



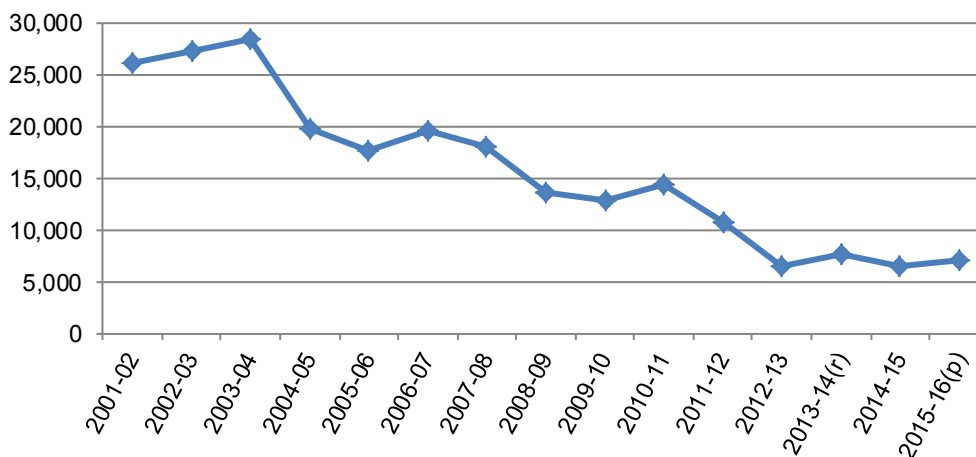
28 Feb 2017
SB 13/2017

Deliberate fires 2015-16

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 2015-16, almost 6 in 10 attendances at fires by the Welsh Fire and Rescue Authorities were due to deliberate fires.

The 2015-16 data are currently provisional, extracted from the Incident Recording System (IRS) in July 2016 and may be revised in subsequent publications.

Chart 1 Deliberate fires attended in Wales



The Welsh Fire and Rescue Authorities attended a total of 7,128 deliberate fires in 2015-16. This is an increase of 11 per cent compared with the previous year, but only about a quarter of the number of fires in 2001-02.

South Wales FRA attended 4,812 deliberate fires in 2015-16.



16 per cent increase compared with 2014-15

Mid and West Wales FRA attended 1,612 deliberate fires in 2015-16.



4 per cent increase compared with 2014-15

North Wales FRA attended 704 deliberate fires in 2015-16.



3 per cent decrease compared with 2014-15

About this bulletin

This is a biennial bulletin which 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 Fire and Rescue Authorities (FRAs) in Wales to the Home Office.

In this bulletin

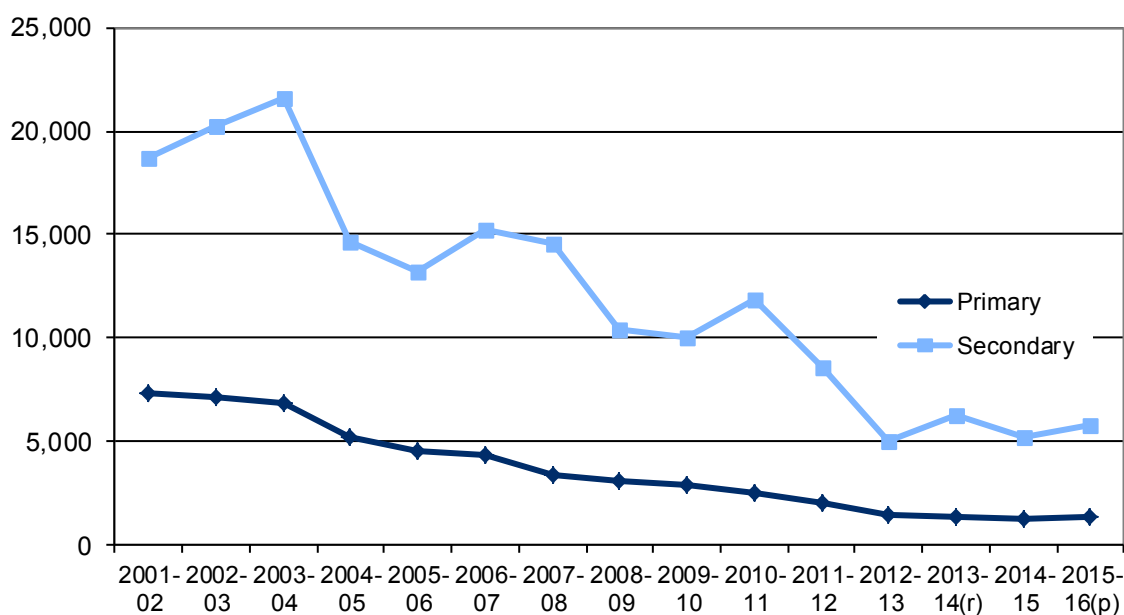
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Fires

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).

Welsh Fire and Rescue Services attended 12,111 fires in 2015-16, of these 7,128 (59 per cent) were started deliberately. This is an increase, of 11 per cent from the 6,434 deliberate fires attended in 2014-15. However since 2001-02 the number of deliberate fires in Wales has fallen by 73 per cent. The peak in the time series occurred in 2003-04 when there were 28,464 deliberate fires.

