

Statistical Bulletin





Deliberate fires 2023-24

19 Dec 2024 SB 41/2024

Deliberate fires are those ignited deliberately, or where deliberate ignition is suspected, or those recorded as 'doubtful' by the Fire and Rescue Authority (FRA). In 2023-24, 55% of fires attended by the Welsh FRAs were deliberate.

The 2023-24 data are currently provisional, extracted from the Incident Recording System (IRS) in August 2024 and may be revised in subsequent publications

Figure 1: Deliberate fires attended in Wales, 2001-02 to 2023-24[p]



Description of Figure 1: The line chart shows an obvious downward trend in the first part of the time series where numbers of deliberate fires were high. In more recent years, numbers have stabilised to between 5,000 and 8,000 a year.

[p] Provisional data.

[r] Revised data.

The Welsh Fire and Rescue Authorities attended a total of 5,379 deliberate fires in 2023-24. This is a decrease of 14% compared with the previous year.

North Wales FRA attended 467 deliberate fires in 2023-24.

1

10% decrease compared with 2022-23

Mid and West Wales FRA attended 1,171 deliberate fires in 2023-24.



20% decrease compared with 2022-23

South Wales FRA attended 3,741 deliberate fires in 2023-24.



13% decrease compared with 2022-23

About this bulletin

This biennial bulletin is complementary to data on fire incidents published in November 2024. It examines the impact and patterns in deliberate fires in Wales. The Welsh Government compiles these statistics from reports on all fires attended submitted by all FRAs in Wales to the Home Office.

This report covers the financial year from April 2023 to March 2024, and comparisons are made with April 2022 to March 2023.

In this bulletin

All deliberate fires	4
by month and time	14
Road vehicles	20
Casualties	29
Prevention	31
Glossary	34
Quality Information	36

Statistician: Claire Davey ~ statsinclusion@gov.wales

Enquiries from the press: 0300 025 8099

Table of Contents

	Figure 1: Deliberate fires attended in Wales, 2001-02 to 2023-24	1
AII	deliberate fires	4
	Figure 2: Number of deliberate fires attended, by type, 2001-02 to 2023-24	4
	Table 1: Number of deliberate fires, by location, 2019-20 to 2023-24	5
	Figure 3: Number of deliberate primary fires, by location, 2001-02 to 2023-24	6
	Table 2: Percentage of primary fires started deliberately, by location, 2019-20 to 2023-24	7
	Table 3: Number and percentage of deliberate fires, by FRA, 2021-22 to 2023-24	7
	Figure 4: Rate of deliberate primary fires per 10,000 population, by FRA and Wales, 2001-0 2023-24	
	Figure 5: Rate of deliberate secondary fires per 10,000 population, by FRA and Wales, 200 to 2023-24	
	Figure 6: Number of deliberate fires by local authority, 2023-24	.10
Fir	es by month and time of day	.14
	Table 4: Total deliberate fires, by month, 2021-22 to 2023-24	.14
	Figure 10: Number of primary and secondary deliberate fires, by month, 2023-24	.15
	Figure 11: Number of deliberate primary fires, by month, median 2017-18 to 2021-22, 2022-2023-24	
	Figure 12: Number of deliberate secondary fires, by month median 2017-18 to 2021-22, 202 2023-24	
	Table 5: Number and percentage of deliberate primary and secondary fires, by month, 2020 2023-24	
	Figure 13: Total deliberate fires and total hours of sunshine, by month, 2023-24	.17
	Figure 14: Total deliberate fires and total rainfall, by month, 2023-24	.18
	Table 6: Number and percentage of deliberate primary and secondary fires, by time of day, 22 to 2023-24	
	Figure 15: Number of deliberate primary fires, by time of day and location 2023-24	.19
Ro	oad vehicle fires	.20
	Figure 16: The percentage of deliberate primary fires in road vehicles, 2001-02 to 2023-24.	.20
	Table 7: Number and percentage of deliberate road vehicle fires, by vehicle type, 2021-22 to 2023-24	
	Figure 17: Number of deliberate primary fires in road vehicles, by FRA, 2001-02 to 2023-24	.22
	Figure 18: Number of deliberate primary fires in road vehicles, by local authority 2023-24	.22
Sc	hool fires	.23
	Figure 19: Number of deliberate and accidental fires in schools, 2001-02 to 2023-24	.23
	Figure 20: Source of ignition of deliberate primary fires in schools, 2014-15 to 2023-24	.24
So	urce and hazardous materials (all primary fires)	.24
	Figure 21: Source of ignition of deliberate primary fires, 2019-20 to 2023-24	.25
	Figure 22: Materials first ignited in deliberate primary fires, 2019-20 to 2023-24	.25
	Figure 23: Hazardous materials involved in deliberate primary fires, 2019-20 to 2023-24	.26

Figure 24: Dangerous substances in deliberate primary fires, 2019-20 to 2023-2427	
Description of figure 24:	
Figure 25: Materials causing explosions in deliberate primary fires, 2019-20 to 2023-2427	
Casualties29	
Table 8: Number of casualties in deliberate fires, by location, 2019-20 to 2023-2429	
Figure 26: Number of fatalities in fires, by motive, 2004-05 to 2023-2429	
Figure 27: Number of non-fatal casualties in fires, by motive, 2004-05 to 2023-2430	
Table 9: Number and percentage of non-fatal casualties by nature of injury sustained in deliberate fires, , 2021-22 to 2023-2430	
Prevention31	
Figure 28: Safety systems present at primary fires in buildings, by system type, 2019-20 to 2023	3.
Table 10: Number of safety systems in building fires, by operation, 2019-20 to 2023-2431	
Table 11: Number of primary fires in buildings, by presence of smoke alarms and motive, 2021-22 to 2023-2432	
Great Britain comparisons33	
Figure 29: Rate of deliberate fires in England, Scotland and Wales per 10,000 population, 2001 02 to 2023-24	-
Glossary34	
Quality information36	

All deliberate fires

Fires are classed as primary, secondary or chimney fires.

Primary fires include all fires in non-derelict buildings and vehicles or in outdoor structures, or any fire involving casualties or rescues, or fires attended by five or more appliances.

Secondary fires are mainly outdoor fires including grassland and refuse fires unless they involve casualties or rescues, or are attended by five or more appliances. They include fires in single derelict buildings, derelict road vehicles and derelict outdoor structures.

Chimney fires are reportable fires in occupied buildings where the fire was confined within the chimney structure and did not involve casualties or rescues or are attended by 5 or more appliances.

Accidental fires include those where the fire was ignited by accident or the cause was not known or unspecified.

Deliberate fires include those where deliberate ignition is merely suspected.

More detailed definitions are in the Glossary.

This section looks at the total number of deliberate fires attended by the Fire and Rescue Authority as recorded via the Incident Recording System (IRS).

Of the 9,700 fires Welsh Fire and Rescue Authorities (FRAs) attended in 2023-24, 5,379 (55%) were started deliberately. This is a decrease of 14% from the 6,267 deliberate fires attended in 2022-23. Since 2001-02 the number of deliberate fires in Wales has fallen by 79%. The peak in the time series occurred in 2003-04 when there were 28,464 deliberate fires.

In 2023-24, 27% of primary fires and 78% of secondary fires were started deliberately.

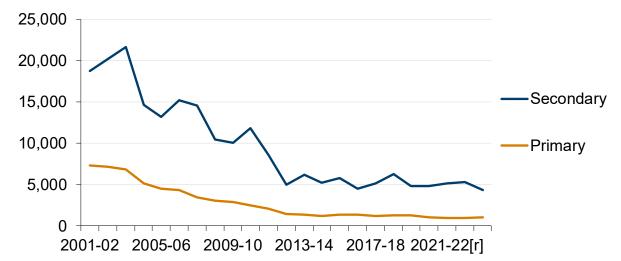


Figure 2: Number of deliberate fires attended, by type, 2001-02 to 2023-24[p]

Description of Figure 2: A line chart showing the number of deliberate fires attended, split into primary and secondary fires. The data ranges from 2001-02 to 2023-24, where the 2023-24 data are marked as provisional. Throughout the time series there have been a higher number of deliberate secondary fires than deliberate primary fires. Both categories see an overall downward trend, but the secondary fires are more prone to fluctuation and in recent years the trend has flattened.

- [r] Revised data.
- [p] Provisional data.

In 2023-24, there were 1,059 deliberate primary fires, a 7% increase compared with 2022-23 but following 3 annual decreases; the 2023-24 is the third lowest figure in the time series. Generally, there has been a downward trend in the number of deliberate primary fires since 2001-02, decreasing 86% (figure 2).

Numbers of secondary fires are more prone to fluctuation; the majority of these fires occur outdoors and as such may be affected by weather conditions among other factors. There were 4,319 deliberate secondary fires in 2023-24, a decrease of 18% compared with 2022-23 and the lowest number in the timeseries. Deliberate secondary fires accounted for 45% of all (accidental and deliberate, primary, secondary and chimney) fires attended by the FRAs. Since 2001-02 there has been an overall reduction of 77% in deliberate secondary fires.

In 2023-24, 11% of all attendances (fires, fire false alarms and Special Service Incidents (SSIs)) were for deliberate fires.

Table 1: Number of deliberate fires, by location, 2019-20 to 2023-24[p]

	2019-20	2020-21	2021-22[r]	2022-23	2023-24[p]
Primary fires	1,261	1,060	993	987	1,059
Dwellings [note 1]	130	126	120	163	124
Other buildings [note 2]	268	203	202	220	259
Road vehicles	670	533	499	427	473
Other outdoors	193	198	172	177	203
Secondary fires	4,792	4,827	5,126	5,278	4,319
Derelict buildings	97	69	88	103	97
Derelict road vehicles	22	15	24	18	24
Other outdoors	4,673	4,743	5,014	5,157	4,198
All deliberate fires [note 3]	6,054	5,887	6,121	6,267	5,379

Description of Table 1: a table showing the number of deliberate fires for the years 2019-20 to 2023-24, where the 2023-24 are marked provisional. The data are shown for primary and secondary fires and are further split into location types, for example dwellings or road vehicles.

