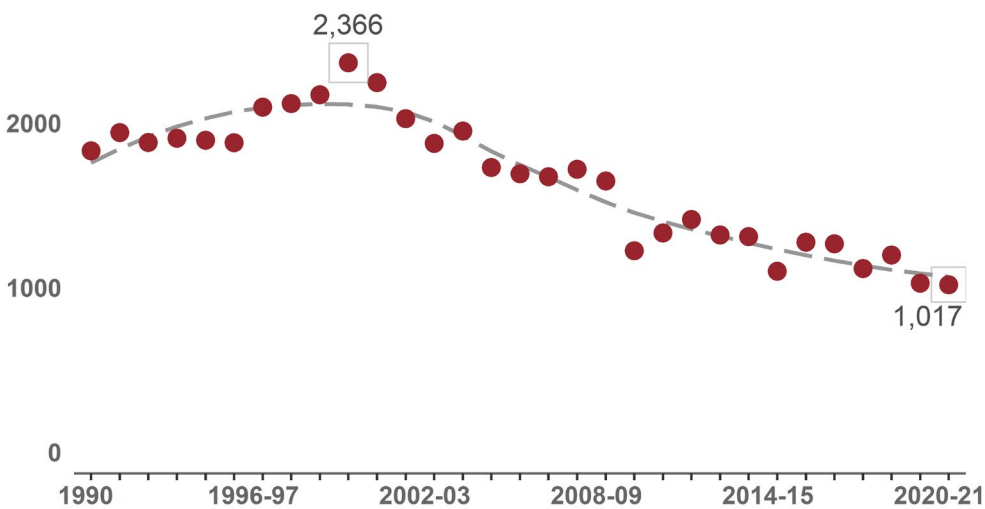


Figure 17: Long-term trend in the number of non-fatal fire casualties. Note that the series changed from calendar year to financial year after 1993. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent value is also the minimum value.

In 2020-21, 693 casualties required treatment, down from 808 last year (14.2% reduction). 324 casualties were given no treatment at the scene but a precautionary check was recommended. This is up from 219 in 2019-20 (48.0% increase).

The primary cause of injury in fires was being overcome by gas, smoke or toxic fumes at 50.1%, with burns accounting for a further 14.0% and a combination of burns and being overcome by gas or smoke accounting for a further 2.0%.

Of those who required treatment, 350 casualties attended hospital, down from 367 last year (4.6% reduction).

Treatment of Non-fatal Casualties

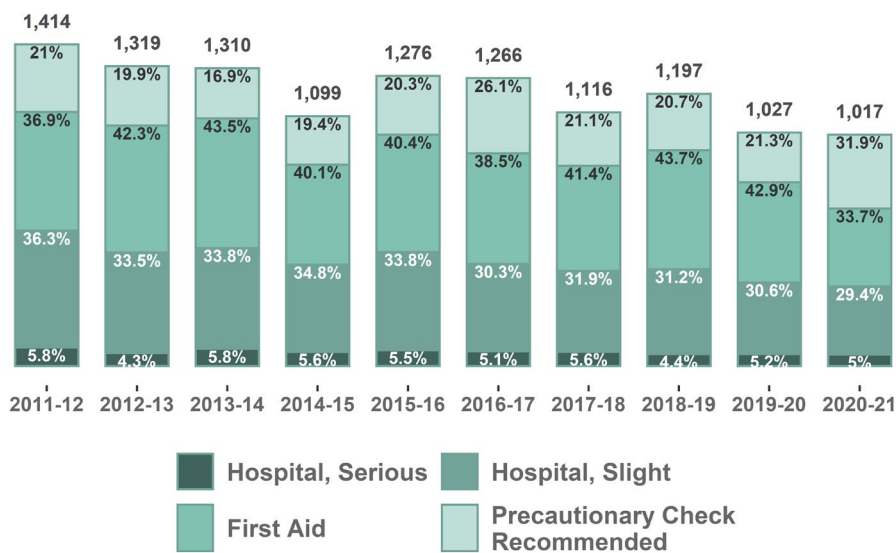


Figure 18: Treatment of non-fatal casualties with percentage share by type

Great Britain Comparisons

The number of fatal casualties in fires varies each year. Figure 19 shows that overall, there has been a downward trend in fatal fire casualties per million population since the early 2000s across all nations.

Scotland has consistently had higher fatal fire casualties per million than England and Wales. Differing demographic, deprivation and urban-rural profiles of each nation are likely factors in explaining the different rates.

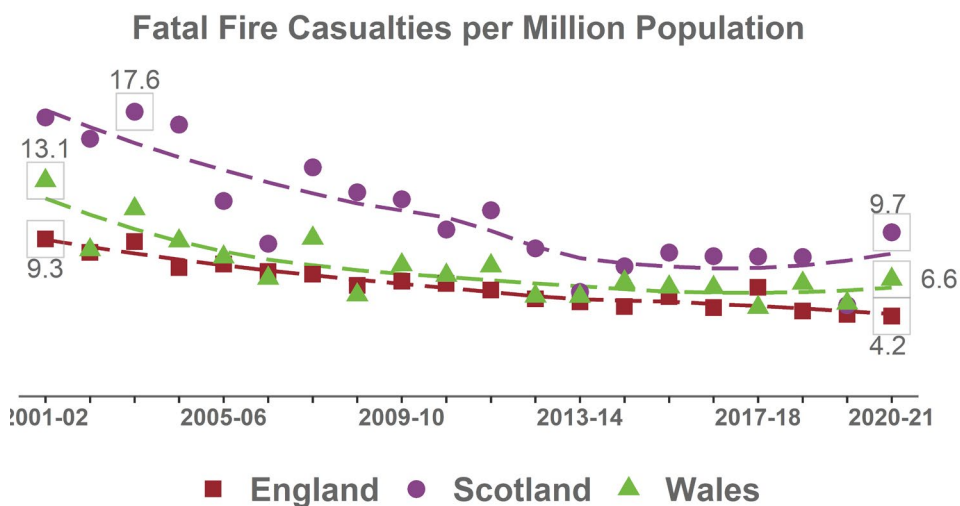


Figure 19: Fatal fire casualties per million population in Great Britain. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent values are also the minimum values.

Hospitalised Non-fatal Fire Casualties per Million Population

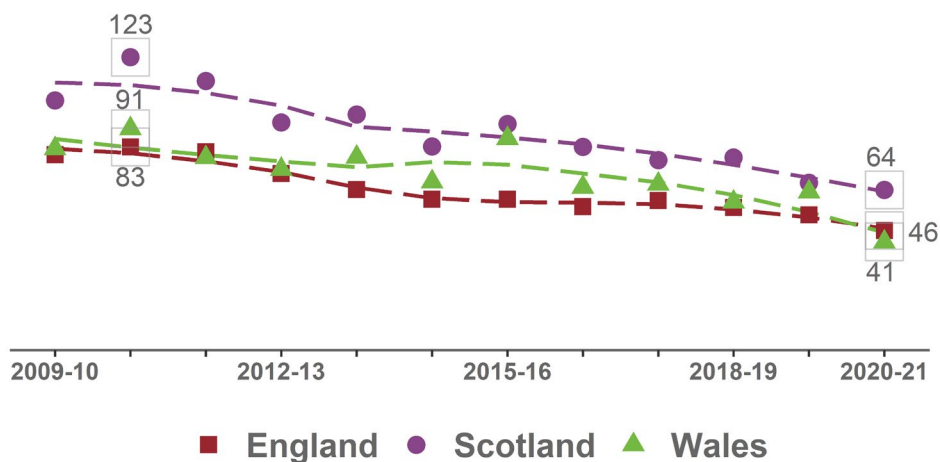


Figure 20: Hospitalised fire casualties per million population in Great Britain. Values displayed on chart represent the maximum, minimum and most recent value. In this case, the most recent values are also the minimum values.

Casualty Profile

Age

Figure 21 shows the strong relationship between age and rates of fatal casualties. The rates for those over 40 are all above the Scotland average. After age 79 the rate is considerably higher, with those aged 80-89 having a rate more than triple the Scotland average and those over 90 years of age having a rate over five times higher.

Those aged 0 to 39 years are below the Scotland average, with those aged 5 to 16 years having a rate less than a tenth of the Scottish average. Those aged 0 to 4 years have a rate of zero. One-year figures can vary a lot and so, ten-year average figures have been used to ensure that comparisons are robust.