Chart 2: Number of deliberate fires attended, by type



(p) Provisional data.

Fires are classed as primary, secondary or chimney fires. Primary fires are the most serious type of fires attended, usually involving property, vehicles, casualties, or rescues. Secondary fires usually involve grassland, rubbish or derelict buildings. More detailed definitions are in the Glossary.

In 2015-16, 1,371 primary fires were deliberate, a rise of 13 per cent compared with 2014-15; this is the first increase in the time series shown in the chart above and the highest number since 2012-13. Overall the number of deliberate primary fires has shown a long term downward trend, decreasing by 81 per cent since 2001-02.

Numbers of secondary fires are more prone to fluctuation, as can be seen from chart 2. This is due to the majority of these fires being outdoors and as such may be affected by weather conditions among other factors. There were 5,757 deliberate secondary fires in 2015-16, an increase of 10 per cent compared with 2014-15, and accounting for 48 per cent of all fires attended by the Fire and Rescue Authorities. Since 2001-02 there has been an overall reduction of 69 per cent in deliberate secondary fires.

In 2015-16, around 27 per cent of all fire and false alarm attendances were for deliberate fires; this was an increase of 3 percentage points from 2014-15.

Table 1: Number of deliberate fires by location

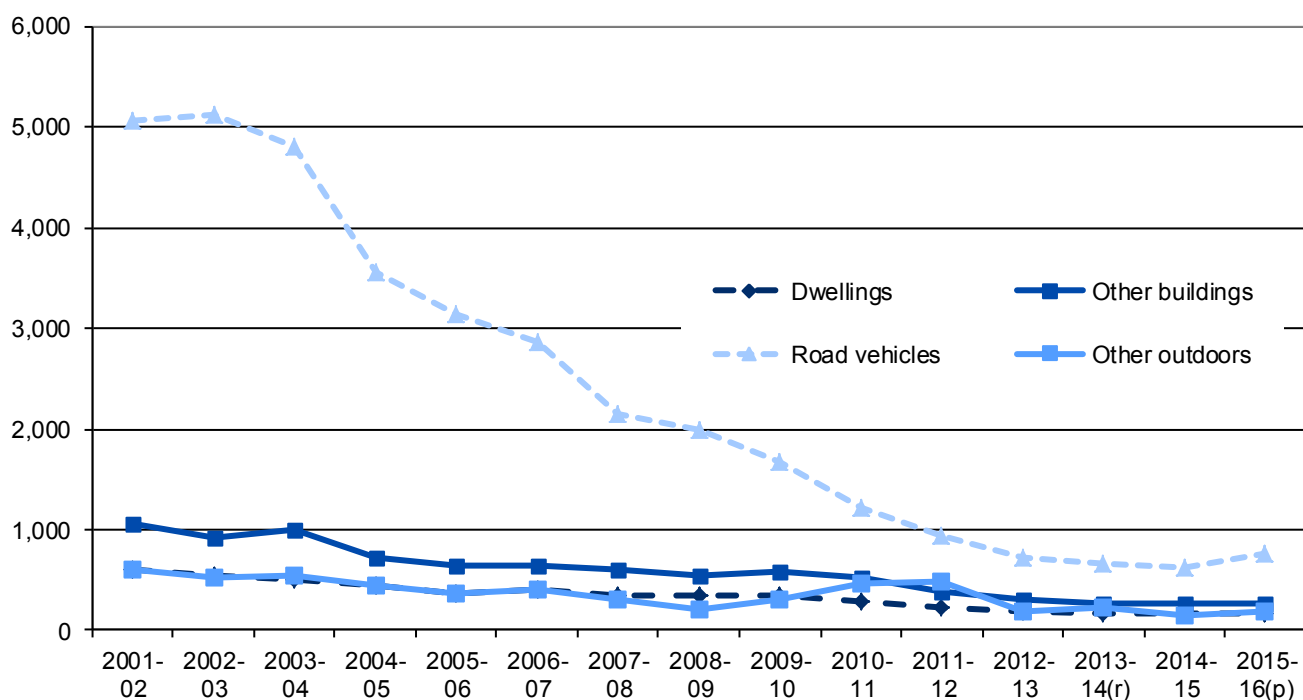
	2010-11	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)
Primary fires	2,484	2,051	1,405	1,345	1,214	1,371
Dwellings	282	233	186	178	173	166
Other buildings	516	385	304	274	263	263
Road vehicles	1,220	940	718	666	633	756
Other	466	493	197	227	145	186
Secondary fires	11,812	8,596	4,993	6,224	5,220	5,757
Derelict buildings	150	137	131	91	60	56
Derelict road vehicles	39	51	26	24	28	26
Other	11,623	8,408	4,836	6,109	5,132	5,675
All deliberate fires (a)	14,297	10,648	6,399	7,569	6,434	7,128

(a) Includes a small number of deliberate chimney fires.

(r) Revised data.

(p) Provisional data.