[Note 1] Dwellings include caravans, houseboats and other non-building structures used solely as a permanent dwelling.

[Note 2] 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 and so on; non-residential buildings include properties such as offices, shops, factories, warehouses, restaurants, public buildings, religious buildings and so on.

[Note 3] Includes a small number of deliberate chimney fires.

[p] Provisional data.

In 2023-24, 27% of primary fires were deliberate, 2 percentage points higher than in 2022-23. The larger proportion is due to there being a decrease in the number of accidental primary fires but a rise in the number of deliberate primary fires. Whilst only 8% of primary dwelling fires were deliberate, over half of

outdoor primary fires (55%), 39% of road vehicle fires and 31% of fires in 'other buildings' were deliberate in 2023-24.

As in other years, in 2023-24, road vehicles accounted for the largest proportion of deliberate primary fires in Wales (45%). In 2023-24 the number of road vehicle fires increased by 11% (compared with the previous year) to 473, however this is the second lowest number in the time series. The number of deliberate primary road vehicle fires in 2023-24 is around 9% of the figure in 2001-02, when there were over 5,000 such fires.

In 2023-24 the number of deliberate primary fires in dwellings fell by 24% compared with the previous year. There were 15% more in other locations (which include those occurring outdoors, in outdoor structures and in other transport vehicles), whilst numbers of deliberate primary fires in other buildings increased by 18%.

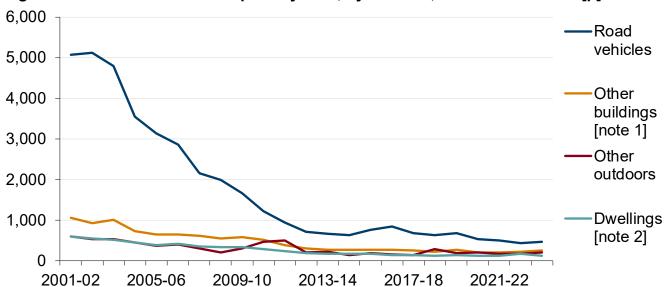


Figure 3: Number of deliberate primary fires, by location, 2001-02 to 2023-24[p]

Description of Figure 3: a line chart showing the number of primary deliberate fires attended in Wales. The data relates to 2001-02 through to 2023-24, where 2023-24 are provisional. The data are further broken down by location type: dwellings, other buildings, road vehicles and other outdoors. The chart shows how numbers of deliberate fires in road vehicles have been consistently higher than the other location categories.

[p] Provisional data.

[Note 1] 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 and so on; non-residential buildings include properties such as offices, shops, factories, warehouses, restaurants, public buildings, religious buildings and so on.

[Note 2] Dwellings include caravans, houseboats and other non-building structures used solely as a permanent dwelling.

Table 2: Percentage of primary fires started deliberately, by location, 2019-20 to 2023-24

	2019-20	2020-21	2021-22	2022-23	2023-24
Building	16	15	13	16	16
Dwelling	8	8	8	11	8
Other residential	12	16	13	18	26
Non residential	33	29	26	27	32
Road vehicle	47	45	41	36	39
Other [note 1]	56	50	51	49	53
Outdoor	58	51	53	50	55
All primary fires	29	28	25	25	27

Description of Table 2: a table showing the percentage of primary fires in various location types (for instance dwellings, road vehicles and so on) which were started deliberately. The data relates to 2019-20 to 2023-24. Percentages for 2023-24 are based on provisional data.

[Note 1] Includes 'other transport vehicles'.

South Wales FRA continues to attend the bulk of deliberate fires in Wales (70% of all deliberate fires); Mid and West Wales attend just over a fifth of the deliberate fires in Wales, whilst just under 10% were attended by North Wales FRA. Similar proportions are seen throughout the time series.

In 2023-24 all FRAs in Wales saw decreases in deliberate fires compared with 2022-23; the largest decrease being in Mid and West Wales (20%), followed by South Wales (also 13%). North Wales saw a decrease of 10% in the number of deliberate fires.

South Wales was the only FRA which saw an increase in deliberate primary fires, up 17%. In Mid and West Wales numbers of deliberate primary fires fell by 12% whilst in North Wales there was a 4% fall. All FRAs saw decreases in numbers of deliberate secondary fires, down 22% in Mid and West Wales, down 18% in South Wales, and down 12% in North Wales.

Table 3: Number and percentage of deliberate fires, by FRA, 2021-22 to 2023-24[p]

	2021-	2022-	2023-	2021-22	2022-23	2023-24
	22	23	24[p]	deliberate %	deliberate %	deliberate %
Primary fires	993	987	1,059	25	25	27
North Wales	143	143	137	16	17	17
Mid and West Wales	246	234	207	20	20	19
South Wales	604	610	715	33	32	35
Secondary fires	5,126	5,278	4,319	79	77	78
North Wales	329	376	330	37	36	42
Mid and West Wales	1,434	1,230	963	74	71	70
South Wales	3,363	3,672	3,026	91	90	89
All deliberate						
fires[note 1]	6,121	6,267	5,379	57	57	55
North Wales	472	519	467	25	26	28
Mid and West Wales	1,682	1,466	1,171	51	48	45
South Wales	3,967	4,282	3,741	71	71	69

Description of Table 3: This table has 2 sections; the first part shows the numbers of primary, secondary and all deliberate fires by FRA.

The second part shows the percentage of fires in each FRA for each category which were started deliberately. In 2023-24, 35% of primary fires in South Wales, 19% in Mid and West Wales and 17% in North Wales were started deliberately. For secondary fires the proportion started deliberately was higher, 89% in South Wales, 70% in Mid and West Wales and 42% in North Wales.

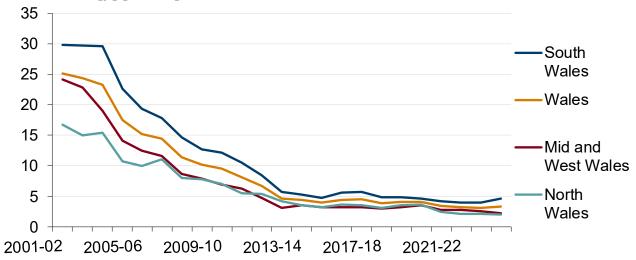
Both parts show data for 2021-22 to 2023-24.

[Note 1] All deliberate fires includes a small number of deliberate chimney fires.

[p] Provisional data.

Figures 4 and 5 show rates of primary and secondary deliberate fires per 10,000 population. As with absolute numbers of fires, the highest rates are consistently in South Wales, although the gap has narrowed greatly since 2001-02. The difference between the highest and the lowest regional rates of primary fires has fallen from around 13 per 10,000 population in 2001-02, to approximately 3 per 10,000 population in 2023-24.

Figure 4: Rate of deliberate primary fires per 10,000 population, by FRA and Wales, 2001-02 to 2023-24[p] [note 1]



Description of Figure 4: shows the rate of deliberate primary fires per 10,000 people, for each FRA and Wales. Data relate to 2001-02 to 2023-24, where 2023-24 are provisional.

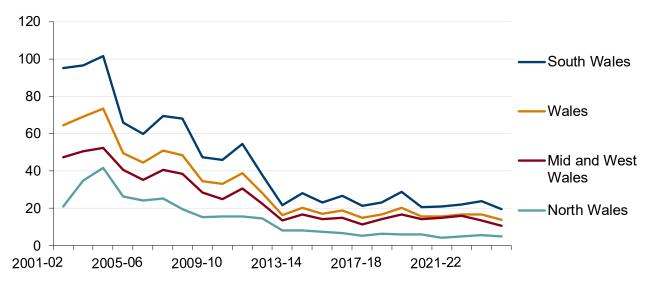
All regions and Wales show a general downward trend but in recent years the rates have stabilised and grown a lot closer together. Only South Wales saw an increase in the rate in 2023-24 which in turn caused an increase in the rate for Wales.

[Note 1] Population data are taken from ONS Mid-Year Estimates and are revised periodically and so rates are subject to change between publications.

[p] Provisional data.

Similarly, the difference between the highest rate of secondary fires and the lowest rate has fallen from around 75 fires per 10,000 population in 2001-02 to approximately 15 fires per 10,000 population in 2023-24.

Figure 5: Rate of deliberate secondary fires per 10,000 population, by FRA and Wales, 2001-02 to 2023-24[p] [note 1]



Description of Figure 5: shows the rate of deliberate secondary fires per 10,000 people, for each FRA and Wales. Data relate to 2001-02 to 2023-24, where 2023-24 are provisional.

A general downward trend is seen, but the time series shows much more fluctuation than in primary fires.

[Note 1] Population data are taken from ONS Mid-Year Estimates and are revised periodically and so rates are subject to change between publications.

[p] Provisional data.

Figure 6 shows five local authorities (Cardiff, Caerphilly, Rhondda Cynon Taf, Newport and Swansea) each had over 500 deliberate fires, accounting for, in total, 55% of all deliberate fires in Wales in 2023-24. Blaenau Gwent had the highest proportion (78%) of fires which were deliberately started.

In four local authorities in South Wales over 70% of fires were started deliberately. In Mid and West Wales FRA, Swansea and Neath Port Talbot had the highest proportions which were started deliberately (both with 64%) whilst Ceredigion not only had the lowest proportion in Mid and West FRA but the lowest in Wales (18% were started deliberately). In North Wales, Wrexham had both the highest number and the highest proportion of deliberate fires (117 deliberate fires and 37% of fires started deliberately).

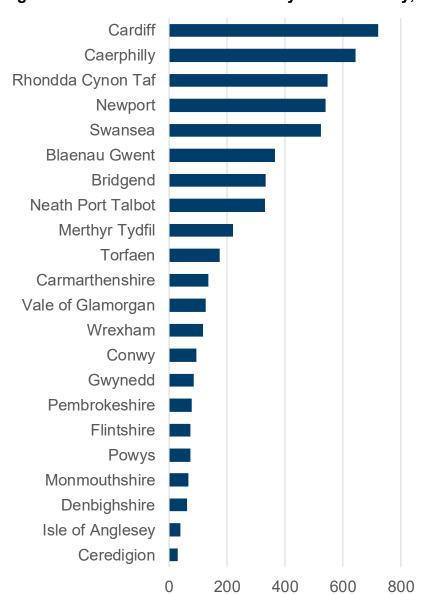


Figure 6: Number of deliberate fires by local authority, 2023-24[p][note 1]

Description of Figure 6: a bar chart showing the number of deliberate fires in each local authority for 2023-24. Of the 10 local authorities with the most deliberate fires in 2023-24, 8 were in South Wales FRA.