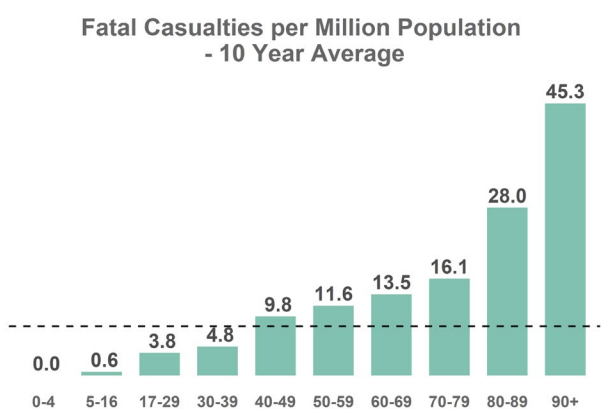


Figure 21: Ten-year average rate per million population of fatal casualties by age band. The dotted line represents the average figure of 8.4

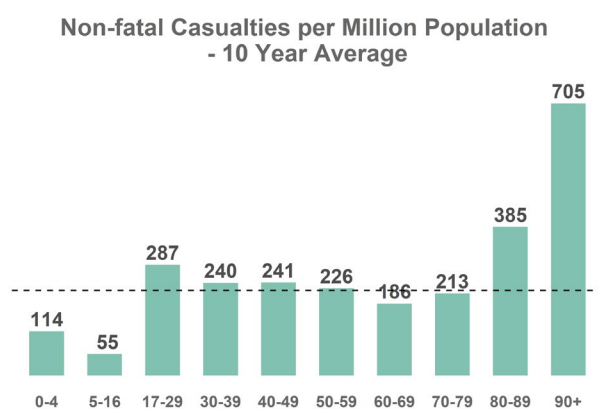


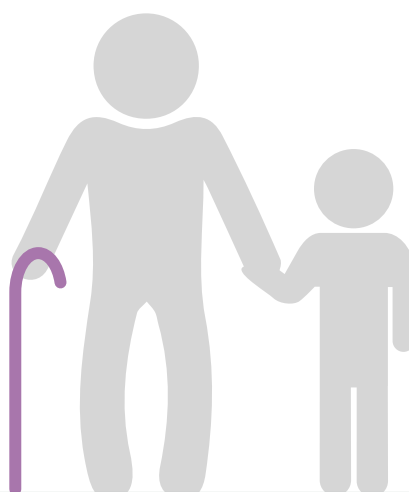
Figure 22: Ten-year average rate per million population of non-fatal casualties by age band. The dotted line represents the average figure of 220.4

The relationship between age and rate of casualty is not as strong for non-fatal casualties as it is for fatal casualties.

There are similar rates for those over 80, with those aged 80-89 having almost double the rate of the Scotland average and those over 90 having a rate over three times the average.

In contrast to fatal casualty rates, those aged 17-29 have a rate 1.3 times above the Scotland average and those aged 60-69 have a rate 0.7 times less than the Scotland average.

People under the age of 16 years have a rate below the Scotland average, with those aged 0-4 years having a rate just over half of the average and those aged 5-16 years having a rate 4 times less than the Scotland average.



Gender

Of the 53 fatal casualties in 2020-21, 40 were male (75.5% of fatalities). Similar to previous years, there is a distinct difference between genders in the rate of fatal casualties per million population. The total rate of fatal casualties per million population was 9.7 in 2020-21.

The rate of male fatal casualties was considerably higher in comparison at 15.0 fatalities per million population. The rate of female casualties was considerably lower than the overall rate at 4.6 fatalities per million population.

There is a similar gender difference seen in non-fatal casualty rates, however the difference is smaller. In 2020-21, the total rate of non-fatal casualties was 184.6 casualties per million population.

The rate of male non-fatal casualties was 207.9 and the rate of female non-fatal casualties was 150.7 casualties per million population.

Deprivation

There is a relationship between deprivation and fire casualty rates in Scotland. For fatal casualties, the most deprived 20% has a 5.1 times higher fatal casualty rate than the least deprived 20% and 1.9 times higher than the Scotland average.

The least deprived 20% is considerably below all other areas with a rate that is 2.8 times less than the Scotland average.

A similar situation is seen for non-fatal casualties. The most deprived area has a rate of non-fatal casualties 5.4 times more than the least deprived 20%.

Rate of Fatal Casualties by Deprivation

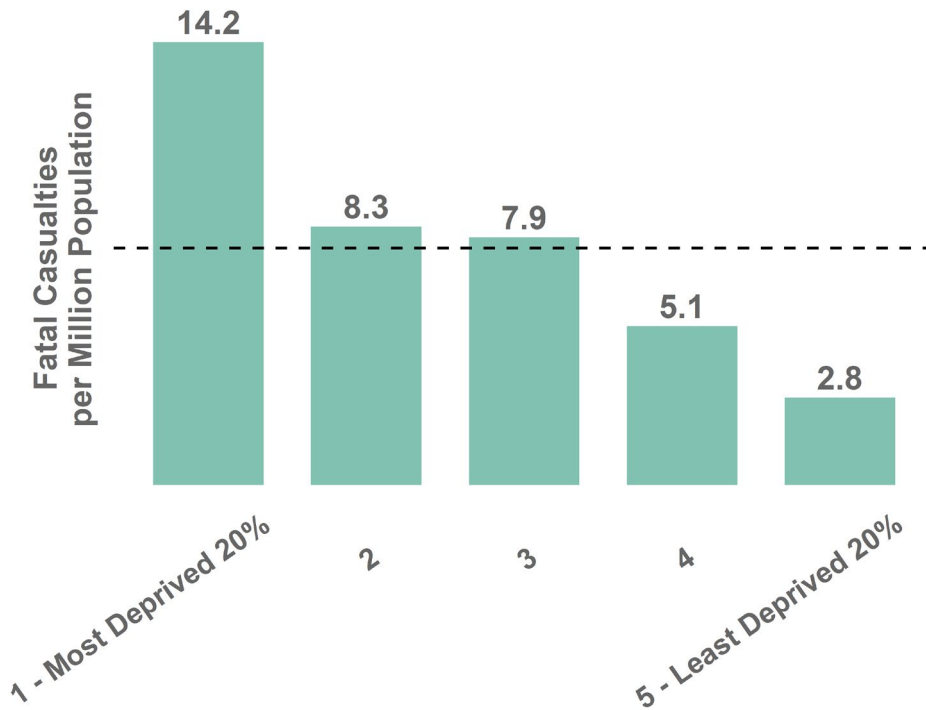


Figure 23: Eight-year⁶ average rate of fatal fire casualties per million population by level of deprivation. The Scotland average is 7.6. Eight years of data was used to ensure a fair comparison.

Rate of Non-fatal Casualties by Deprivation

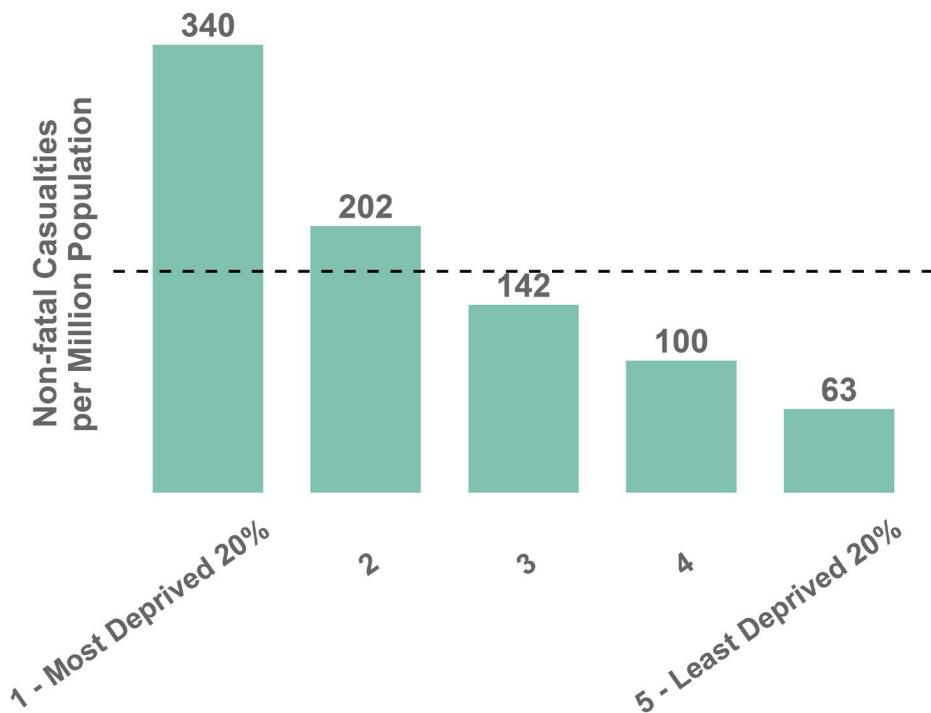


Figure 24: Eight-year average rate of non-fatal fire casualties per million population by level of deprivation. The Scotland average is 167.9. Eight years of data was used to ensure a fair comparison.

⁶ An eight-year average is used as the annual totals vary substantially and multiple years of data is needed to produce robust statistics

Deprivation is a very clear factor in the historic casualty profile regardless of gender or age. This comes out clearly in figures 25 and 26. Please note, these charts are presented to highlight the historic casualty profile only, each bar should not be interpreted as the true risk of any individual or group.

Figure 25 shows that for fatal casualties, there is a clear link between deprivation and fatal casualty rate. Regardless of age or gender, those in the most deprived 20% areas have a higher rate of fatal casualties per million population. Over the age of 50, males have a much higher rate of fatal casualties regardless of deprivation.

Females over 80 and in the most deprived areas have a much higher rate of casualty than females over 80 in less deprived areas, with the least deprived 20% having a casualty rate far below average. In contrast, in all areas males over 80 have a higher than average deprivation rate.

Those over 90 have not been included in this chart due to the higher number of casualties and low population rates resulting in some areas exceeding 100 fatal casualties per million population. There have been 15 fatal casualties in those aged over 90 in the last eight years, of which 9 were male. Of the 15 fatal casualties in over 90s, 12 were in SIMD quintiles 3 or 4.