As in other years, in 2015-16, road vehicles accounted for the highest proportion of deliberate primary fires in Wales (55 per cent). In 2015-16 the number of road vehicle fires increased by 19 per cent compared with the previous year. Whilst this is much reduced from 2001-02 (around 15 % of the number of fires at the time) it is the first increase 2002-03. More information on deliberate fires in road vehicles can be found on pages 14 and 15. There was a decrease of 4 per cent in the number of deliberate primary fires in dwellings compared with the previous year; the percentage occurring in other buildings saw no change, whilst there was a 28 per cent increase in fires in other locations (including outdoors and those in outdoor structures).

Chart 3: Number of deliberate primary fires by location

(r) Revised data.

(p) Provisional data

In 2015-16, 29 per cent of primary fires were deliberate, compared with 27 per cent in 2014-15. Whilst only 9 per cent of primary dwelling fires were deliberate, around half of outdoor primary fires were deliberate in 2015-16.

Table 2: Percentage of primary fires started deliberately by location

	<u>2010-11</u>	<u>2011-12</u>	<u>2012-13</u>	<u>2013-14(r)</u>	<u>2014-15</u>	<u>2015-16(p)</u>
Building	23	19	17	16	15	16
Dwelling	13	12	10	9	10	9
Other residential	11	12	11	14	11	16
Non residential	40	37	34	30	27	29
Road vehicle	55	52	47	45	44	48
Other(a)	70	72	60	56	51	51
Outdoor	70	73	61	56	51	51
All primary fires	39	36	30	28	27	29

(a) Includes 'other transport vehicles'.

(r) Revised data.

(p) Provisional data.

A large proportion of outdoor fires are started deliberately on grassland and in forests.

Over the years there have been a number of national programmes for dealing with deliberate fires for instance the Wales Arson Reduction Strategy in 2007¹ (it was reviewed in 2009 with an update strategy for 2012-15 published in 2012²). Ongoing targeted programmes continue, for instance the South Wales FRA Bernie campaign which specifically targets primary school children to engage with and educate them on the potential consequences of deliberately setting grass and mountain fires. The Fire Service in North Wales, in conjunction with North Wales Police and the British Transport Police, launched a deliberate fires awareness campaign in March 2016. The theme of the campaign is to encourage fire and potential fire starters to think about the consequences of deliberately starting grass and mountain fires.

More intensive programmes such as 'Crimes and Consequences' and 'Phoenix' operate throughout the year and across Wales.

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.

¹ [Wales Arson Reduction Strategy - Report of the Joint Arson Group August 2007](#)

² [Wales Arson Reduction Strategy](#)

In 2015-16, 37 per cent of primary fires in South Wales, 24 per cent in North Wales and 20 per cent in Mid and West Wales were started deliberately. The proportion of fires started deliberately was higher for secondary fires, 49 per cent in North Wales, 74 per cent in Mid and West Wales and 93 per cent of secondary fires in South Wales.

South Wales FRA continues to attend the bulk of deliberate fires in Wales (over two-thirds of all deliberate) fires; Mid and West Wales attend around a quarter of the deliberate fires in Wales, whilst North Wales attend a tenth.

North Wales was the only FRA in Wales in 2015-16 to see an overall reduction in the number of deliberate fires compared with the previous year, driven by an 11 per cent fall in deliberate secondary fires. Mid and West Wales FRA saw a fall in deliberate primary fires of 2 per cent, but an overall increase of 4 per cent. South Wales FRA saw an increase of 19 per cent in deliberate primary fires and 15 per cent in deliberate secondary fires, resulting in an overall increase of 16 per cent in all deliberate fires.