[Note 1] Local authorities have been assigned to incidents based on the grid reference recorded by the FRA. See the Quality Information for further information.

[p] Provisional data

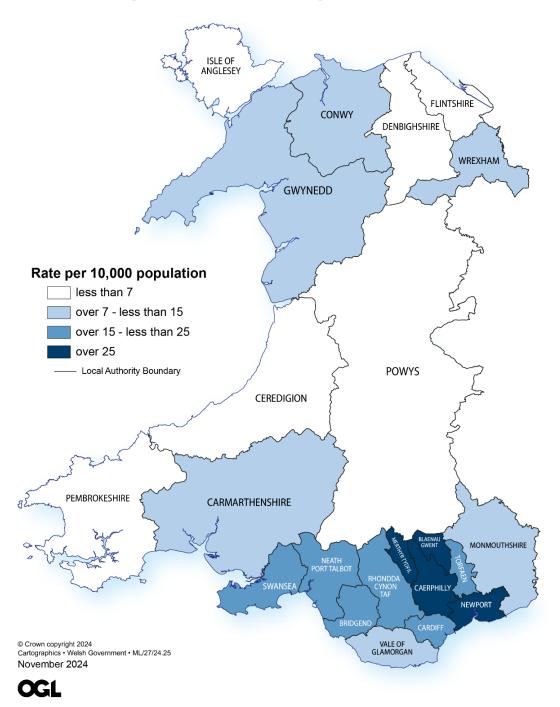
Wrexham had the highest proportion of deliberate fires which occurred in buildings of all the local authorities (27%). The Vale of Glamorgan had the lowest proportion, with only 3% of deliberate fires occurring in buildings. Bridgend had the most deliberate building fires in 2023-24, 17% of those occurring in Wales.

Wrexham also had the highest proportion of deliberate fires which occurred in road vehicles (18%) whilst Isle of Anglesey had no deliberate road vehicle fires. Cardiff had the most deliberate road vehicle fires followed by Newport (18% and 14% respectively of deliberate road vehicle fires in Wales in 2023-24).

The map below shows the rates (per 10,000 population) of deliberate fires in each Local Authority in Wales in 2023-24.

PIGURE 7:

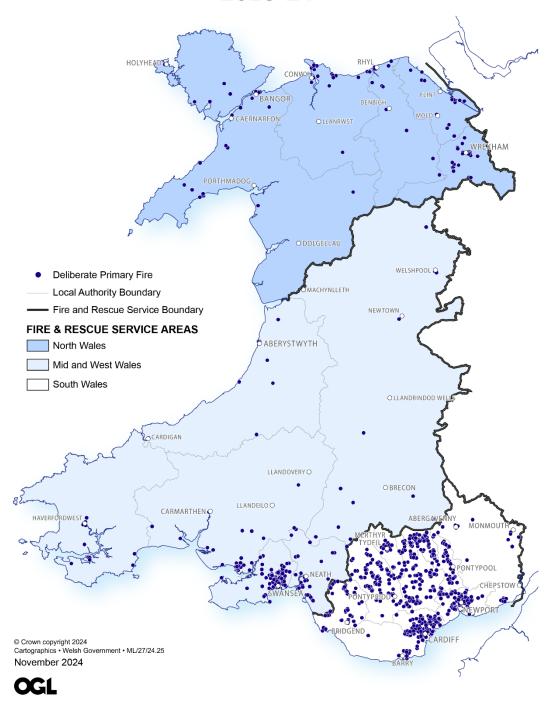
Deliberate fires per 10,000 population
by Local Authority, 2023-24



The map below shows the locations of deliberate primary fires in Wales in 2023-24. The map highlights the level of concentration of these fires in the South Wales area as a whole and in Swansea in Mid and West Wales.

PIGURE 8:

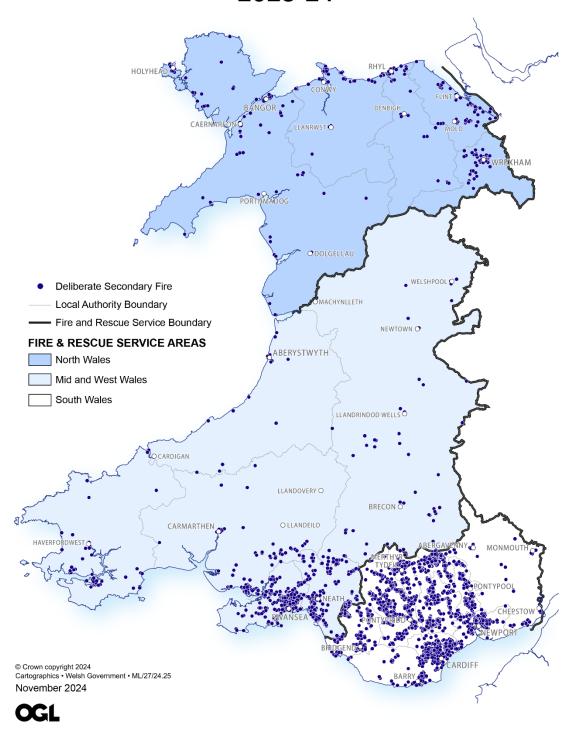
Deliberate primary fires across Wales,
2023-24



Data mapped above are based on grid references; see the quality information for further details

The map below shows the locations of deliberate secondary fires in Wales in 2023-24. As with primary fires, the map shows the large number of clusters of these fires in the South Wales area, and also around Swansea and Neath in Mid and West Wales, and in the Wrexham area in North Wales.

FIGURE 9: **Deliberate secondary fires across Wales, 2023-24**



Data mapped above are based on grid references; see the <u>quality information</u> for further details

Fires by month and time of day

In 2023-24 June 2023 had the most deliberate fires of the year (19%). This is unusual because, since 2010-11 in all but two years, April has been the month with the most deliberate fires each year; the other exception being 2018-19 when July had 25% of the deliberate fires of the year.

Numbers of deliberate fires rose from 571 in June 2022 to 1,041 in June 2023; an increase of 82%. Increases were also seen in January (up 32% compared with January 2023), May (up 22% compared with May 2022), October (up 15% compared with October 2022) March (up 9% compared with March 2023) and November (up 9% compared with November 2022).

Numbers of deliberate fires in April have varied greatly throughout the time series with a high of 3,119 in 2010-11 and a low of 478 in 2018-19; the figure in April 2023 fell by almost half compared with April 2022.

There were 5 months beside April which saw a decrease in 2023-24 compared with the previous year. Decreases were seen in the months of August (down 58%), February (down 55%), July (down 34%), September (down 25%) and December (down 1%).

Table 4: Total deliberate fires, by month, 2021-22 to 2023-24[p][note 1]

		, ,	,		Fledfrage 1	
	2021-22[r]	2022-23	2023-24[p]	2021-22%	2022-23%	2023-24%
April	1,273	1,049	536	21	17	10
May	385	621	760	6	10	14
June	558	571	1,041	9	9	19
July	476	746	495	8	12	9
August	402	968	411	7	15	8
September	418	515	386	7	8	7
October	339	330	380	6	5	7
November	422	299	327	7	5	6
December	232	199	197	4	3	4
January	358	243	321	6	4	6
February	297	418	188	5	7	3
March	961	308	337	16	5	6

Description of Table 4: The table shows the number of deliberate fires occurring each month, for the years 2021-22 to 2023-24, where 2023-24 data are provisional. The table also shows the percentage of deliberate fires occurring each month, for example 10% of the deliberate fires in 2023-24 occurred in April 2023.

[Note 1] Includes deliberate chimney fires.

- [r] Revised data.
- [p] Provisional data.

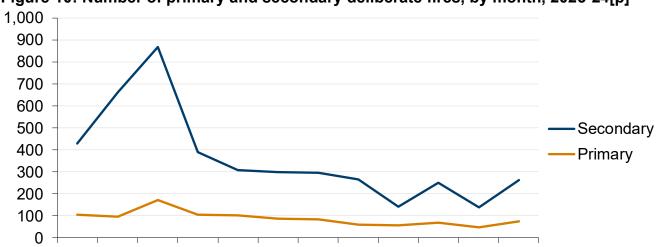


Figure 10: Number of primary and secondary deliberate fires, by month, 2023-24[p]

Description of Figure 10: shows the number of deliberate primary and secondary fires each month in 2023-24. The series for primary fires is fairly static, whereas the number of secondary fires varies, with the peak being in the spring months. Similar patterns are seen in earlier years.

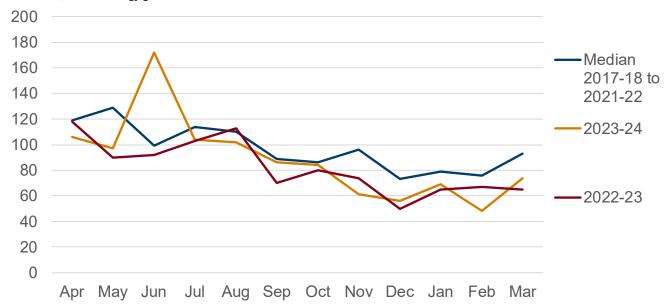
Aug Sep Oct Nov Dec Jan Feb Mar

[p] Provisional data.