Fatal Casualties per Million Population - 8 Year Average

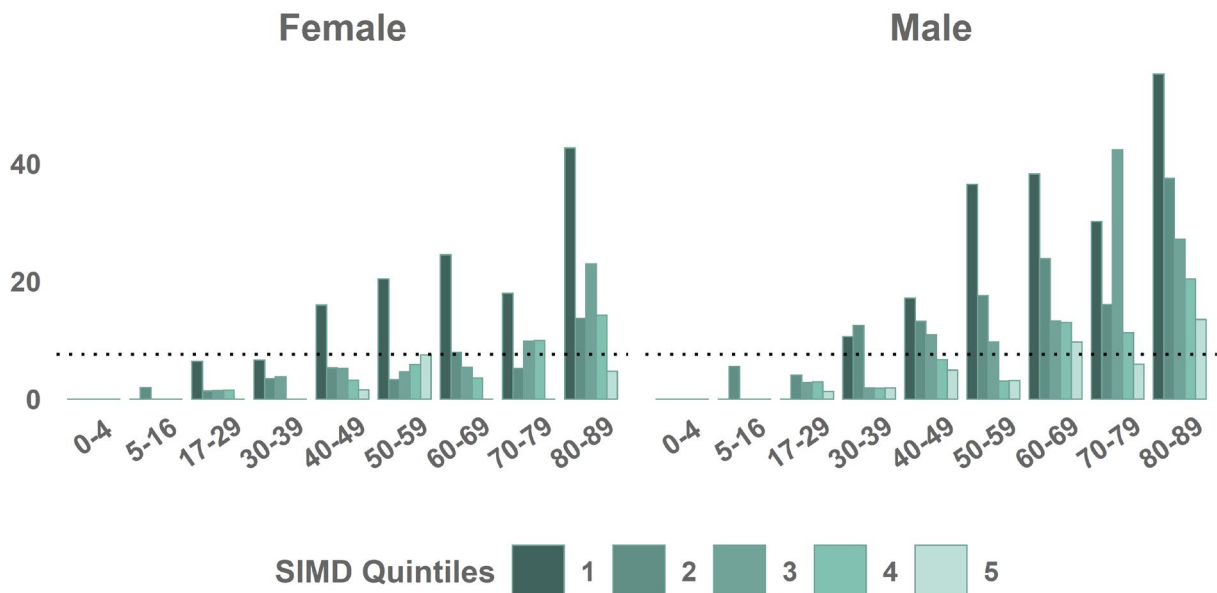


Figure 25: Fatal fire casualties per million population by gender, age and by level of deprivation where 1 is the 20.0% most deprived areas and 5 is the 20.0% least deprived areas. The horizontal line represents the Scotland average (7.6)

For non-fatal hospitalised casualties, the rates are higher for all adults in the 20% most deprived areas, except for males who are aged over 90. Males in the 40% most deprived areas have higher rates than females, with all males above age 17 years in SIMD quintile 2 being above the Scotland average.

Hospitalised Casualties per Million Population - 8 Year Average

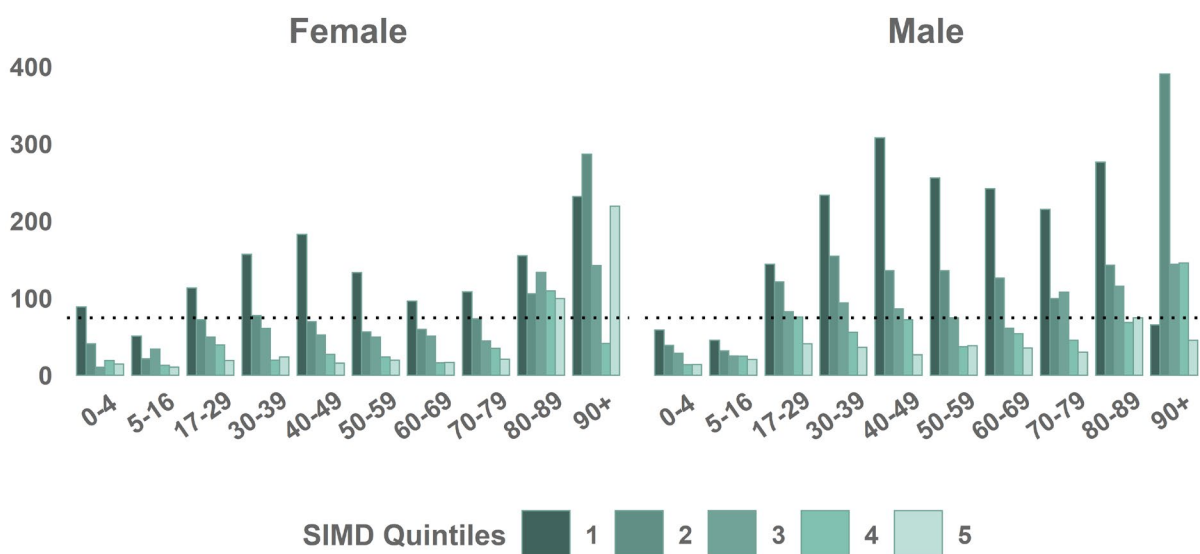


Figure 26: Hospitalised fire casualties per million population by gender, age and by level of deprivation where 1 is the 20.0% most deprived areas and 5 is the 20.0% least deprived areas. The horizontal line represents the Scotland average (77.7).

Impairment

Impairment using alcohol or drugs was suspected to have been a contributing factor in 16.1% of accidental dwelling fires. These fires have higher casualty rates, with an average rate of 12.3 fatal casualties per 1,000 fires in the last ten years.

This is compared to the 2.6 fatal casualties per 1,000 fires where impairment was not suspected.

There were 366.0 non-fatal casualties per 1,000 fires with such impairment, compared to the 139.5 without.

These averages are based on ten years of casualty data as there is no clear trend in recent years and the relatively low number of casualties means that a longer-term average is fairer.

In 2020-21, there were 8 fatal casualties in accidental dwelling fires where impairment by alcohol or drugs was suspected and 216 non-fatal casualties.

Urban-Rural

The rate of non-fatal casualties is 1.7 times higher in the most urban areas compared to the most rural.

The non-fatal casualty figures vary each year. In the last eight years, rates have been decreasing proportionally faster in the most rural areas.

The most rural areas have seen a decrease of 51.1%, while the most urban areas have seen a decrease of 42.3%. Overall, the Scotland total has decreased by 36.4% since 2013-14.

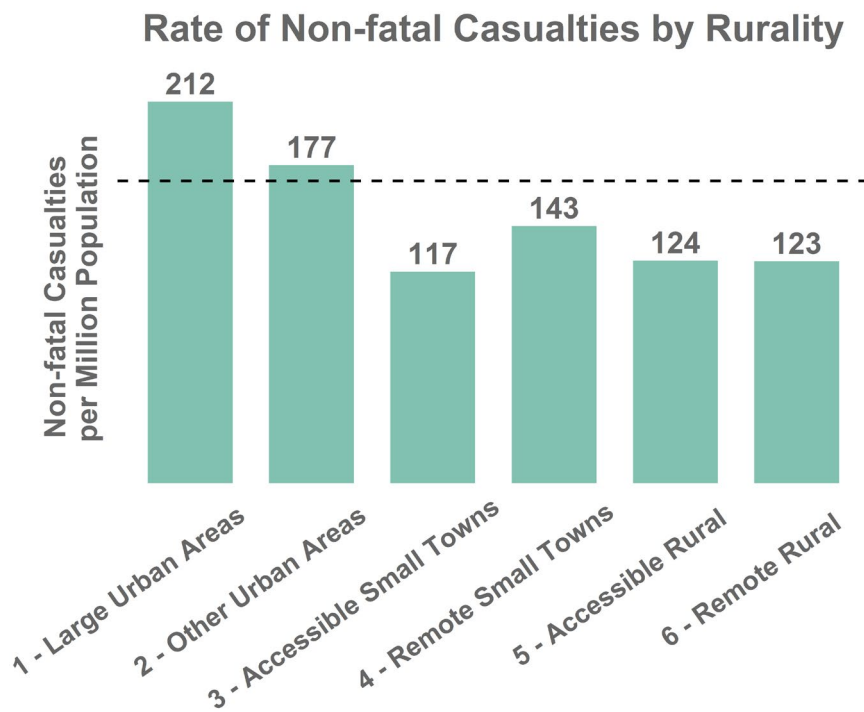


Figure 27: Eight-year average rate of non-fatal fire casualties per million population by level of rurality. The Scotland average is 167.9. Eight years of data was used to ensure a fair comparison.

The situation differs for fatal casualties. The rate of fatal casualties per million population is 1.7 times higher in the most rural areas compared to the most urban areas.

The three categories of most remote areas (remote small towns, accessible rural and remote rural) all have higher than average rates of fatal casualties per million population, yet all have lower than average rates of non-fatal casualties.