Table 3: Deliberate fires by fire and rescue authority

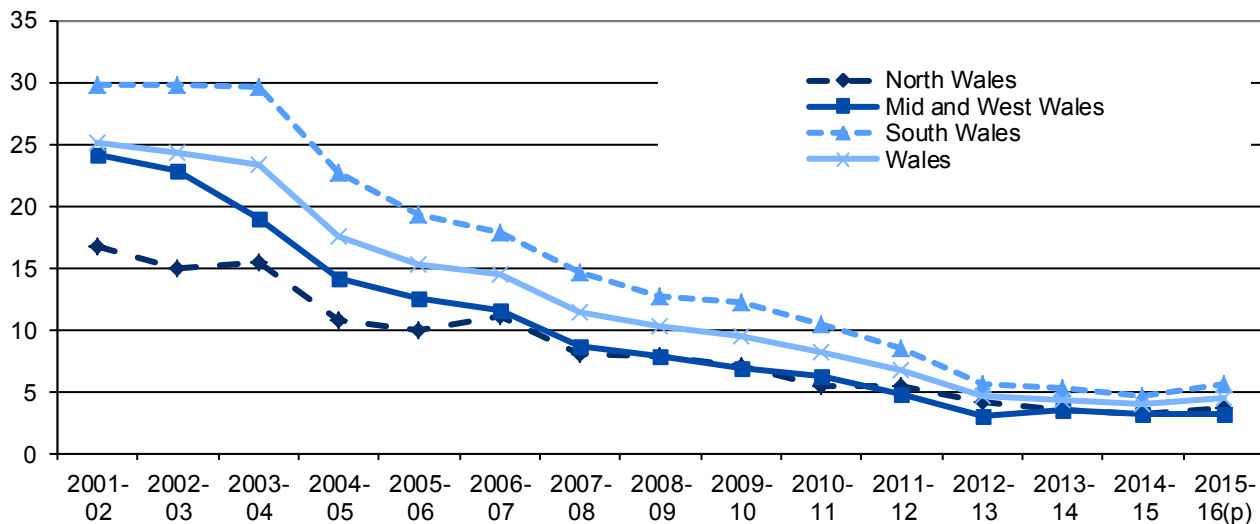
	Primary fires				Secondary fires				All fires			
	Mid and		South	Wales	Mid and		South	Wales	Mid and		South	Wales
	North	West			North	West			North	West		
	Wales	Wales	Wales	Wales	Wales	Wales	Wales	Wales	Wales	Wales	Wales	Wales
Number												
2011-12	370	423	1,258	2,051	1,006	2,002	5,588	8,596	1,376	2,426	6,846	10,648
2012-13	286	277	842	1,405	549	1,217	3,227	4,993	835	1,494	4,070	6,399
2013-14(r)	243	320	782	1,345	549	1,478	4,197	6,224	792	1,798	4,979	7,569
2014-15	222	291	701	1,214	503	1,260	3,457	5,220	725	1,551	4,158	6,434
2015-16(p)	254	285	832	1,371	450	1,327	3,980	5,757	704	1,612	4,812	7,128
Percentage by region												
2011-12	18	21	61	100	12	23	65	100	13	23	64	100
2012-13	20	20	60	100	11	24	65	100	13	23	64	100
2013-14	18	24	58	100	9	24	67	100	10	24	66	100
2014-15	18	24	58	100	10	24	66	100	11	24	65	100
2015-16	19	21	61	100	8	23	69	100	10	23	68	100
Percentage in region which are deliberate												
2011-12	28	26	46	36	62	77	94	85	43	54	78	65
2012-13	25	20	37	30	62	78	93	84	36	46	70	56
2013-14	22	21	36	28	51	69	92	80	33	46	73	57
2014-15	21	20	34	27	52	69	92	80	32	44	70	55
2015-16	24	20	37	29	49	74	93	82	33	48	73	59

(r) Revised data.

(p) Provisional data.

Charts 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 2 per 10,000 population in 2015-16.

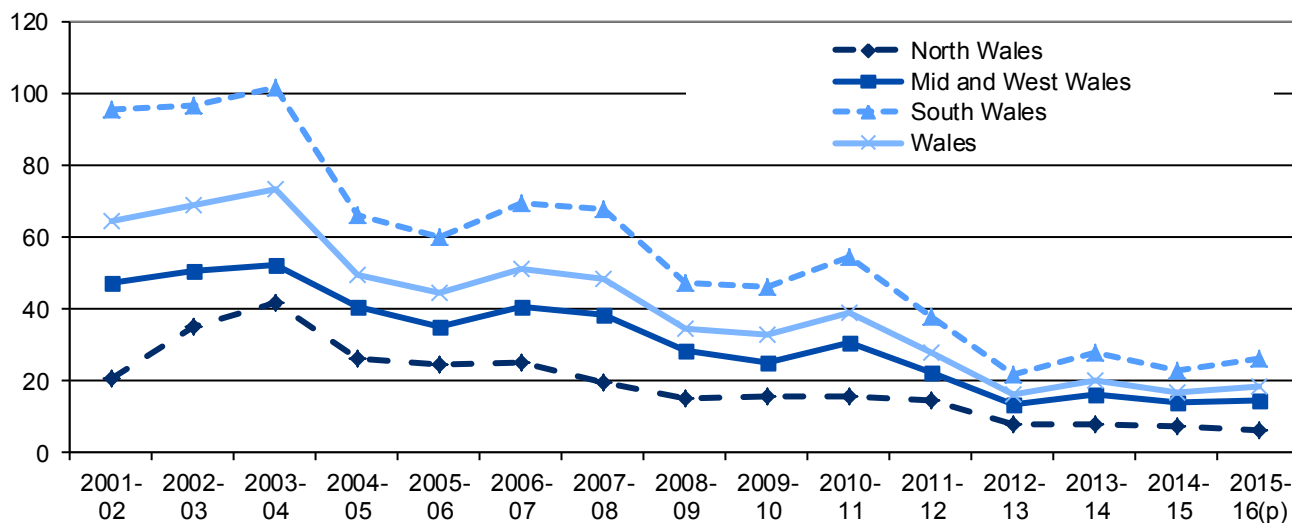
Chart 4: Rate of deliberate primary fires per 10,000 population (a)



(a) 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 in 2001-02 the difference between the highest rate of secondary fires and the lowest rate was around 75 fires per 10,000 population, in 2015-16 this figure has fallen to approximately 20 fires per 10,000 per population.