Apr May Jun

Jul

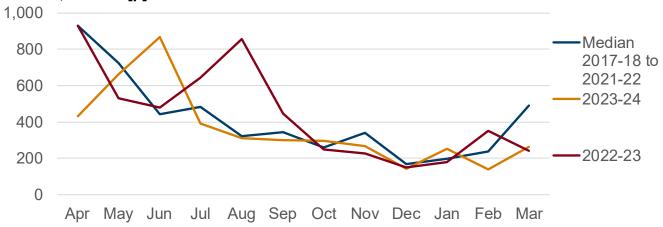
Figure 11: Number of deliberate primary fires, by month, median 2017-18 to 2021-22, 2022-23, 2023-24[p]



Description of Figure 11: a line chart showing numbers of primary fires by month for 2022-23 and 2023-24, along with median figures for the period 2017-18 to 2021-22. The chart shows the most recent years have tended to have lower numbers than the median though there are exceptions, noticeably June 2023 (within the financial year 2023-24) and this figure is 74% above the median for June 2017 to June 2021.

[p] Provisional data.

Figure 12: Number of deliberate secondary fires, by month median 2017-18 to 2021-22, 2022-23, 2023-24[p]



Description of Figure 12: A line chart showing numbers of secondary fires by month for 2022-23 and 2023-24, along with median figures for the period 2017-18 to 2021-22. The chart shows the individual years are more prone to fluctuation, with distinct peaks for 2022-23 and 2023-24 but in different months.

[p] Provisional data.

Table 5: Number and percentage of deliberate primary and secondary fires, by month,

2020-21 to 2023-24[p][note 1]

	2021-22[r]	2022-23	2023-24[p]	2021-22%	2022-23%	2023-24%
Primary	993	987	1,059	100	100	100
April	125	118	106	13	12	10
May	81	90	97	8	9	9
June	71	92	172	7	9	16
July	87	103	104	9	10	10
August	98	113	102	10	11	10
September	62	70	86	6	7	8
October	83	80	84	8	8	8
November	82	74	61	8	7	6
December	64	50	56	6	5	5
January	87	65	69	9	7	7
February	58	67	48	6	7	5
March	95	65	74	10	7	7
Secondary	5,126	5,278	4,319	100	100	100
April	1,148	931	430	22	18	10
May	304	531	663	6	10	15
June	487	479	869	10	9	20
July	389	643	391	8	12	9
August	304	855	309	6	16	7
September	356	445	300	7	8	7
October	256	250	296	5	5	7
November	340	225	265	7	4	6
December	168	149	141	3	3	3
January	271	178	252	5	3	6
February	239	350	140	5	7	3
March	864	242	263	17	5	6

Description of Table 5: a table showing numbers and percentages of deliberate primary and secondary fires by month. From the table we can see that deliberate secondary fires fluctuate a great deal throughout the year and in 2023-24 occurred mainly in June and May. Numbers of deliberate primary fires stay relatively stable. Since the majority of secondary fires occur outdoors, they can be greatly influenced by the seasons and weather conditions.

[Note 1] Deliberate primary and secondary fires in the table above may not add to the total of deliberate fires shown elsewhere, this is due to the exclusion of the small number of deliberate chimney fires from this table.

- [r] Revised data.
- [p] Provisional data.

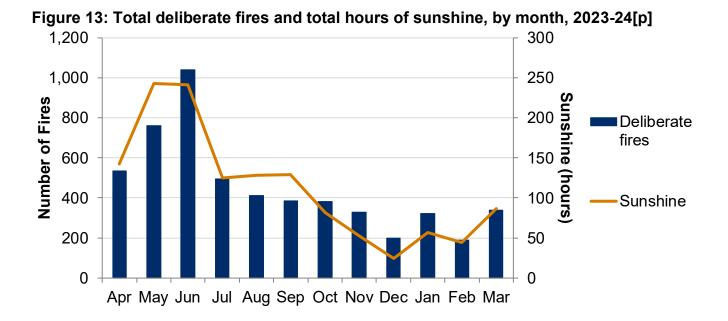
In 2023-24 at least 73% of fires seen in any month were outdoors, the lowest proportion being in February (73%), whereas 90% of deliberate fires in June and 89% of those in May occurred outdoors.

Eight months saw an increase in the number of deliberate primary fires in 2023-24. The largest percentage increase occurred in June (up 87% compared with June 2022) while the largest percentage decrease occurred in February (down 28% compared with February 2023).

Six months in 2023-24 saw an increase in deliberate secondary fires, the largest (as with deliberate primary fires) being in June (up 81% compared with June 2022). The largest decrease in secondary deliberate fires occurred in August (down 64% compared with August 2022).

As seen in figures 13 and 14, data from the Met Office shows that, June and May saw the most hours of sunshine, the least amount of rainfall, and the highest numbers of fires in 2023-24. Levels of sunshine were low in December, which was also the wettest month and saw the second fewest deliberate fires.

Weather data are available from the Met Office



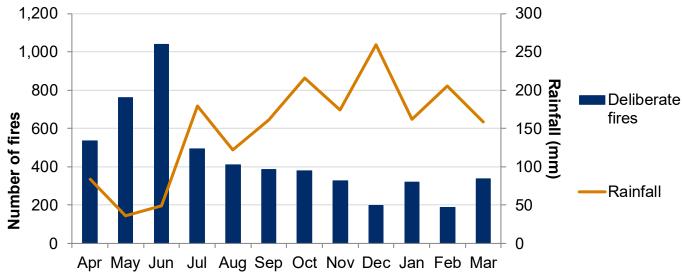
Description of Figure 13: A line and bar combination chart which shows bars for the numbers of deliberate fires occurring each month in 2023-24 and is plotted against the number of hours of sunshine in each month in the same year.

The chart shows that in many months there is a clear pattern, when hours of sunshine are high, numbers of fires are high and where hours of sunshine are low, numbers of fires are low.

Source: Met Office and Incident Recording System

[p] Provisional data.

Figure 14: Total deliberate fires and total rainfall, by month, 2023-24[p]



Description of Figure 14: A line and bar combination chart which shows bars for the numbers of deliberate fires occurring each month in 2023-24 and is plotted against the amount of rainfall in millimetres in each month in the same year. Generally a pattern is seen that months with low levels of rainfall see high numbers of fires, and those months with high levels of rainfall see fewer fires.

Source: Met Office and Incident Recording System

[p] Provisional data.

In 2023-24 (as in previous years) the largest proportion of deliberate primary and secondary fires occurred between 6pm and midnight, with 42% of primary fires and 55% of secondary fires. Almost a quarter of primary fires took place between midnight and 5.59 a.m., whilst around 3 in 10 secondary fires took place between midday and 5.59 p.m.

Table 6: Number and percentage of deliberate primary and secondary fires, by time of day. 2021-22 to 2023-24[p]

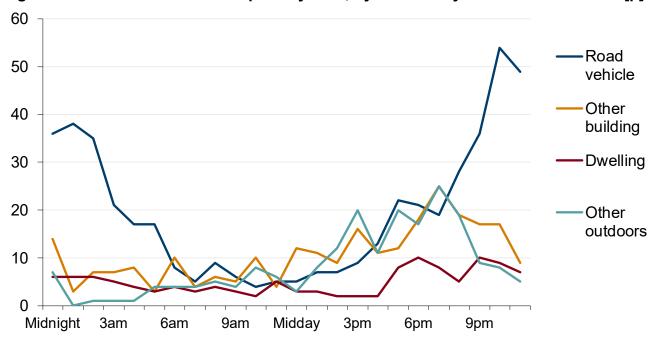
day, Lot 1 Lt to Loto Lat	6 1					
	2021-22[r]	2022-23	2023-24[p]	2021-22%	2022-23%	2023-24%
Primary						
Midnight - 5.59 a.m.	222	261	250	22	26	24
6.00 a.m 11.59 a.m.	97	87	128	10	9	12
Midday - 5.59 p.m.	219	206	228	22	21	22
6.00 p.m 11.59 p.m.	439	410	444	44	42	42
Late call [note 1]	16	23	9	2	2	1
Secondary						
Midnight - 5.59 a.m.	415	458	429	8	9	10
6.00 a.m 11.59 a.m.	321	344	293	6	7	7
Midday - 5.59 p.m.	1,485	1,651	1,210	29	31	28
6.00 p.m 11.59 p.m.	2,897	2,815	2,379	57	53	55
Late call [note 1]	8	10	8	0	0	0

Description of Table 6: A table showing deliberate fires, split by category and then broken down by time of day (grouped in blocks of 6 hours). The table also shows the percentage of these fires occurring within each 6 hour period. The data relates to 2021-22 to 2023-24, where 2023-24 data are provisional.

[Note 1] A fire known to be extinguished when the call was made (or to which no call was made, for example a fire which comes to the attention of the fire and rescue service as a result of a press report or inquest) and the fire and rescue service attended.

- [r] Revised data.
- [p] Provisional data.

Figure 15: Number of deliberate primary fires, by time of day and location 2023-24[p]



Description of Figure 15: A line chart showing number of deliberate fires by location (for example, dwellings) by time of day for 2023-24.

The chart shows that deliberate fires in dwellings, other buildings and other outdoor deliberate fires follow a similar pattern in terms of the time of day, with most occurring between midday and midnight. However, for road vehicles, distinct peaks can be seen in the timing of these fires, occurring in the evening and early hours of the morning.

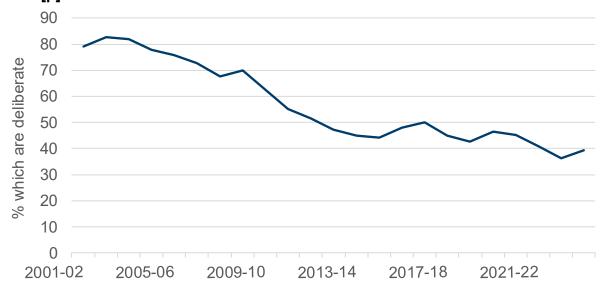
[p] Provisional data.

Road vehicle fires

Fires in road vehicles have consistently made up the majority of deliberate primary fires in Wales, however the proportion has fallen from around 70% in the early part of the time series to around 45% in 2023-24. Numbers of deliberate secondary fires in road vehicles are small as these would be derelict vehicles.

The number of deliberate primary fires in road vehicles rose by 11% in 2023-24 compared with 2022-23 but still the second lowest figure in the time series. Overall numbers of deliberate primary fires in road vehicles have fallen by 91% since 2001-02, the start of the time series.