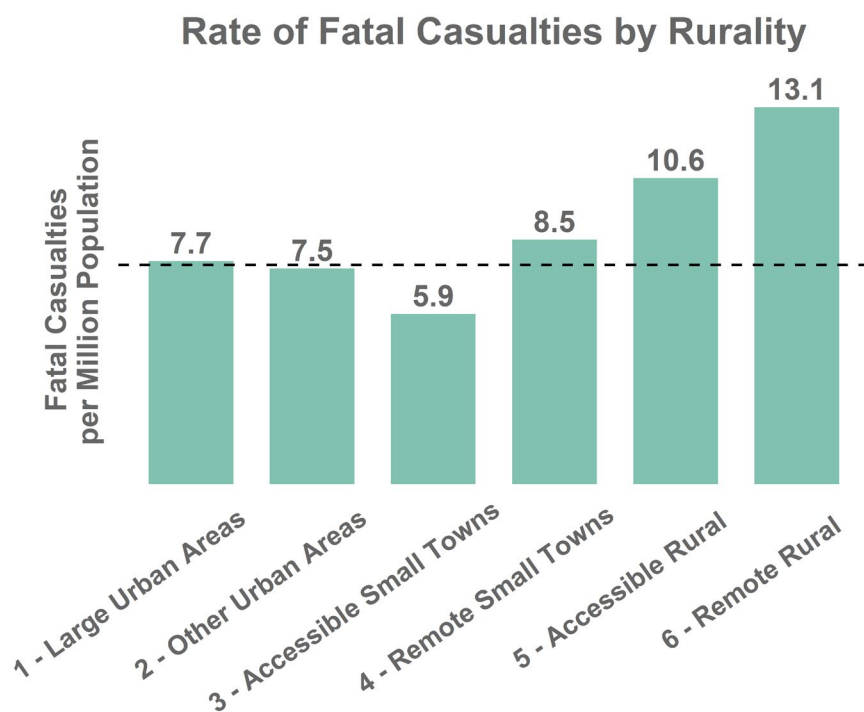


Figure 28: Eight-year average rate of fatal fire casualties per million population by level of rurality. The Scotland average is 7.6. Eight years of data was used to ensure a fair comparison.

5. Non-fire Incidents and Casualties

In 2020-21, there was 12,693 non-fire incidents recorded, down from 14,397 last year (11.8% reduction). Although this is a relatively large reduction from last year's figures, the figures for this year could be unusually low due to the restrictions that were imposed during the Covid-19 pandemic.

The restrictions led to limited travel, closure of buildings and changes in human behaviours. Consequently, some non-fire incident categories have reduced more substantially than would have been expected when compared to previous years' figures. Figure 29 shows the overall trend of non-fire incidents, showing the figure levelling off and remaining relatively stable from 2015-16.

Pre-pandemic working arrangements recognised wider partnership working in dealing with known casualties. However, throughout lockdown periods, SFRS had reduced involvement in these cases, particularly during multi-agency incidents. In following reporting guidance, SFRS personnel did not report any casualties where there had been no direct involvement.

There has been a large decrease in the number of road traffic collisions attended by SFRS, with 1,596 recorded in 2020-21, compared to the 2,372 recorded last year. This is a reduction of 32.7%.

Covid-19 restrictions meant that people could not travel as freely within the country as they did before the pandemic and so, there was less traffic on the roads. Due to this, low overall figures are to be expected.

Lift release is a further sub-category of non-fire incident where Covid-19 restrictions appear to have had an impact on operational attendance. There has been a 44.5% reduction on last year's figures, reducing from 748 to 415 in 2020-21.

Effecting Entry or Exit incidents decreased from 3,992 last year to 3,735 in 2020-21 (6.4% reduction). Similarly, Assist Other Agencies incidents reduced by 7.8%, from 1,259 in 2019-20 to 1,161 this year. See figures 31 to 36 for trends in major non-fire incident categories.

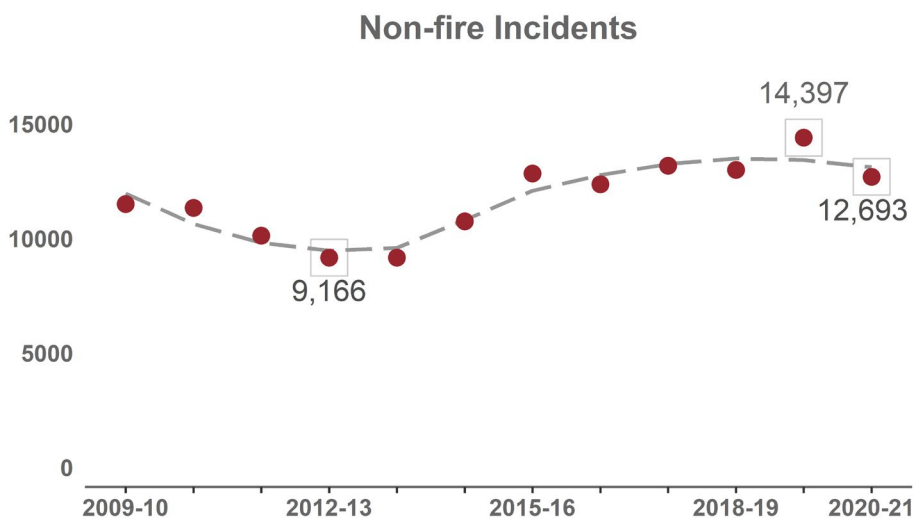


Figure 29: Trends in non-fire incidents. Values displayed in boxes on chart represent the maximum, minimum and most recent values.

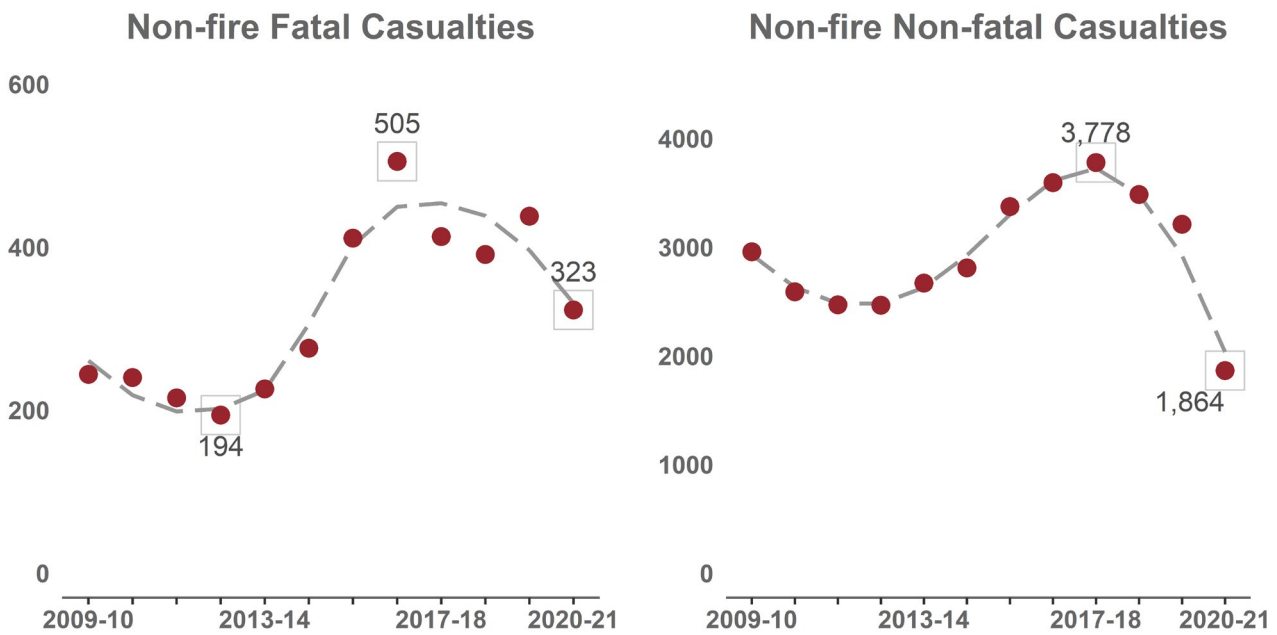


Figure 30: Trends in the number of non-fire casualties. Values displayed in boxes on chart represent the maximum, minimum and most recent values. For non-fire non-fatal casualties, the most recent value is also the minimum value. Changes in operational procedures during the Covid-19 pandemic has impacted casualty figures. [See page 27 for explanation.](#)

There were 323 non-fire fatal casualties in 2020-21, a decrease of 26.3% from last year's 438 fatalities. This figure had increased consistently in previous years due to increasing inter-agency cooperation.

There were 1,864 non-fire non-fatal casualties in 2020-21, a decrease of 42.0% from last year's total of 3,211.

The number of non-fire non-fatal casualties has been decreasing steadily since 2017-18 but this is the largest reduction that has been seen within one year.

As previously discussed, there has been a reduction in non-fire incidents attended this year which is likely to have been caused by the Covid-19 lockdown and social distancing restrictions.

With less incidents attended, it is likely that the large reductions in fatalities and non-fatal casualties is partly attributed to the Covid-19 restrictions.

There was a large decrease in the number of fatal and non-fatal casualties resulting from road traffic collisions attended to by SFRS crews in 2020-21.

There were 895 non-fire non-fatal casualties resulting from these road traffic collisions (45.5% decrease from the 1,642 recorded in 2019-20) and 60 fatalities (26.8% reduction from 82 recorded in 2019-20).

There has also been a considerable decrease in the number of suicide or suicide attempts attended by SFRS resulting in casualties, with 34 fatalities (down from 51 in 2019-20) and 17 non-fatal casualties (down from 27 in 2019-20).