Chart 5: Rate of deliberate secondary fires per 10,000 population (a)

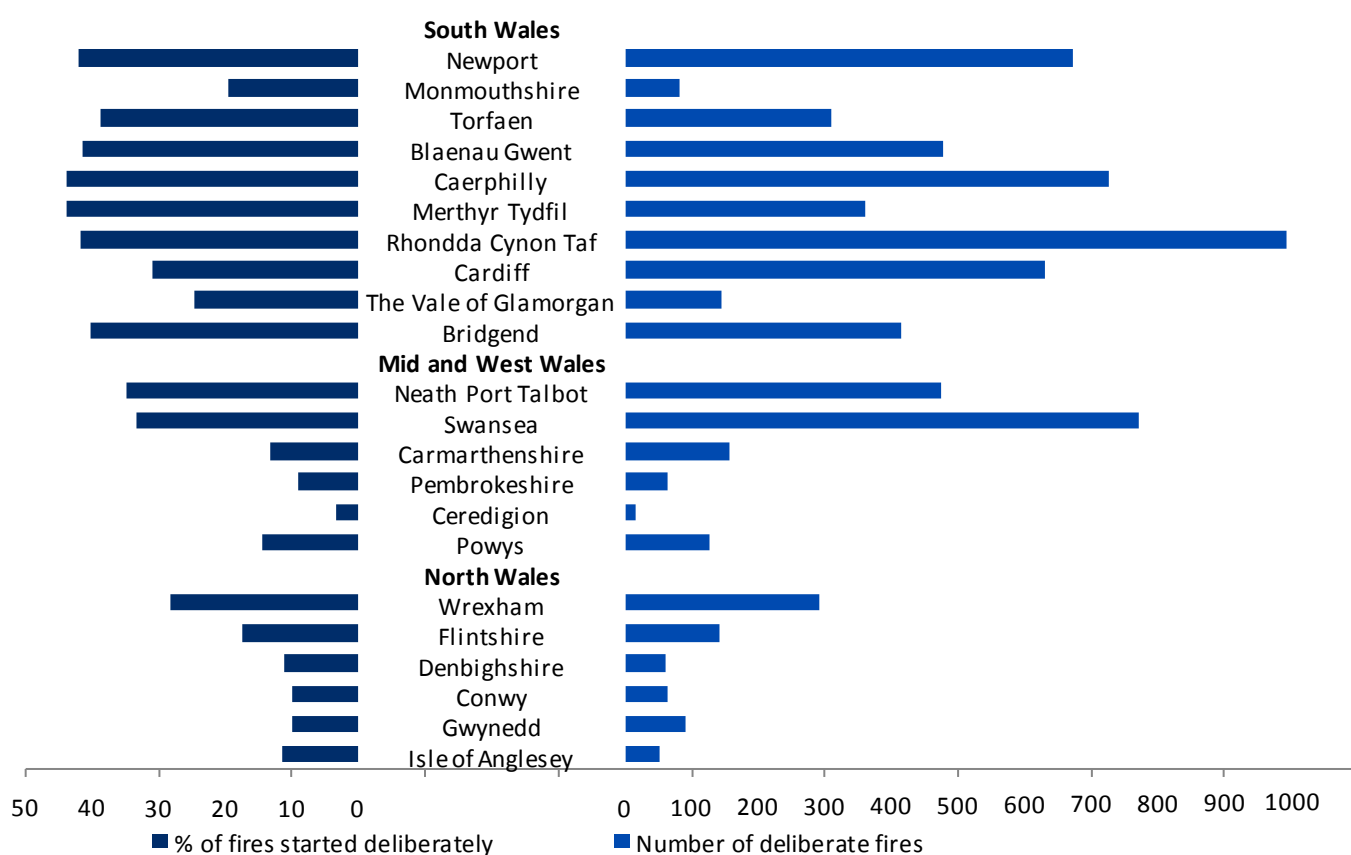


(a) Population data are taken from ONS Mid Year Estimates and are revised periodically and so rates are subject to change between publications.
 (p) Provisional data.

Chart 6 below shows the number of deliberate fires occurring in each local authority in 2015-16. It also shows the proportion of fires within each local authority which were started deliberately.

From the chart we can see that Rhondda Cynon Taf has the most deliberate fires of all the local authorities in Wales (14 per cent of all deliberate fires), and that 42 per cent of fires were started deliberately. However, two local authorities have a higher proportion of fires started deliberately, namely Caerphilly and Merthyr Tydfil (44 per cent in each). Within the Mid and West Wales region Swansea has the highest number of deliberate fires, but Neath Port Talbot has a higher proportion of fires which were started deliberately. In North Wales, Wrexham had both the highest number and the highest proportion of deliberate fires. Overall Ceredigion has both the fewest deliberate fires (less than 0.5 percent of the deliberate fires in Wales) and the lowest proportion of fires started deliberately (3 per cent).