Figure 16: The percentage of deliberate primary fires in road vehicles, 2001-02 to 2023-24[p]



Description of Figure 16: a line chart showing the percentage primary road vehicle fires which were deliberate. Data relates to the years 2001-02 to 2023-24. The 2023-24 data are currently provisional. The chart shows the percentage of primary road vehicles fires which were started deliberately has fallen from above 80% at the beginning of the time series to around 40%.

[p] Provisional data.

In 2023-24, there were 473 primary fires started deliberately in road vehicles, and a further 24 in derelict road vehicles; in total this is 52 more than in the previous year. Most vehicles set on fire were cars, almost two thirds of all deliberate primary road vehicle fires. In 2023-24, of the 669 (accidental and deliberate) fires in cars, 38% were started deliberately.

Of fires in other vehicles, motorcycle (81%) and caravan (60%) fires saw the largest proportions of deliberate fires in 2023-24 although numbers of such fires are not high.

Table 7: Number and percentage of deliberate road vehicle fires, by vehicle type, 2021-22 to 2023-24

	2021-22	2022-23	2023-24[p]	2021-22 %	2022-23 %	2023-24 %
Car	313	248	257	43	36	38
Caravan [note 1]	22	16	15	85	48	60
Lorry/HGV	2	8	6	4	16	14
Motorcycle	68	54	87	83	86	81
Van	61	73	78	39	43	43
Other [note 2]	33	28	30	42	39	35
All deliberate primary						
road vehicle fires	499	427	473	41	36	39
of which						
stolen vehicles	25	24	27	96	86	84
abandoned vehicles	203	162	221	91	92	93
All deliberate secondary						
road vehicle fires [note 3]	24	18	24	67	62	83
All deliberate road						
vehicle fires	523	445	497	42	37	40

Description of Table 7: A table showing the number of road vehicle fires by type of vehicle and the percentage of fires which were deliberate for each vehicle type. The table relates to the years 2021-22 to 2023-24. The 2023-24 are currently marked as provisional.

[Note 1] Includes caravans on tow.

[Note 2] Includes agricultural, bicycles, bus/coach, minibus, motor home, multiple vehicles, tankers and trailers.

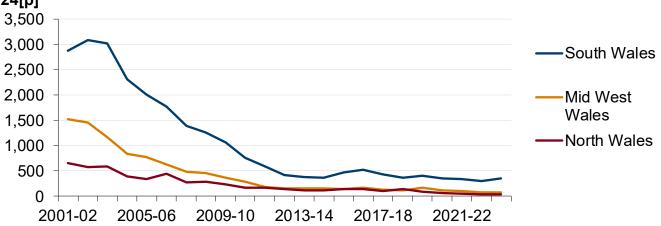
[Note 3] Derelict vehicles.

[p] Provisional data.

The majority (almost three-quarters) of deliberate primary fires in road vehicles occurred in South Wales in 2023-24. Throughout the time series the proportion occurring in South Wales has consistently been the highest of the FRAs, varying between 57% and 74%. Mid and West Wales saw 17% of road vehicle fires in 2023-24 whilst 8% occurred in North Wales.

Numbers of road vehicle fires in South Wales saw an increase of 15% in 2023-24 compared with 2022-23; in Mid and West Wales there was 1 more incident whilst in North Wales there were 2 fewer. At the beginning of the time series (2001-02) numbers of deliberate fires in road vehicles were far higher and in the years to 2011-12 a steady decrease can be observed. However, in more recent years the fall is less noticeable and all FRAs have seen small year on year rises from time to time. Compared with 2001--02 numbers have fallen by a similar proportion in all three FRAs; Mid and West Wales and North Wales have seen a fall of 95% and 94% respectively, whilst in South Wales there has been a fall of 88%.

Figure 17: Number of deliberate primary fires in road vehicles, by FRA, 2001-02 to 2023-24[p]

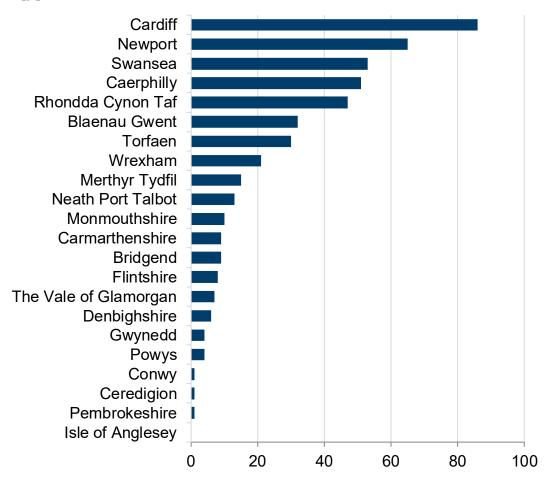


Description of Figure 17: A line chart showing the number of deliberate primary fires in road vehicles by fire and rescue authority. The chart shows data from 2001-02 to 2023-24, where 2023-24 data are currently provisional.

The chart shows how numbers in all three FRAs have noticeably fallen during the time series, but the trend in recent years has become more stable.

[p] Provisional data.

Figure 18: Number of deliberate primary fires in road vehicles, by local authority 2023-24[p]



Description of Figure 18: a bar chart showing the number of deliberate primary fires in road vehicles, occurring in each local authority in 2023-24. The data are marked as provisional. The chart shows most deliberate fires in road vehicles in 2023-24 occurred in Cardiff and Newport whilst relatively few occurred across North Wales.

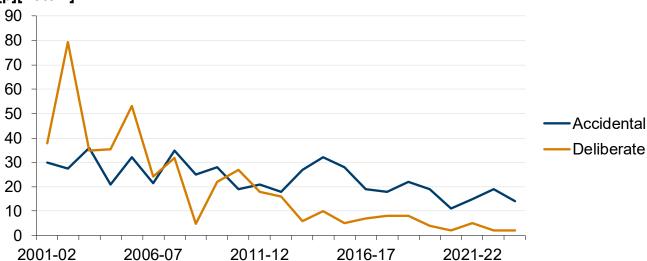
Cardiff (86) had the highest number of deliberate primary road vehicle fires in 2023-24, equating to 18% of the number in Wales in 2023-24, while Newport had the second most at 65 (equating to 14% of the Wales total).

[p] Provisional data

School fires

In 2023-24 there were only 2 deliberate primary fires in schools, equating to 13% of all fires in schools. The peak figure in the time series (as seen below in figure 19) was 79 deliberate fires in schools in 2002-03.

Figure 19: Number of deliberate and accidental fires in schools, 2001-02 to 2023-24[p][note 1]

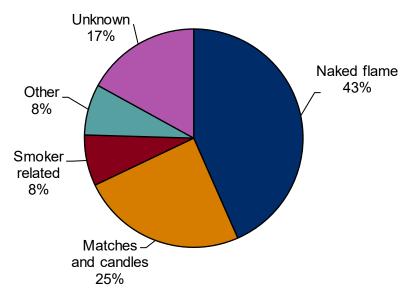


Description of Figure 19: a line chart showing the number school fires started deliberately along with the number started accidentally. Data relates to the years 2001-02 to 2023-24, where 2023-24 data are currently provisional. The chart highlights how the number of deliberate fires in schools have fallen over the time period and, since 2011-12, the number has been lower than those started accidentally. Every year since 2013-14, less than a third of fires in schools each year were started deliberately.

[p] Provisional data.

[Note 1] Due to COVID-19 there were periods of 2020-21 when schools in Wales were closed to most pupils.

Figure 20: Source of ignition of deliberate primary fires in schools, 2014-15 to 2023-24[note 1]



Description of Figure 20: a pie chart in which the source of ignition in deliberate school fires have been aggregated for the years 2014-15 to 2023-24. A longer time period has been used in comparison to other pie charts in this bulletin due to the small numbers occurring annually. Of the 53 deliberate fires in schools since 2014-15, 43% were started with a naked flame, 25% with matches or candles and 8% were smoker related. A further 17% have unspecified sources.

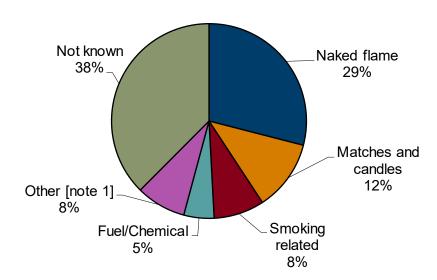
[Note 1] Since numbers of deliberate fires in schools are small, the chart is based on ten years of data from IRS (2014-15 to 2023-24).

Of the 53 deliberate fires in schools between 2014-15 and 2023-24, 23 (43%) occurred in school hours. Almost a third of deliberate fires in schools occurred in bathrooms or toilets; of the fires starting here, 71% occurred during school hours.

Source and hazardous materials (all primary fires)

Detailed information is only available for the source of primary fires. In the 5 years from 2019-20 to 2023-24 there has been a total of 5,360 deliberate primary fires. During this period, the source of ignition in 29% of deliberate primary fires was a naked flame, and in 12% matches and/or candles. In each year these two categories have been the largest (where the source is known) although the percentage due to matches and candles has noticeably dropped from a peak of 48% in 2009-10 to 10% in each of the last three years; the number of fires attributable to this matches and candles has dropped 92%.

Figure 21: Source of ignition of deliberate primary fires, 2019-20 to 2023-24

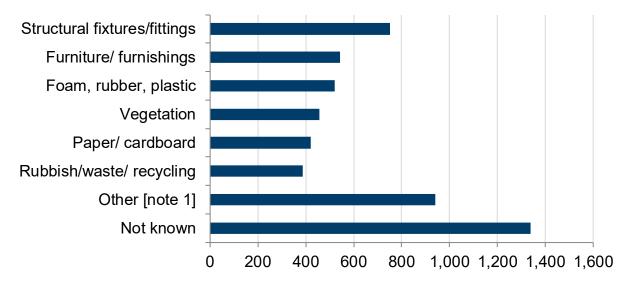


Description of Figure 21: a pie chart in which the source of ignition in deliberate primary fires have been aggregated. The data relates to 2019-20 to 2023-24. The largest known categories of source of ignition are naked flame (29%) and matches/candles (12%). However in 38% of deliberate primary fires the source was not known.