Road Traffic Collisions

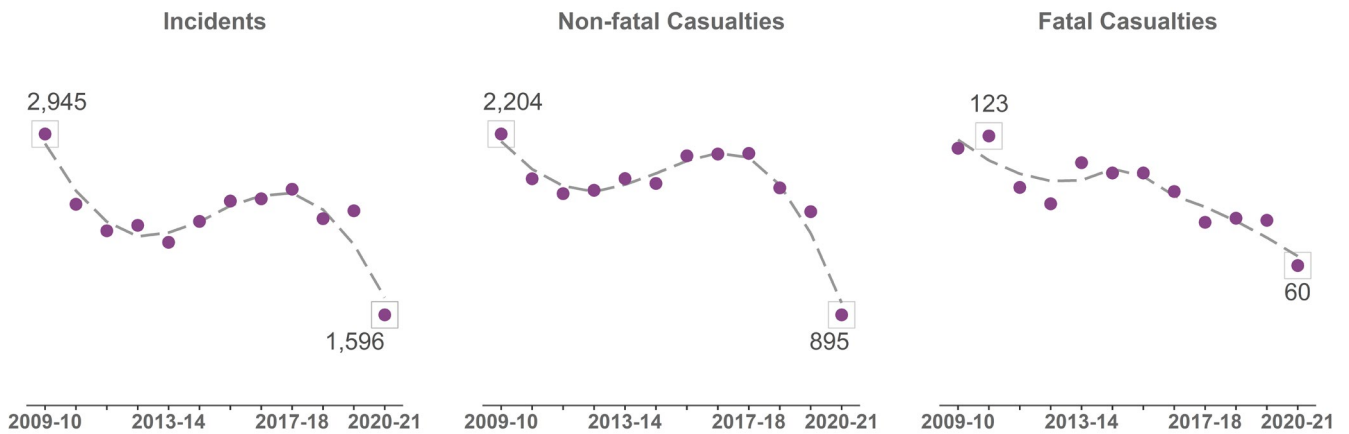


Figure 31: Trends in the Number of Road Traffic Collisions. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent values are also the minimum values.

Flooding and Rescue or Evacuation from Water

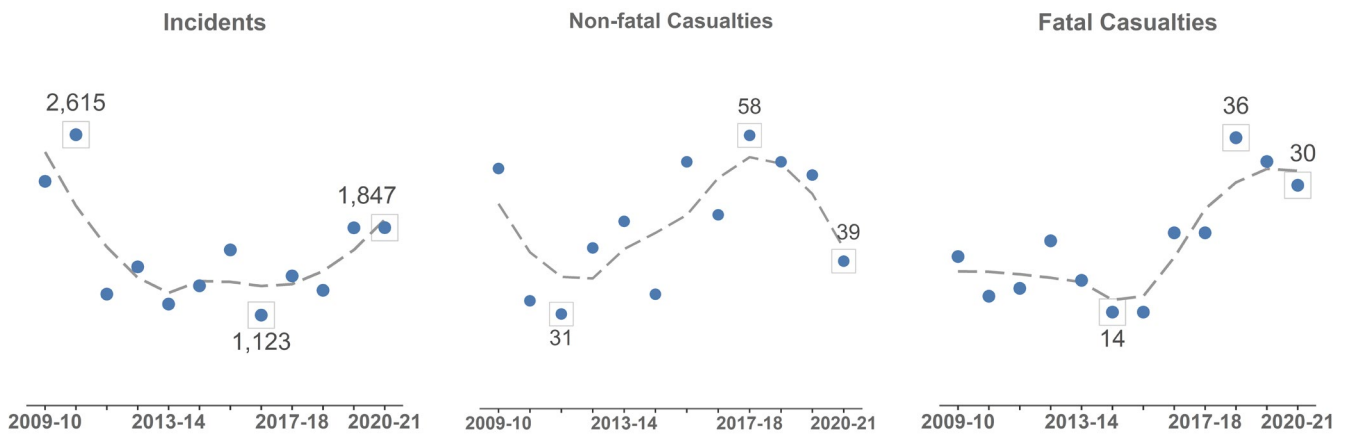


Figure 32: Trends in the Number of Flooding Incidents. Values displayed in boxes on chart represent the maximum, minimum and most recent values.

Medical Response

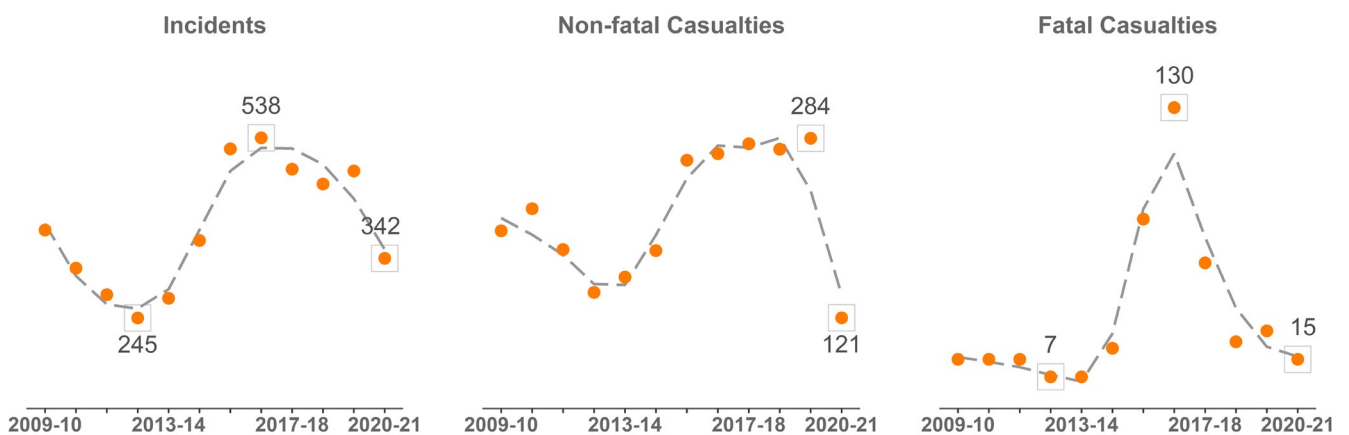


Figure 33: Trends in Number of Medical Incidents. Values displayed in boxes on chart represent the maximum, minimum and most recent values. There are instances where the most recent value is also the minimum value. Changes in operational procedures during the Covid-19 pandemic has impacted casualty figures. See page 27 for explanation.

Suicide (including attempts)

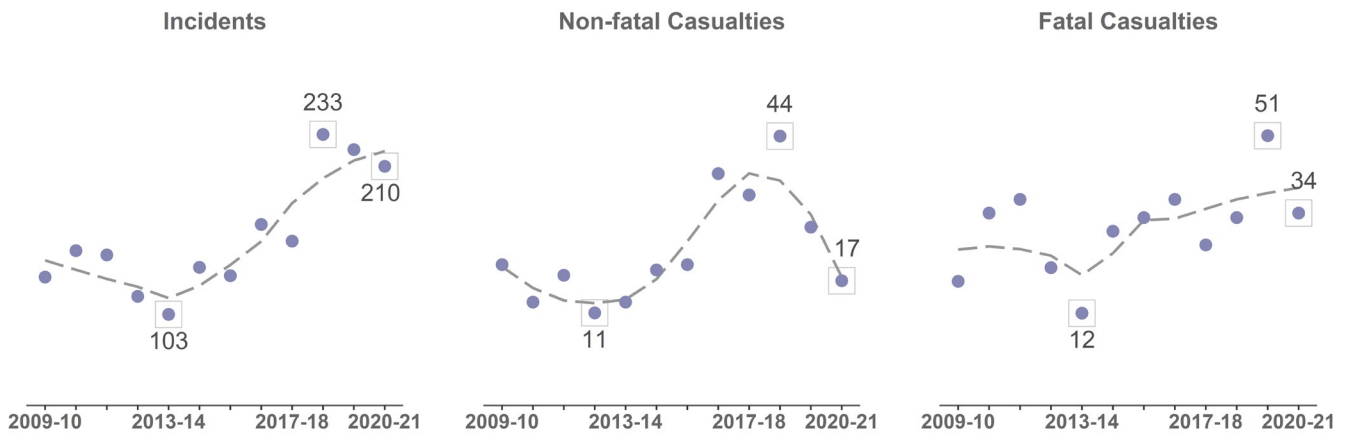


Figure 34: Trends in Suicide (including attempts). Values displayed in boxes on chart represent the maximum, minimum and most recent values.

Effecting Entry or Exit

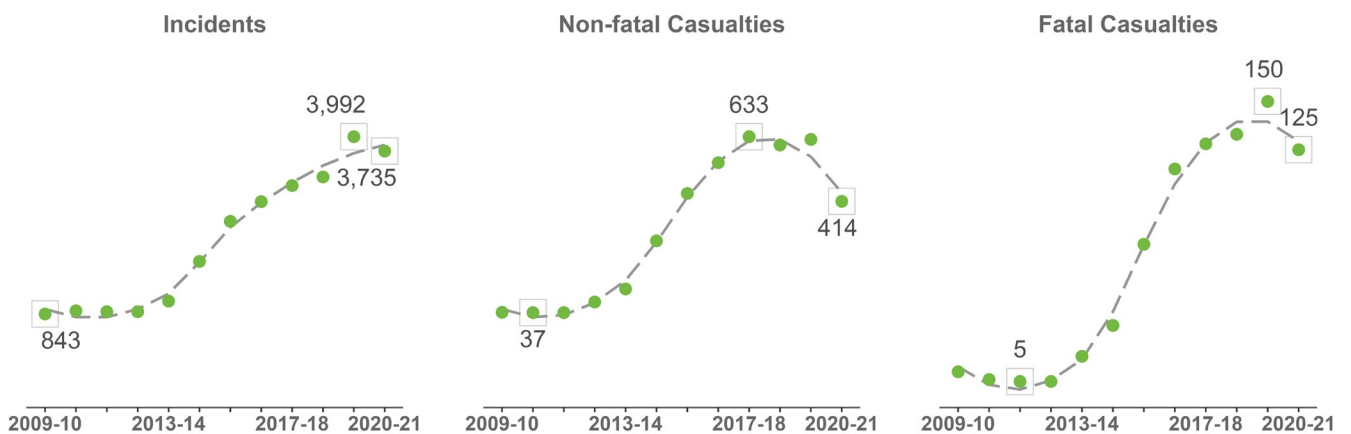


Figure 35: Trends in Effecting Entry or Exit. Values displayed in boxes on chart represent the maximum, minimum and most recent values. Changes in operational procedures during the Covid-19 pandemic has impacted casualty figures. See page 27 for explanation.