Chart 6 Number of deliberate fires by local authority, 2015-16(a)(p)

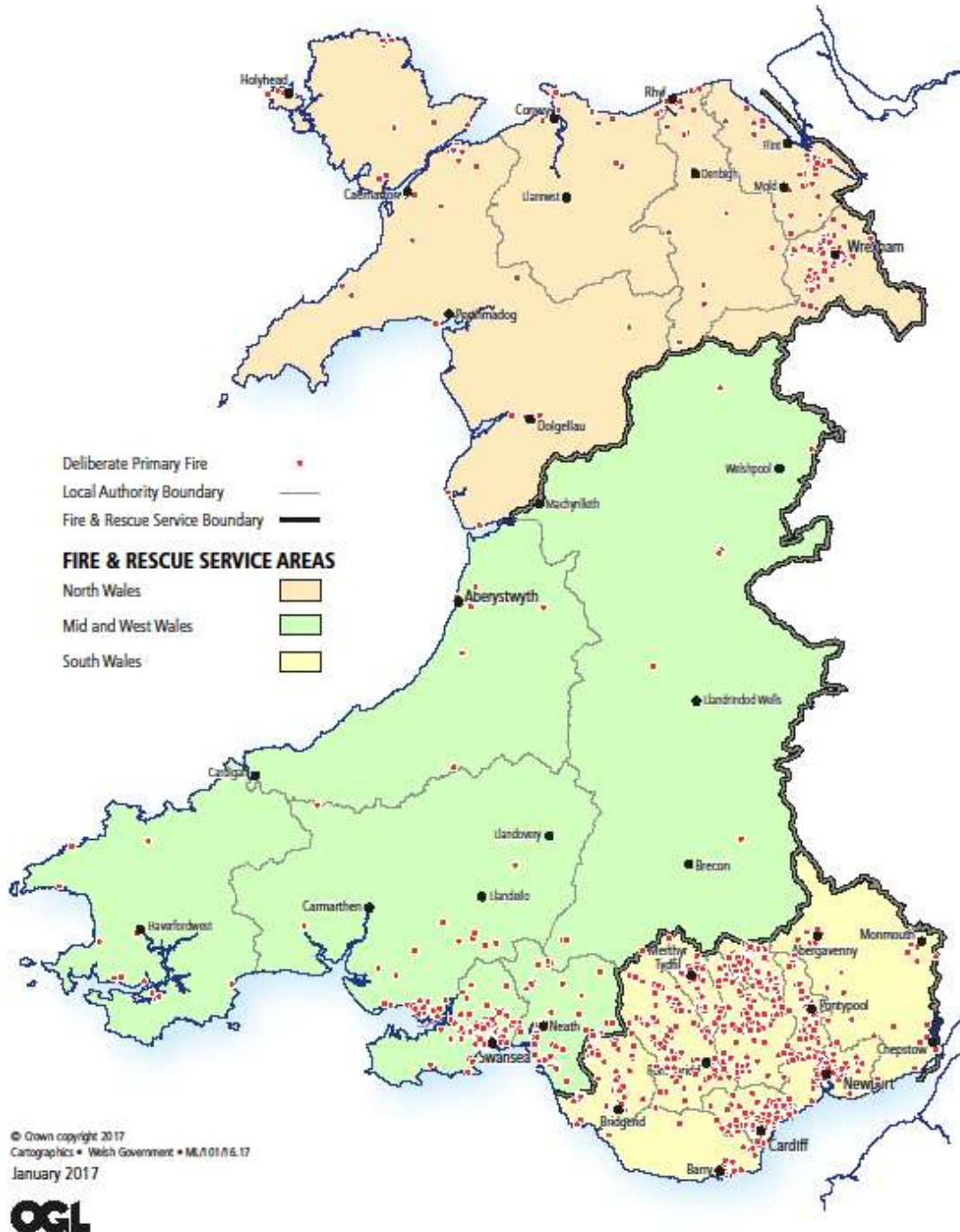


(a) Local authorities have been assigned to incidents based on the grid reference recorded by the Fire and Rescue Authority. See the Key Quality Information for further information.
 (p) Provisional data

Swansea has the highest number of deliberate road vehicle fires, 12 per cent of the number in Wales in 2015-16 and also 12 per cent of the deliberate fires in the local authority. In Wrexham 28 per cent of deliberate fires occurred in road vehicles. For most local authorities deliberate building and road vehicle fires make up a small proportion of the total, with the majority occurring outdoors. 95 per cent of deliberate fires in Powys occurred outdoors or in outdoor structures. Denbighshire had the highest proportion of deliberate building fires (27 per cent of deliberate fires), whilst Rhondda Cynon Taf had the lowest with only 3 per cent of deliberate fires occurring in buildings.

The map below shows the locations of deliberate primary fires in Wales. The map highlights the level of concentration of these fires in the South Wales area.