[Note 1] 'Other' includes 'spread from secondary fire', 'fireworks', 'cooking appliance', 'electricity supply', 'bombs and explosives', 'heating equipment', 'industrial equipment', 'other domestic style appliance' and 'wet hay'.

In the 5,360 deliberate primary fires for the combined years 2019-20 to 2023-24, structural fixtures and fittings was the material first ignited in 14% of incidents. In 25% of deliberate primary fires in this period the item first ignited was not known.

Figure 22: Materials first ignited in deliberate primary fires, 2019-20 to 2023-24



Description of Figure 22: a bar chart in which the item first ignited in deliberate primary fires have been aggregated for the years 2019-20 to 2023-24.

The chart shows two categories of materials first ignited, 'structural fittings/fixtures' and 'furniture or furnishings' had the largest proportions, with 14% and 10% of deliberate primary fires respectively.

[Note 1] 'Other' includes 'clothing/textiles', 'explosives, gas, chemicals', 'wood', 'none', 'decoration/celebration', 'food' and 'animal'.

Of the 5,360 deliberate primary fires in the last 5 years, in 4,389 (82%) the cause of spread of the fire was identified; in 12% of all deliberate primary fires in this period spread due to structural fixtures and fittings (external and internal) and 10% spread due to furniture and furnishings; a further 10% spread due to foam, rubber and plastic. In 18% of deliberate primary fires the cause of the spread was unknown.

In 15% of deliberate primary fires, rapid growth was recorded; petrol and oil products were found to be the cause in the majority of these cases, over two thirds in the last 5 years.

Deliberate primary fires tend to be single-seated, only 4% over the last 5 years have been multi-seated.

In the combined years 2019-20 to 2023-24, there were a total of 462 deliberate primary fires involving hazardous materials (9% of all deliberate primary fires), of which, 16 involved multiple hazardous materials. In total there were 480 instances of hazardous materials being involved in deliberate primary fires.

Petrol
LPG
Diesel fuel
White asbestos
Propane
Other [note 1]
Unknown
0 100 200 300 400

Figure 23: Hazardous materials involved in deliberate primary fires, 2019-20 to 2023-24

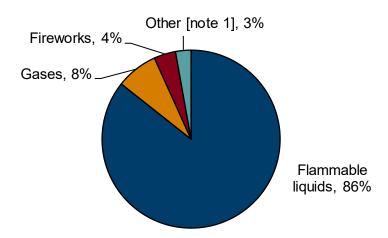
Description of Figure 23: a bar chart in which hazardous materials involved in deliberate primary fires have been aggregated for the years 2019-20 to 2023-24. The largest proportions of instances involved petrol (62%) and liquefied petroleum gas LPG (8%). 'Other' as grouped in this chart made up 9% of instances but this category is a sum of several smaller categories.

[Note 1] 'Other' includes Oxygen, refrigerated liquid, kerosene, hydrochloric acid, sodium hydroxide solution, butane, methane, blue asbestos, ethanol, ammonia, hydrogen sulphide, turpentine, potassium chlorate, sulphuric acid, aerosols and carbon monoxide.

There were 1,839 instances of dangerous substances (Figure 24) being involved in primary fires over the last 5 years, of these 711 (39%) were involved in deliberate primary fires. The majority of these involved

'flammable liquids' (86%), the next largest proportion was 'gases' (8%). These were also the largest categories in accidental primary fires although the percentages were closer (66% and 24% respectively).

Figure 24: Dangerous substances in deliberate primary fires, 2019-20 to 2023-24

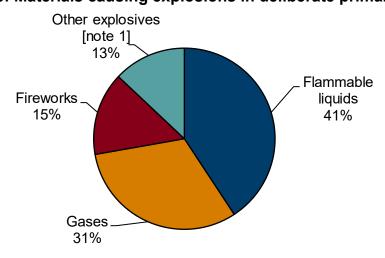


Description of Figure 24: a pie chart in which dangerous substances involved in deliberate primary fires have been aggregated for the years 2019-20 to 2023-24. The dangerous substance involved in most deliberate primary fires was flammable liquids (in 86% of deliberate primary fires where dangerous substances were present).

[Note 1] 'Other' Includes other explosives, acetylene and ammunition.

There were 222 explosions involved in primary fires (accidental and deliberate) in the years 2019-20 to 2023-24. These may have occurred before the fire, during the fire, both before and during, or the sequence of events maybe unknown. In this 5-year period, 54 explosions (24%) were recorded in relation to deliberate fires.

Figure 25: Materials causing explosions in deliberate primary fires, 2019-20 to 2023-24



Description of Figure 25: a pie chart in which materials causing explosions in deliberate primary fires have been aggregated for the years 2019-20 to 2023-24. Flammable liquids caused the largest number

of explosions (41% in deliberate primary fires where there was an explosion), whilst gases caused 31% and fireworks 15%.

[Note 1] 'Other explosives' includes acetylene, ammunition, flammable solids and 'other'.

Casualties

There were 4 fatalities and 50 non-fatal casualties due to deliberate fires in 2023-24. Cumulatively, over the last 5 years 17% of fatalities and 11% of non-fatal casualties in fires occurred in deliberate fires.

Table 8: Number of casualties in deliberate fires, by location, 2019-20 to 2023-24[p]

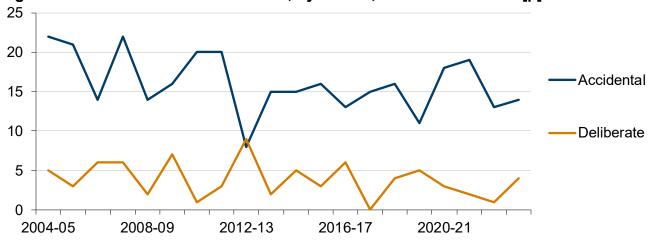
	or casaarrises.		,	,	<u> </u>
	2019-20	2020-21	2021-22	2022-23	2023-24[p]
Dwellings					
Fatal	1	2	1	1	1
Non-fatal	42	29	18	36	29
Other buildings					
Fatal	1	1	0	0	0
Non-fatal	16	4	13	8	9
Road vehicles					
Fatal	3	0	1	0	2
Non-fatal	2	1	5	1	5
Other					
Fatal	0	0	0	0	1
Non-fatal	9	2	6	8	7
All locations					
Fatal	5	3	2	1	4
Non-fatal	69	36	42	53	50

Description of Table 8: numbers of fatal and non-fatal casualties, grouped by location type (for example dwellings), in deliberate fires. Data relates to the years 2019-20 to 2023-24, where the 2023-24 data are provisional. Almost 6 in 10 non-fatal casualties from deliberate fires in 2023-24 occurred in dwellings.

[p] Provisional data.

For most of the time series, deliberate fires accounted for fewer than half the number of fatalities compared with those from accidental fires. The only exception was 2012-13 when fatalities from deliberate fires outnumbered those from accidental fires (due to a combination of a relatively high number of fatalities from deliberate fires and a low number from accidental fires).

Figure 26: Number of fatalities in fires, by motive, 2004-05 to 2023-24[p]



Description of Figure 26: a line graph, showing a time series of the number of fatalities from accidental fires and the number of fatalities from deliberate fires, for the years 2004-05 to 2023-24, where 2023-24 are currently provisional.

The chart shows that in every year except one in the time series fatalities in accidental fires outnumbered those in deliberate fires. Since numbers are small, they are prone to fluctuation.

(p) Provisional data.

Although prone to fluctuation the number of non-fatal casualties which can be attributed to deliberate fires has seen a downward trend. Since 2009-10 the number has not been above 100, and the average over the last 5 years is 50. In 2023-24 there were 50 non-fatal casualties from deliberate fires, 14% of all non-fatal casualties.

800 700 600 500 Accidental 400 300 Deliberate 200 100 0 2020-21 2004-05 2008-09 2012-13 2016-17

Figure 27: Number of non-fatal casualties in fires, by motive, 2004-05 to 2023-24[p]

Description of Figure 27: a line chart showing the number of non-fatal casualties from deliberate fires and accidental fires. The chart shows data for years 2004-05 to 2023-24, where 2023-24 are currently provisional. Though the time series numbers of non-fatal casualties have been far higher in accidental fires than in deliberate fires.

[p] Provisional data.

In 2023-24, 23 non-fatal casualties (46%) from deliberate fires went to hospital. 2023-24 was the first year in which the number of non-fatal casualties with serious injuries outnumbered those with slight injuries.

Table 9: Number and percentage of non-fatal casualties by nature of injury sustained in deliberate fires, 2021-22 to 2023-24

	2021-22	2022-23	2023-24[p]	2021-22%	2022-23%	2023-24%
First aid [note 1]	9	11	10	21	21	20
Precautionary check						
recommended	14	21	17	33	40	34
Slight injuries [note 2]	15	16	10	36	30	20
Serious injuries [note 3]	4	5	13	10	9	26
All non-fatal casualties	42	53	50	100	100	100

Description of Table 9: a table showing the number of non-fatal casualties, broken down into injury severity (serious, slight, first aid or precautionary check. Also shown is the percentage of non-fatal casualties for each category, for example 20% in 2023-24 were given first aid.

[Note 1] First aid given at scene.

[Note 2] Casualty went to hospital, injuries appear to be slight.

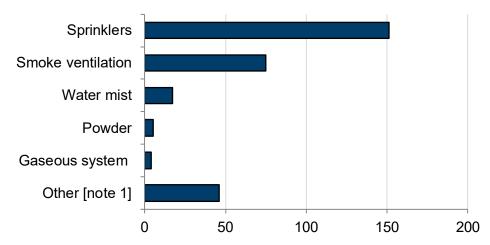
[Note 3] Casualty went to hospital, injuries appear to be serious.

[p] Provisional data.