Assist Other Agencies

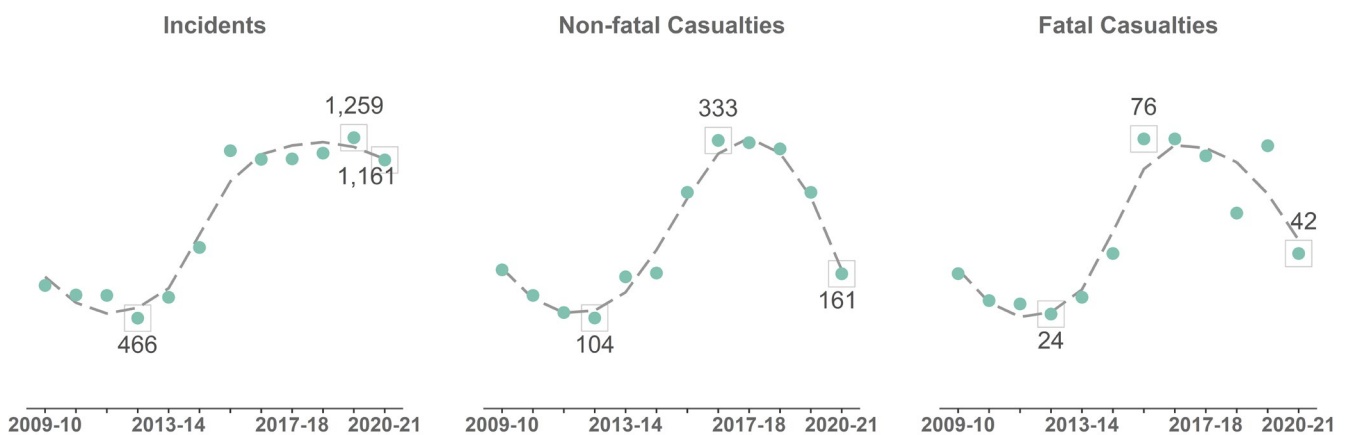


Figure 36: Trends in Assist Other Agencies. Values displayed in boxes on chart represent the maximum, minimum and most recent values. Changes in operational procedures during the Covid-19 pandemic has impacted casualty figures. See page 27 for explanation.

6. False alarms

In 2020-21, there were 47,742 false alarms, down from 53,177 last year (10.2% reduction). Of these, 46,820 were fire false alarms. This is considerably lower than last year's 52,302 (10.5% reduction) and the lowest recorded value in this series.

Fire false alarm incidents where detecting apparatus has raised an alarm is the main cause of this reduction. In recent years, there was an upward trend in this type of false alarm. However, this year the number of fire false alarms due to apparatus has decreased to 35,809. This is a 13.6% reduction from 41,467 recorded in 2019-20.

This large reduction is likely due to the closure of non-domestic premises during the Covid-19 pandemic.

This is shown in figure 38, where it is shown that false alarms in dwellings remained relatively consistent, when compared to previous years' figures, but false alarms in other buildings has dropped substantially.

Fire false alarm attendances caused by raised alarms from detecting apparatus accounts for 41.8% of all incidents attended this year. This is down from 45.0% in 2019-20.

Fire False Alarms

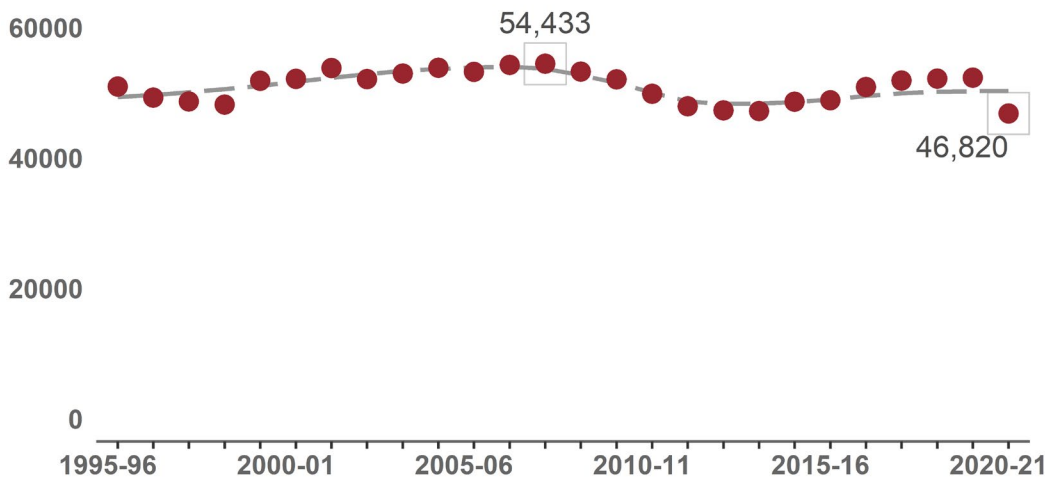


Figure 37: Long-term trend in fire false alarms. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent value is also the minimum value.

Figure 38 shows that an increase in fire false alarms due to apparatus was the cause of the overall increase up until the mid-2000s, shown in figure 36.

This trend levelled off in the mid to late 2000s and appeared to continue increasing until this year when the figure decreased again.

The number of fire false alarms accounted for by good intent remained stable until about 2009-10 and then began to decrease slowly.

This year there has been an increase in the number of good intent fire false alarms compared to recent years.

The number of malicious fire false alarms has steadily decreased since the late 1990s and continued to decrease from 2019-20 to 2020-21.

Trends in Fire False Alarms

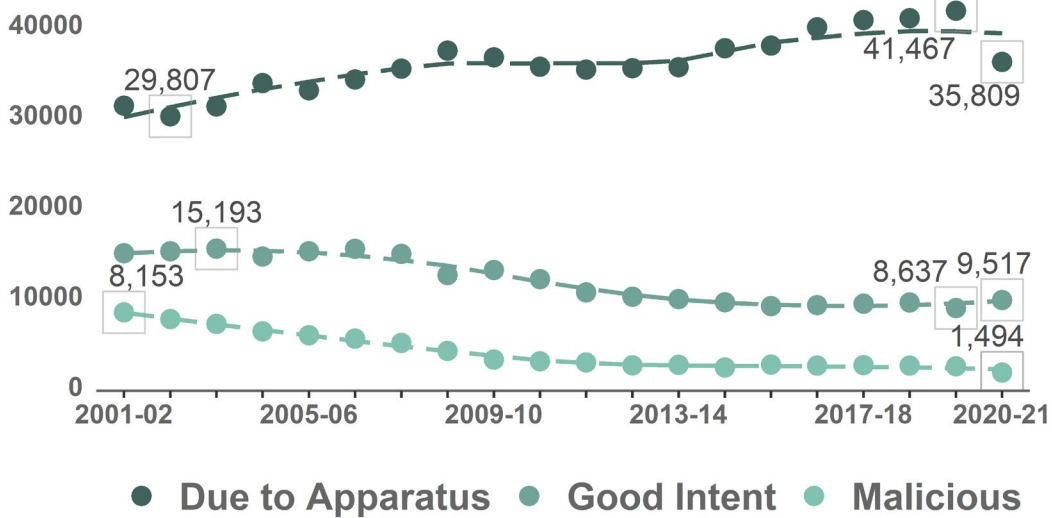


Figure 38: Trends in cause of fire false alarms. Values displayed in boxes on chart represent the maximum, minimum and most recent values. There are instances where the most recent value is also the minimum value.

The main cause of increasing fire false alarms is due to apparatus false alarms in dwellings. The total number of apparatus false alarms in dwellings is 13,325, a decrease from 13,859 recorded in 2019-20 (3.9%). This is up 43.0% from ten years ago.

The number of apparatus false alarms in other buildings has remained more stable over the last ten years. Malicious false alarms have reduced in dwellings over the last ten years from 782 to 300 in 2020-21 (61.6%) and good intent false alarms has decreased from 4,479 to 3,535 (21.1%).

Trends in Fire False Alarms due to Apparatus



Figure 39: Trends in the location of fire false alarms due to apparatus. Values displayed in boxes on chart represent the maximum, minimum and most recent values. There are instances where the most recent value is also the minimum value.

Unwanted Fire Alarm Signals

Unwanted Fire Alarm Signals, commonly referred to as UFAS, describes a potentially avoidable false alarm signal from a workplace, either from an automatic fire alarm or from a person. In previous years, these signals had steadily increased, from 26,394 incidents in 2013-14 to 29,285 in 2019-20 (10.9% increase).

Within the last year this figure has reduced substantially to 23,733 (19.0% decrease from last year). The number of fire alarm signals that are not UFAS has remained relatively stable over the last few years.

There has been an increase of 0.3% from 2019-20 (23,017 incidents) to 2020-21 (23,087 incidents). With the overall number of fire false alarms decreasing in Scotland this year, this suggests that the main reason is due to a large decrease in the number of unwanted fire alarm signals.

The Covid-19 pandemic could have influenced this figure as most offices were closed and home-working was encouraged. This means that less people were in workplace buildings and so, less opportunity for an unwanted signal to be triggered.