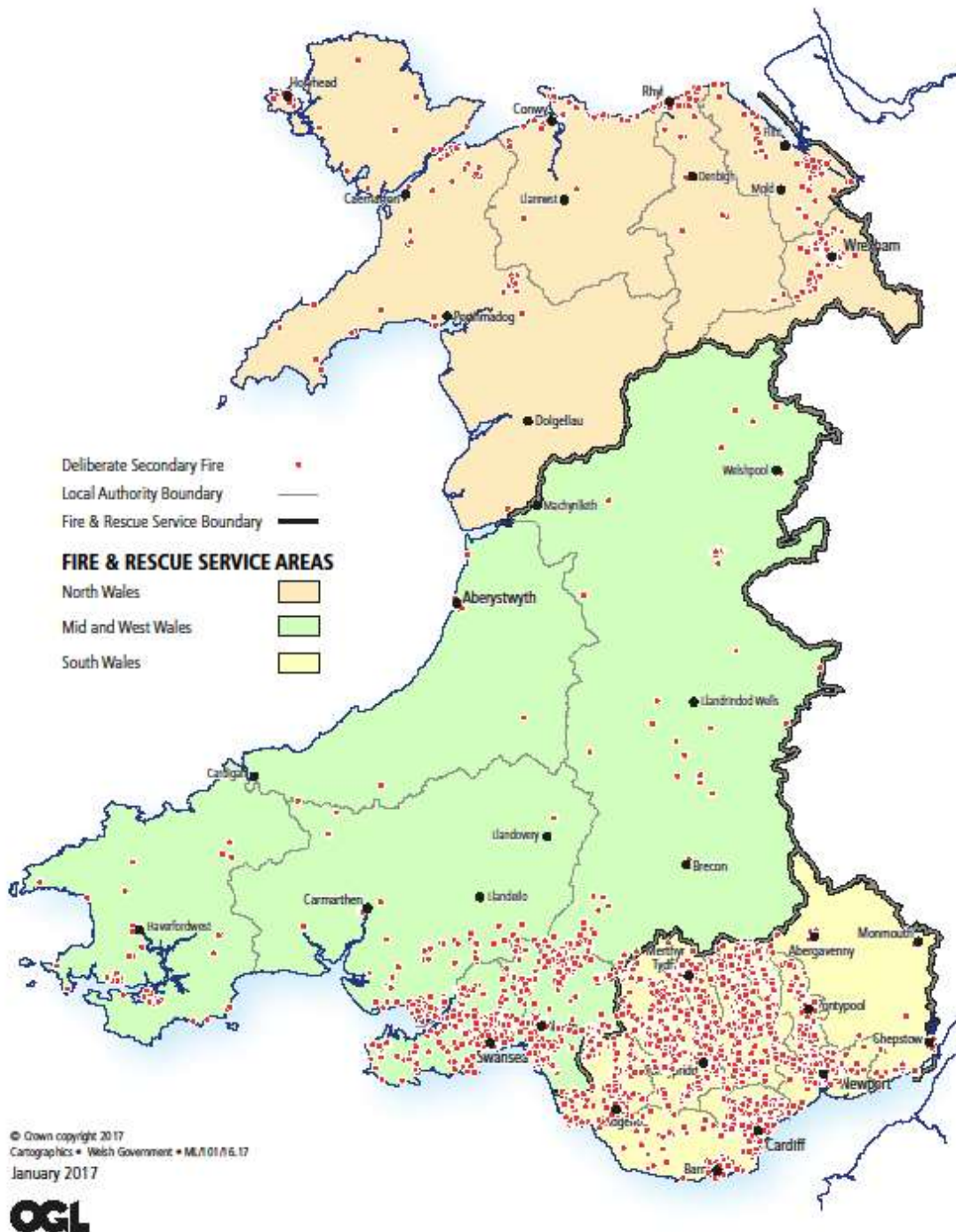
Deliberate Primary Fires across Wales, 2015-16



Data mapped above are based on grid references; see the Key Quality Information for further details

The map below shows the locations of deliberate secondary fires in Wales. As with primary fires, the map shows the large number of clusters of these fires in the South Wales area.

Deliberate Secondary Fires across Wales, 2015-16



Data mapped above are based on grid references; see the Key Quality Information for further details

In 2015-16, 27 per cent of the deliberate fires occurred in April, almost double the proportion seen in the previous year and more than double the number. Numbers and proportions of fires in this month have fluctuated whilst continuing to be one of the months when most fires have occurred. April, May, August, October, January and March each saw an increase in the number of deliberate fires in 2015-16. The largest decrease was seen in July (41 per cent).

Table 4: Total deliberate fires by month (a)