Prevention

The data in this section looks at safety systems present in accidental and deliberate fires, since numbers in deliberate fires alone are small (in the last ten years there have been 138 safety systems recorded present in deliberate fires). In the aggregated figures for the last 5 years, fire safety systems were present at 298 accidental and deliberate primary building fires. However, some buildings have more than one system and there were a total of 290 safety systems present at primary fires. 32% of these primary fires where safety systems were present were deliberate. Throughout the time series sprinklers have been to most common safety system in use.

Figure 28: Safety systems present at primary fires in buildings, by system type, 2019-20 to 2023-24



Description of Figure 28: a bar chart showing numbers of fires (accidental and deliberate) in buildings in which safety systems were present, these have been aggregated for the years 2019--20 to 2023-24. Sprinklers were the most used safety system, present at 51% on fires in buildings (where a safety system was present).

[Note 1] 'Other' includes 'drencher', 'pressurisation', and 'foam'.

For the aggregated years 2019-20 to 2023-24, where safety systems were present, more than 6 in 10 operated correctly (although not all of these raised the alarm). Where systems failed to operate, more than two fifths of cases were due to the fire occurring in an area not covered by the safety system.

Table 10: Number of safety systems in building fires, by operation, 2019-20 to 2023-24[p][note 1]

	2019-20	2020-21	2021-22	2022-23	2023-24[p]
Operated and raised alarm	28	23	31	33	46
Operated, but did not raise alarm	8	5	4	4	3
Did not operate	18	11	27	29	28

Description of Table 10: a table showing the number of safety systems at building fires (accidental and deliberate), whether operated and whether raised the alarm.

Data relates to 2019-20 to 2023-24, where 2023-24 are currently provisional.

[Note 1] The table refers to the number of safety systems not the number of accidental and deliberate fires in buildings. Data includes some instances where more than one safety system was present at a fire.

[p] Provisional data.

In 2023-24 there were smoke alarms present in 68% of accidental primary dwelling fires, and 55% of deliberate dwelling fires. For other buildings in 2023-24, smoke alarms were present in 63% of primary accidental fires and 53% of primary deliberate fires.

Table 11: Number of primary fires in buildings, by presence of smoke alarms and motive,2021-22 to 2023-24[p]

	<u> </u>					
	2021-22	2022-23	2023-24[p]	2021-22	2022-23	2023-24[p]
	accidental	accidental	accidental	deliberate	deliberate	deliberate
Dwelling						
No alarm	417	422	445	45	68	56
Alarm present						
[note 1]	1,050	957	931	75	95	68
All primary						
fires [note 1]	1,467	1,379	1,376	120	163	124
Other building						
No alarm	254	274	216	116	128	122
Alarm present						
[note 1]	348	342	362	86	92	137
All primary						
fires [note 1]	602	616	578	202	220	259

Description of Table 11: shows the number of primary fires in buildings, split by motive (deliberate and accidental), building type (dwelling, other) and whether a smoke alarm was present or not.

Data relates to 2021-22 to 2023-24, where 2023-24 are currently provisional.

[Note 1] Includes where it was not known whether the building had a smoke alarm.

[p] Provisional data.

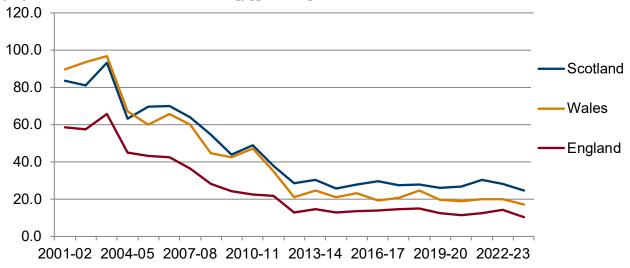
At deliberate dwelling fires in 2023-24 where smoke alarms were present, 75% of smoke alarms successfully operated. In accidental dwelling fires 82% of smoke alarms operated correctly. In deliberate other building fires 89% of smoke alarms operated correctly, whilst for accidental fires in other buildings the proportion was 83%.

Great Britain comparisons

The number of deliberate fires in England, Scotland and Wales all fell in 2023-24 compared with 2022-23. England saw the largest decrease (26%) due to a 31% decrease in deliberate secondary fires. Wales saw the next largest decrease (14%) but was the only country to see an increase in any category (where deliberate primary fires increased by 7%). Scotland saw a decrease of 13%.

In England 27% of deliberate fires were primary whilst in Wales and Scotland this proportion was lower at 20% and 17% respectively.

Figure 29: Rate of deliberate fires in England, Scotland and Wales per 10,000 population, 2001-02 to 2023-24[p][note 1]



Description of Figure 29: a line graph showing the rate of deliberate fires in England, Scotland and Wales, per 10,000 population. The time series shows data from 2001-02 to 2023-24, where 2023-24 are provisional.

The chart shows the rates of deliberate fires in Wales and Scotland have consistently been higher than in England, although the gap has narrowed in recent years. All three countries have seen a general downward trend since 2001-02 although since 2012-13 figures have somewhat plateaued.

[Note 1] Population data are taken from ONS Mid-Year Estimates and are revised periodically and so rates are subject to change between publications.

[p] Provisional data

Source: Data for England are taken from The Home Office publication <u>Fire Statistics: England</u>

Data for Scotland are taken from the Scottish fire service publication <u>Fire and Rescue Incident</u>

<u>Statistics 2023-24</u>

Glossary

Accidental fires

Includes those where the fire was ignited by accident or the cause was not known or unspecified.

Buildings

Defined as all buildings including those under construction, but excluding derelict buildings, or those under demolition. Prior to 1994 'buildings' were referred to as 'occupied buildings'.

Cause of fire

The defect, act or omission leading to ignition of the fire.

Chimney fires

Reportable fires in occupied buildings where the fire was confined within the chimney structure and did not involve casualties or rescues or are attended by 5 or more appliances.

Dangerous substances

These can spread fire, intensify fire, intensify smoke, render water unsuitable or produce toxic gases. Dangerous substances may be grouped into one of the following categories: Fireworks, Acetylene, Ammunition, Other explosives, Gases, Flammable liquids or Flammable solids.

Deliberate fires

Include those where deliberate ignition is merely suspected.

Dwellings

Defined as buildings occupied by households, excluding hotels, hostels and residential institutions. From 1988, mobile homes have been specifically included in the dwelling count. In 2000, the definition of a dwelling was widened to include any non-permanent structures used solely as a dwelling, such as houseboats.

Explosion

An explosion is a very rapid build up of pressure giving rise to a characteristic 'bang'. The pressure may be sufficient to cause injury to people and structural damage to buildings. Explosions may result from gas leaks, including unburnt fire gases, or from overheated cylinders or unstable solid materials.

False alarms

Events in which the Fire and Rescue Authority was called to a reported fire which turned out not to exist.

Fatal casualty (fire related)

A person whose death is attributed to a fire even if the death occurred weeks or months later. There are also occasional cases where it becomes apparent subsequently that fire was not the cause of death. The figures for fatalities are thus subject to revision.

Fire Data Reports (FDR1 and FDR3)

The method of data collection via paper forms prior to the Incident Recording System (introduced in April 2009). FDR1 was used to record primary fires, FDR3 for secondary fires, chimney fires and false alarms.

Fire and Rescue Authorities (FRAs)

The statutory bodies which oversee the policy and service delivery of a fire and rescue service. The three authorities in Wales are North Wales, Mid and West Wales and South Wales.

Hazardous Materials

These are recorded as individual items (solids, liquids or gases) that can harm people, other living organisms, property, or the environment. Each material has a numeric UN 4 digit numeric code, which can be found in the <u>Dangerous Goods Emergency Action Codes List book</u>.

Incident Recording System (IRS)

The electronic based system for recording fires, false alarms and Special Service Incidents. IRS replaced the FDR1 and FDR3 paper forms in April 2009.

Late fire call

A fire known to be extinguished when the call was made (or to which no call was made, for example a fire which comes to the attention of the Fire and Rescue Authority) and which the Fire and Rescue Authority attended.

Location

The type of premises, property or countryside in which the fire started. This is not necessarily the type of premises in which most casualties or damage occurred as a result of the fire.

Non-fatal casualties

Recorded as being in one of four classes of severity as follows:

- (i) Victim went to hospital, injuries appear to be serious
- (ii) Victim went to hospital, injuries appear to be slight
- (iii) First aid given at scene
- (iv) Precautionary check recommended this is when an individual is sent to hospital or advised to see a doctor as a precaution, having no obvious injury or distress.

Non-fatal casualties marked as 'not fire-related' have not been excluded due to widespread inappropriate use of this field.

Other buildings fires

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

and so on; non-residential buildings include properties such as offices, shops, factories, warehouses, restaurants, public buildings, religious buildings and so on.

Primary fires

Includes all reportable fires in non-derelict buildings, vehicles and outdoor structures or any fire involving casualties, rescues, or fires attended by five or more appliances.

Reportable fire

An event of uncontrolled burning involving flames, heat or smoke and which the fire and rescue authority attended.

Secondary fires

The majority of outdoor fires including grassland and refuse fires unless they involve casualties or rescues, property loss or five or more appliances attend. They include fires in single derelict buildings. They are reported in less detail than other fires and consequently less information concerning them is available.

Source of ignition

The source of the flame, spark or heat that started the fire.

Quality information

General information relating to data quality for fire and rescue incidents, operational fire data and FRA performance data can be found in the <u>Quality Report</u>.

Background

The analysis in this bulletin relates to deliberate fires between April 2023 and end March 2024 whilst making comparisons with April 2022 to March 2023 and earlier years.

On 10 November 2004 the Fire and Rescue Services Act 2004, which devolved fire and rescue services to the National Assembly for Wales (now the responsibility of the Welsh Government), was brought into effect. In Wales, these services are provided by three Fire and Rescue Authorities (FRAs). The three FRAs cover varied geographical areas with a wide variety of risks including: fires in homes; outdoor fires; fires in business premises; road traffic collisions; rail or air crashes; chemical spills; building collapses; and trapped people or animals.

North Wales Fire and Rescue Authority provides cover for a population of almost 700,000 across a geographical area of 2,400 square miles. It employs over 900 operational and non-operational support staff from its headquarters and its 44 fire stations.