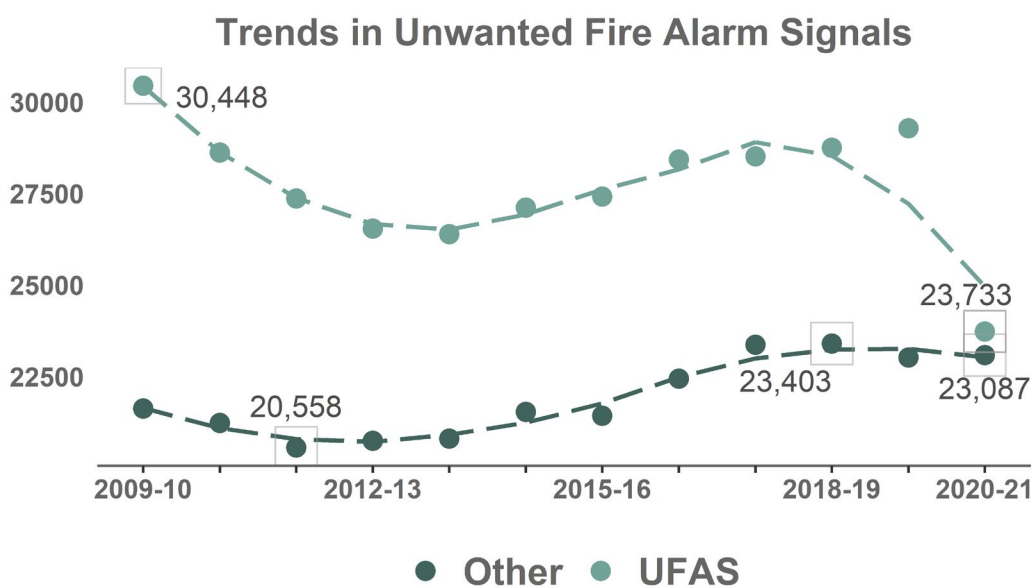


Figure 40: Trends in Unwanted Fire Alarm Signals (UFAS) and Other fire alarm signals in Scotland. Values displayed in boxes on chart represent the maximum, minimum and most recent values. There are instances where the most recent value is also the minimum value.

Local Authority Breakdown

Figure 41 shows a breakdown of UFAS by local authority. UFAS are considerably higher in urban areas such as Glasgow City (rate of 655.9 per 100,000 population).

Dundee City (rate of 622.9 per 100,000) and City of Edinburgh (rate of 568.2 per 100,000 population).

This is because there are typically more offices and workplace buildings in urban areas.

Rural areas have much lower rates, for instance Orkney Islands has a rate of 165.2 per 100,000 population.

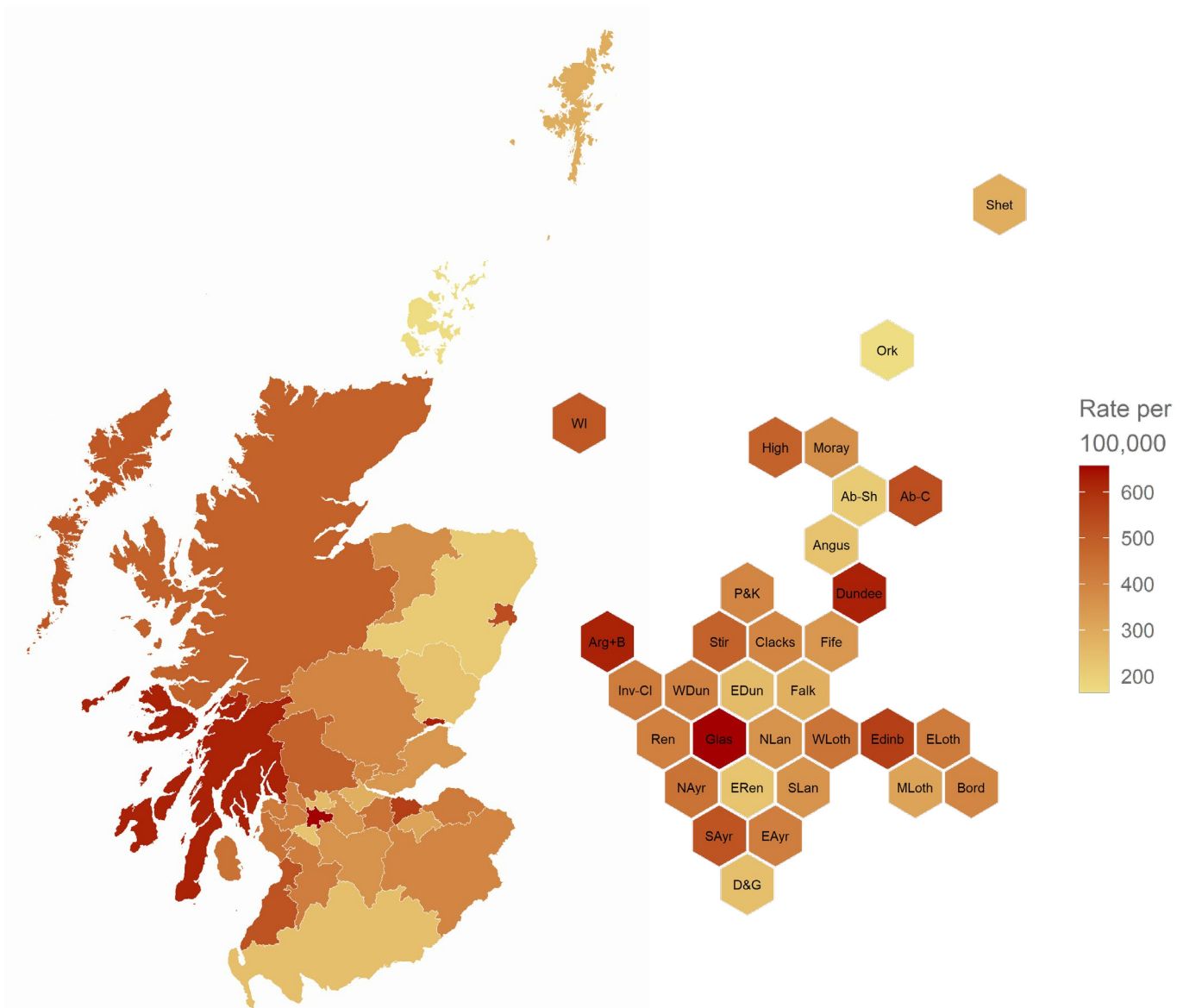


Figure 41: Unwanted Fire Alarm Signals (UFAS) per 100,000 population, choropleth and area normalised cartogram 2020-21

Great Britain Comparisons

Despite the reduction in numbers of fire false alarms, there is still a notably higher rate of fire false alarms per million population in Scotland than in England and Wales.

While all nations have seen a reduction in the number of fire false alarms, there has been a bigger reduction in England and Wales than in Scotland. This has widened the gap between the rates of fire false alarms between Scotland and the other nations.

However, this year, with the reduction of fire false alarms in Scotland, the gap appears to be closing slightly. In 2020-21, Scotland has a 124.1% higher rate than England, compared with 132.6% reported last year.

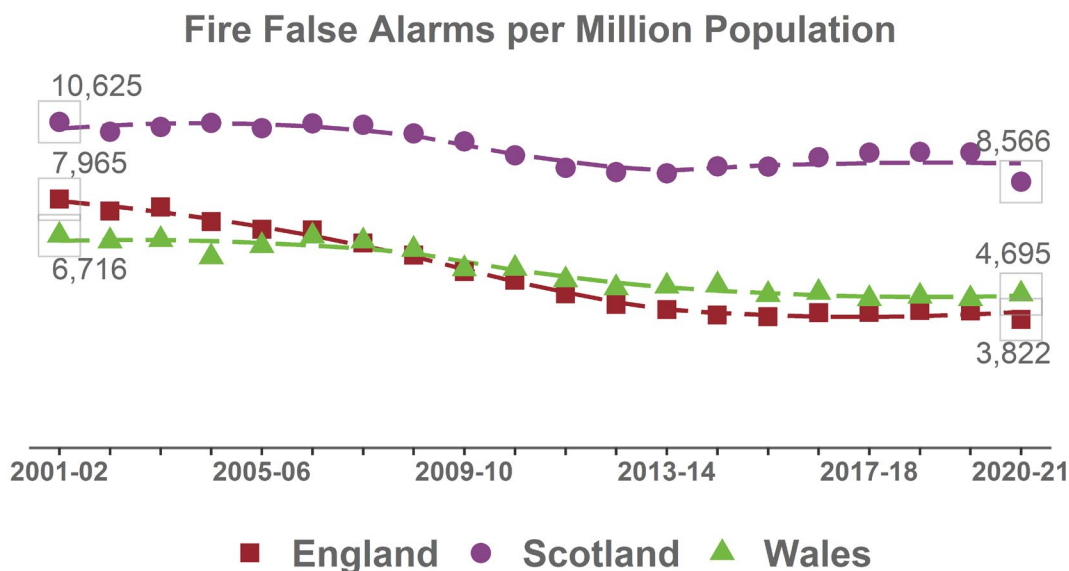


Figure 42: Trends in the fire false alarms by nation. Values displayed in boxes on chart represent the maximum, minimum and most recent values. In this case, the most recent values are also the minimum values.

It should be noted that while Scotland saw a decrease in fire false alarms during the pandemic, England and Wales did not. Currently, England and Wales manage unwanted fire alarm signals differently from Scotland.