Mid and West Wales Fire and Rescue Authority covers over half the area of Wales and a population of over 900,000. There are 58 fire stations and around 1,300 employees.

South Wales Fire and Rescue Authority serves a population of over 1.5 million people covering 1,085 square miles. It employs around 1,700 staff including over 1,400 fire-fighters who operate from 47 fire stations throughout South Wales.

Fire prevention strategies

The FRAs in Wales have a number of ongoing fire safety campaigns and community fire safety work (such as home safety checks and school visits) as detailed on their respective webpages.

North Wales Fire and Rescue Service

Mid and West Wales Fire and Rescue Service

South Wales Fire and Rescue Service

These may be a contributory factor in the overall falling numbers of fires although no all-Wales evidence is currently available.

Over the years there have been a number of national programmes for dealing with deliberate fires. The Wales Arson Reduction Strategy (WARS) first reported in 2007, with a review in 2009, and updated strategies for 2012-15 and most recently 2019. A delivery plan from WARS III resulted in a multi-agency taskforce 'Operation Dawns Glaw' being established in 2015 and aiming to reduce the number of deliberate grassland fires.:

Work has also been done to inhibit the spread of fires; Natural Resources Wales has examined how changes in land and forestry management methods can be used to make grasslands less conducive to fires or be better structured to control the spread of fires and firefighters have also been involved in developing firebreaks on some of our valleys' hillsides, using the latest techniques learned internationally.

Official statistics status

All official statistics should show the standards of the <u>Code of Practice for Statistic (UK Statistics</u> <u>Authority)</u>.

These are accredited official statistics. They were independently reviewed by the Office for Statistics Regulation (OSR) in June 2012. They comply with the standards of trustworthiness, quality and value in the Code of Practice for Statistics.

It is Welsh Government's responsibility to maintain compliance with the standards expected of accreditation. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with OSR promptly. Accreditation can be cancelled or suspended at any point when the highest standards are not maintained, and reinstated when standards are restored.

Accredited official statistics are called National Statistics in the Statistics and Registration Service Act 2007.

Statement of compliance with the Code of Practice for Statistics

Our statistical practice is regulated by the Office for Statistics Regulation (OSR). OSR sets the standards of trustworthiness, quality and value in the Code of Practice for Statistics that all producers of official statistics should adhere to.

All of our statistics are produced and published in accordance with a number of statements and protocols to enhance trustworthiness, quality and value. These are set out in the Welsh Government's Statement of Compliance.

These <u>accredited official statistics</u> demonstrate the standards expected around trustworthiness, quality and public value in the following ways.

Trustworthiness

These statistics are compiled from administrative data systems in use in the Fire and Rescue Services in Wales.

These statistics are pre-announced on the <u>Statistics and Research area of the Welsh Government website</u>. Access to the data during processing is restricted to those involved in the production of the statistics, quality assurance and for operational purposes. Pre-release access is restricted to eligible recipients in line with the <u>Code of Practice</u>.

Quality

Statistics published by Welsh Government adhere to the Statistical Quality Management Strategy which supplements the Quality pillar of the Code of Practice for Statistics and the European Statistical System principles of quality for statistical outputs.

Accuracy

Since April 2009 incident data (relating to fires, false alarms and Special Service Incidents) have been submitted by the Fire and Rescue Authorities via the Incident Recording System (IRS). On 5 January 2016 responsibility for fire and rescue policy in England transferred from the Department for Communities and Local Government (CLG) to the Home Office, this resulted in IRS also being managed by the Home Office. IRS does not currently collect data from FRAs in Northern Ireland.

Data submitted to IRS are automatically checked in the following ways:

- only the applicable questions are asked
- all dates and or times are complete and in the correct format
- dates and or times are in a valid order
- only appropriate options are displayed

Due to the potential complexity of incidents recorded it is not possible for IRS to check that all data submitted is logical; unusual circumstances can be checked by having a process for quality control and assurance by the FRAs. The FRAs complete records in IRS in accordance with <u>guidance</u> available from the Home Office.

Upon receipt of data at Welsh Government some general sense checks are carried out and queried as necessary.

Prior to IRS data were collected via the paper based forms FDR1 and FDR3. The change in collection method has allowed a greater volume of data to be captured:

Data on Special Service Incidents are now recorded

- All fires are recorded; pre-IRS statistics were based on a sampled dataset.
- Some detail on secondary fires and chimney fires are now recorded; pre-IRS, only aggregates were previously available.

For further details of the information collected and held on IRS please see 'Further details'.

The incident data are extracted from IRS annually (around July/August) and marked provisional at first publication. All bulletins and StatsWales tables excluding the six-month data published in February/March are based on this dataset. Due to the nature of the live system, whilst accurate at the time of extraction, totals may change and therefore be revised due to updated information. 2023-24 data are currently marked as provisional and may be revised in future publications.

A key piece of information that the IRS collects for all incidents is the accurate incident location. For all incidents it is mandatory to have the grid location (easting and northing co-ordinates), in addition for addressable locations the address details can be recorded.

Within the IRS forms system, for addressable locations the user locates the address using a gazetteer and this determines the co-ordinates. For non-addressable locations the user will either select the location on a map or use a mobile data terminal to determine the location.

Timeliness and punctuality

This Statistical Bulletin is pre-announced and then published on the <u>Statistics & Research website</u>. Furthermore, should the need arise to postpone an output this would follow the Welsh Government's Revisions, Errors and Postponements arrangements.

Data for this bulletin are taken from the same dataset as the annual Fire Statistics and the Grassland fires bulletin which is extracted in July or August each year. This bulletin is published biennially and is usually published in November. The delayed publication of the 2023-24 bulletin is due to a review of all our fire publications.

Accessibility and clarity

Welsh fire statistics are published in an accessible, orderly, pre-announced manner on the Welsh Government website at 9:30am on the day of publication.

In our outputs, we aim to provide a balance of commentary, summary tables, charts and maps. The aim is to 'tell the story' in the output, without the output becoming overly long and complicated. We provide additional, detailed data on <u>StatsWales</u>.

Comparability and coherence

Since 2009-10 the three Fire and Rescue Authorities have recorded all their fire incidents using the IRS. This may affect some of the incident categories especially when data are compared with years prior to 2009-10. Following a quality assurance exercise carried out by the Department for Communities and Local Government (CLG) on the 2009-10 and 2010-11 two possible discontinuities (due to the change in data collection method) were discovered. One relates to types of incident, notably outdoor primary fires and the second to non-fatal casualties. More information is given on this subject in the Comparability section of Fire Statistics publication

Numbers of non-fatal casualties presented in this bulletin include those recorded as 'not fire related'. This is the result of an exercise CLG undertook which found that the 'not fire related' casualty marker had been widely misused. Data published by the Home Office for England and the Scottish Fire and Rescue Service for Scotland also include these casualties. However the second performance indicator (FRS/RRC/S/002) listed in the Fire and Rescue Authority performance releases and StatsWales table exclude those casualties and so the data are not directly comparable.

Rounding and symbols

The following symbols may have been used in this release:

- [p] provisional
- [r] revised
- [z] not applicable
- [x] no available

UK comparisons

Whilst England and Scotland do not publish specific deliberate fires bulletins, data by motive are available in their annual publications.

Data for England (published by the Home Office since April 2016):

- Fire statistics England (Home Office)
- Fire statistics monitor (Home Office)

Data for Scotland (published by Scottish Fire and Rescue Service since 2015) – not currently badged as national or official statistics.

- Fire and Rescue Incident Statistics 2023-24 (Scottish Fire and Rescue Service)
- Pre 2014-15 data (Scottish Government)

Limited Northern Ireland data are available in an <u>annual report from Northern Ireland Fire and Rescue Service</u>.

Value

The Welsh Government uses the information in this bulletin to monitor the trends in deliberate fires occurring in Wales. This helps to assess the effectiveness of current policies, and the data can be used for future policy development. The data are also used as evidence for national fire safety initiatives and campaigns.

The data are used by the FRAs for comparisons and benchmarking. The data aids the allocation of resources and the provision of community safety projects.

We regularly review our data collections and outputs to ensure that they are relevant, collect reliable data and meet user needs. We also consult our users on a number of fire data collections issues. This is part of an ongoing exercise covering all fire and rescue statistics in order to better understand user requirements and priorities for the future. As part of this, Welsh Government

policy colleagues, fire and rescue services and others have provided information on how they use fire statistics.

You are welcome to contact us directly with any comments about how we meet these standards. Alternatively, you can contact OSR by emailing regulation@statistics.gov.uk or via the OSR website.

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural wellbeing of Wales. The Act puts in place seven wellbeing goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators ("national indicators") that must be applied for the purpose of measuring progress towards the achievement of the wellbeing goals, and (b) lay a copy of the national indicators before Senedd Cymru. Under section 10(8) of the Wellbeing of Future Generations Act, where the Welsh Ministers revise the national indicators, they must as soon as reasonably practicable (a) publish the indicators as revised and (b) lay a copy of them before the Senedd. These national indicators were laid before the Senedd in 2021. The indicators laid on 14 December 2021 replace the set laid on 16 March 2016.

Information on the indicators, along with narratives for each of the wellbeing goals and associated technical information is available in the Well-being of Wales report.

Further information on the Well-being of Future Generations (Wales) Act 2015.

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local wellbeing assessments and local wellbeing plans.

Further details

The document is available on the Welsh Government website: https://www.gov.wales/grassland-fires

More information is available in the form of StatsWales tables that accompany this release.

Accessible Excel tables from the bulletin are also published under the heading 'Data' on the <u>Deliberate fires 2023-24</u> webpage. These tables show the full available time series.

Analysis of annual Welsh fire incident data can be found in the bulletin 'Fire and Rescue Incident Statistics, 2023-24'. The bulletin includes charts and information on fires, false alarms and Special Service Incidents, on all location types (dwellings, road vehicles and so on), causes of fires and the presence of smoke alarms.

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to stats.inclusion@gov.wales.

Open Government Licence

All content is available under the Open Government Licence, except where otherwise stated.