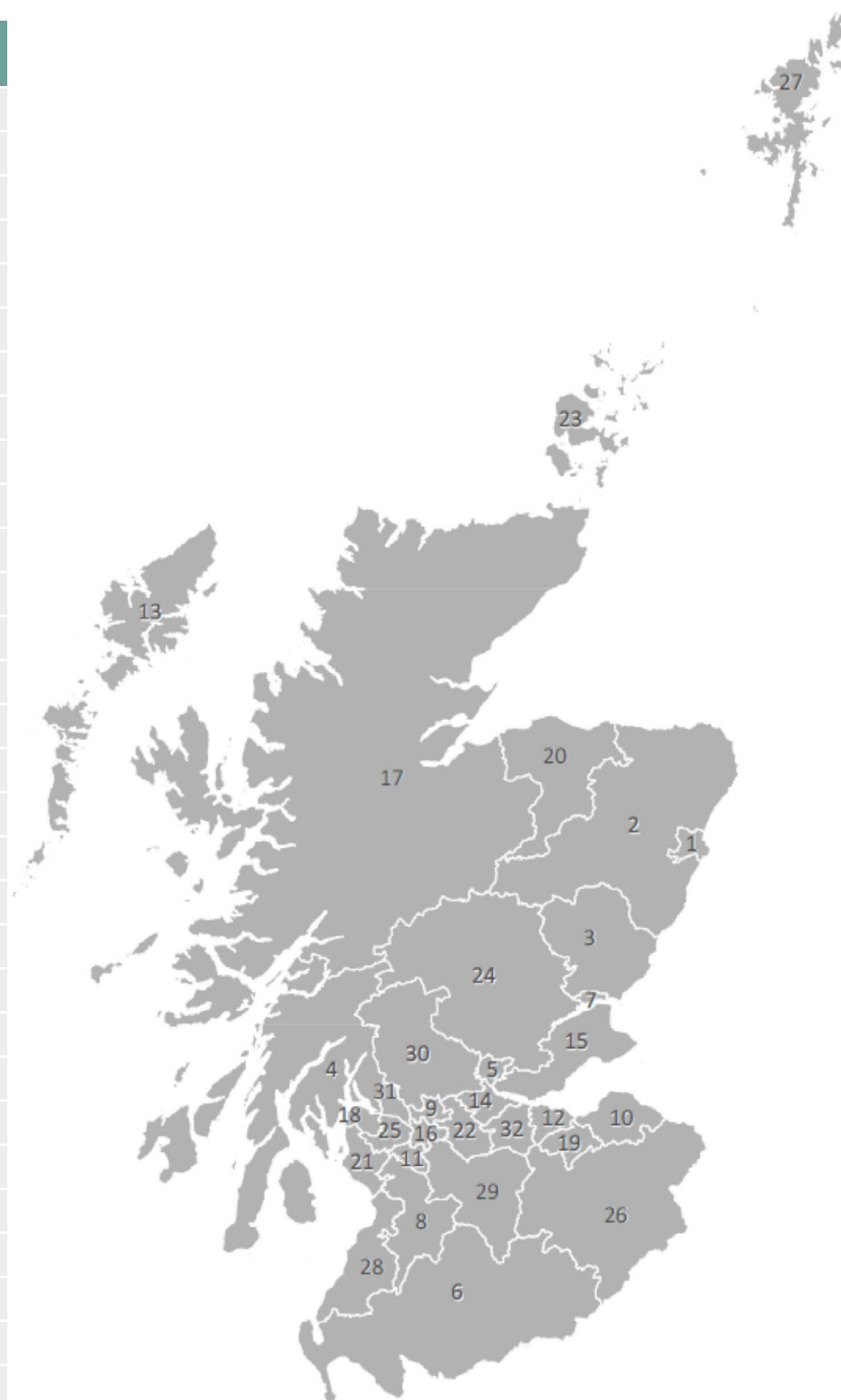
This means that, in general, England and Wales attend to less of these signals.

This year Scotland has attended 19.0% less of these signals than in previous years.

This suggests that the main reason for the difference in Scotland compared to England and Wales is due to the difference in the handling of unwanted fire alarm signals.

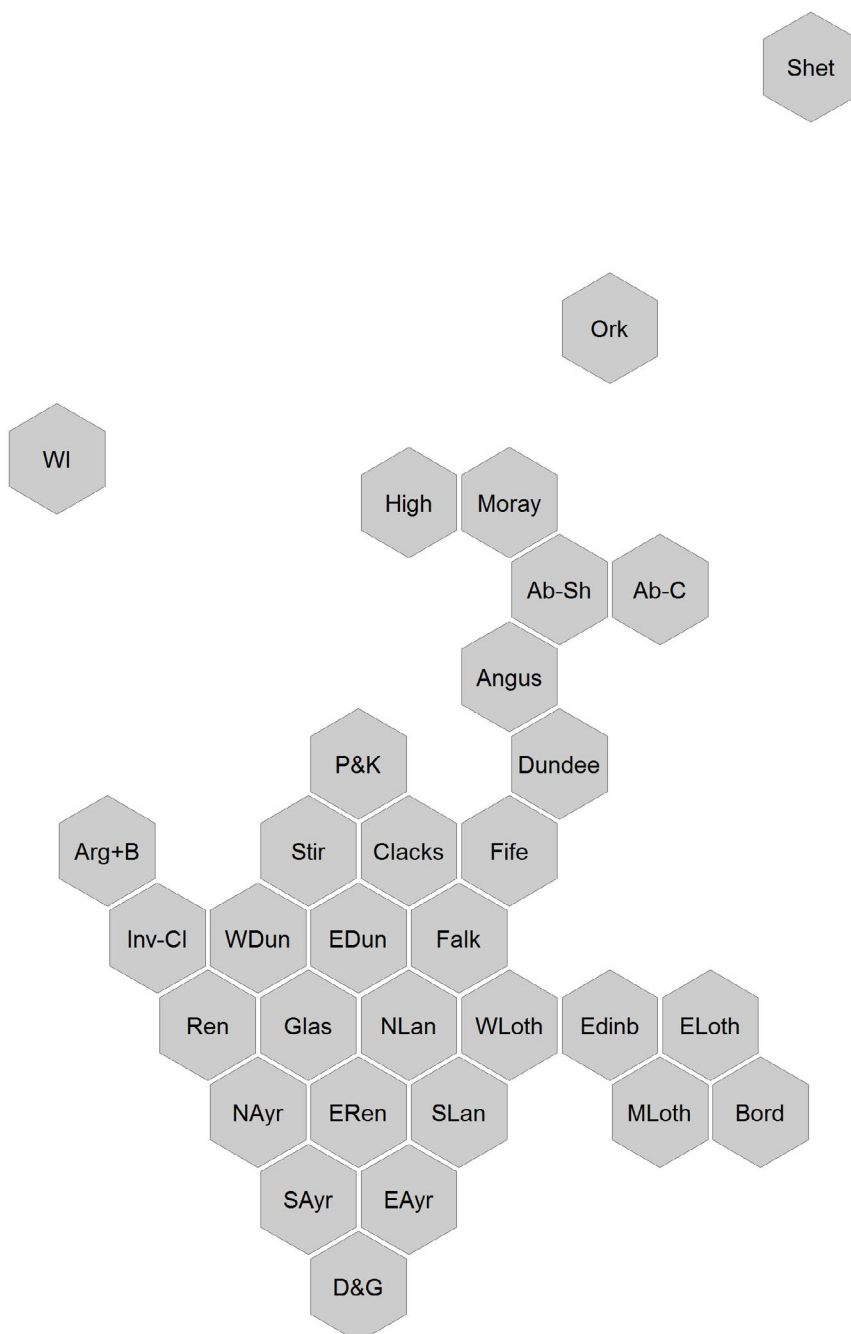
Appendix A – Key for Local Authority Maps

Key	Local Authority
1	Aberdeen City
2	Aberdeenshire
3	Angus
4	Argyll and Bute
5	Clackmannanshire
6	Dumfries and Galloway
7	Dundee City
8	East Ayrshire
9	East Dunbartonshire
10	East Lothian
11	East Renfrewshire
12	Edinburgh, City of
13	Na h'Eileanan Siar
14	Falkirk
15	Fife
16	Glasgow City
17	Highland
18	Inverclyde
19	Midlothian
20	Moray
21	North Ayrshire
22	North Lanarkshire
23	Orkney Islands
24	Perth and Kinross
25	Renfrewshire
26	Scottish Borders
27	Shetland Islands
28	South Ayrshire
29	South Lanarkshire
30	Stirling
31	West Dunbartonshire
32	West Lothian



Cartogram Local Authority Key

Key	Local Authority
Ab-C	Aberdeen City
Ab-Sh	Aberdeenshire
Angus	Angus
Arg+B	Argyll and Bute
Clacks	Clackmannanshire
D&G	Dumfries and Galloway
Dundee	Dundee City
EAyr	East Ayrshire
EDun	East Dunbartonshire
ELoth	East Lothian
ERen	East Renfrewshire
Edinb	Edinburgh, City of
WI	Na h'Eileanan Siar
Falk	Falkirk
Fife	Fife
Glas	Glasgow City
High	Highland
Inv-Cl	Inverclyde
MLoth	Midlothian
Moray	Moray
NAyr	North Ayrshire
NLan	North Lanarkshire
Ork	Orkney Islands
P&K	Perth and Kinross
Ren	Renfrewshire
Bord	Scottish Borders
Shet	Shetland Islands
SAyr	South Ayrshire
SLan	South Lanarkshire
Stir	Stirling
WDun	West Dunbartonshire
WLoth	West Lothian



An Official Statistics Publication for Scotland

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