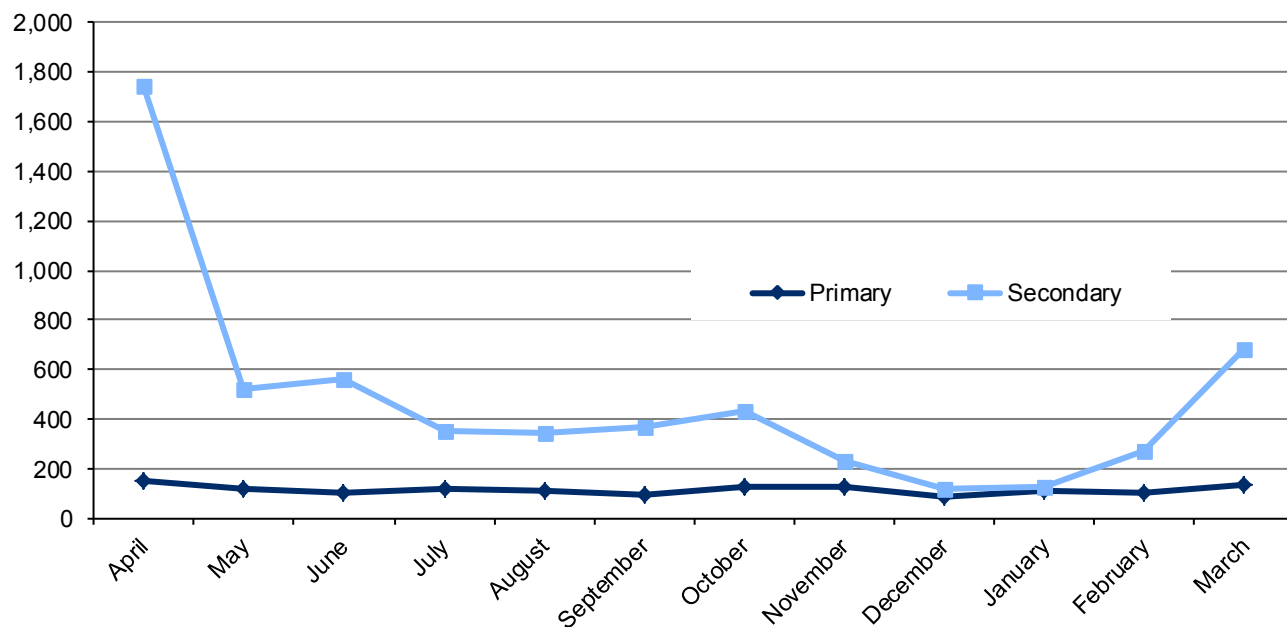
	Number					Percentage				
	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)	2011-12	2012-13	2013-14	2014-15	2015-16
April	2,275	907	1,436	881	1,895	21	14	19	14	27
May	1,333	824	942	536	638	13	13	12	8	9
June	753	400	756	701	656	7	6	10	11	9
July	1,004	492	1,180	795	470	9	8	16	12	7
August	774	433	578	454	455	7	7	8	7	6
September	514	517	461	715	461	5	8	6	11	6
October	653	470	323	353	561	6	7	4	5	8
November	588	504	479	400	362	6	8	6	6	5
December	311	252	294	264	208	3	4	4	4	3
January	358	242	184	209	232	3	4	2	3	3
February	463	528	182	380	370	4	8	2	6	5
March	1,622	830	754	746	820	15	13	10	12	12
Total	10,648	6,399	7,569	6,434	7,128	100	100	100	100	100

(a) Includes deliberate chimney fires.

(r) Revised data.

(p) Provisional data.

Chart 7: Number of primary and secondary deliberate fires by month, 2015-16 (p)



(p) Provisional data.

The chart above shows how the number of primary fires stays relatively static throughout the year, whereas the number of secondary fires varies, with the peak being in the spring months. Similar patterns are seen in earlier years.

From table 5 we can see that deliberate secondary fires fluctuate a great deal throughout the year and in 2015-16 occurred mainly in, April, May, June and March whilst numbers of deliberate primary fires stay relatively stable. For instance in 2015-16, percentages of deliberate primary fires for each month ranged from 6 per cent to 11 per cent, whereas for deliberate secondary fires, percentages for individual months ranged from 2 per cent to 30 per cent. Since the majority of secondary fires occur outdoors, they can be greatly influenced by the seasons and weather conditions.

At least half of the fires seen in any month were outdoors; the lowest proportion being in January, when 54 per cent of deliberate fires occurred outdoors. As a consequence, this month also saw the highest proportions of deliberate building fires and deliberate road vehicle fires (17 per cent and 29 per cent respectively of the deliberate fires in January). 95 per cent of deliberate fires in April occurred outdoors.

Most months saw an increase in the number of deliberate primary fires, June and September being the exceptions. As with deliberate secondary fires, the largest increase (compared with the previous year) in deliberate primary fires was seen in April (40 per cent). However a similar increase (39 per cent) was also seen in January, which was not mirrored in the number of deliberate secondary fires (a 5 per cent decrease).

Table 5: Deliberate primary and secondary fires by month

	Number					Percentage				
	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)	2011-12	2012-13	2013-14	2014-15	2015-16
Primary										
April	260	127	131	104	146	13	9	10	9	11
May	228	139	135	108	119	11	10	10	9	9
June	169	122	125	119	98	8	9	9	10	7
July	199	137	171	98	117	10	10	13	8	9
August	179	119	121	103	110	9	8	9	8	8
September	165	129	122	145	93	8	9	9	12	7
October	161	126	100	98	129	8	9	7	8	9
November	135	103	111	100	129	7	7	8	8	9
December	126	95	84	78	88	6	7	6	6	6
January	111	98	74	77	107	5	7	6	6	8
February	117	107	72	77	99	6	8	5	6	7
March	201	103	99	107	136	10	7	7	9	10
All	2,051	1,405	1,345	1,214	1,371	100	100	100	100	100
Secondary										
April	2,015	780	1,305	777	1,749	23	16	21	15	30
May	1,105	685	807	428	519	13	14	13	8	9
June	584	278	631	582	558	7	6	10	11	10
July	805	355	1,009	697	353	9	7	16	13	6
August	595	314	457	351	345	7	6	7	7	6
September	349	388	339	570	368	4	8	5	11	6
October	492	344	223	255	432	6	7	4	5	8
November	453	401	368	300	233	5	8	6	6	4
December	185	157	210	186	120	2	3	3	4	2
January	247	144	110	132	125	3	3	2	3	2
February	345	421	110	303	271	4	8	2	6	5
March	1,421	726	655	639	684	17	15	11	12	12
All	8,596	4,993	6,224	5,220	5,757	100	100	100	100	100

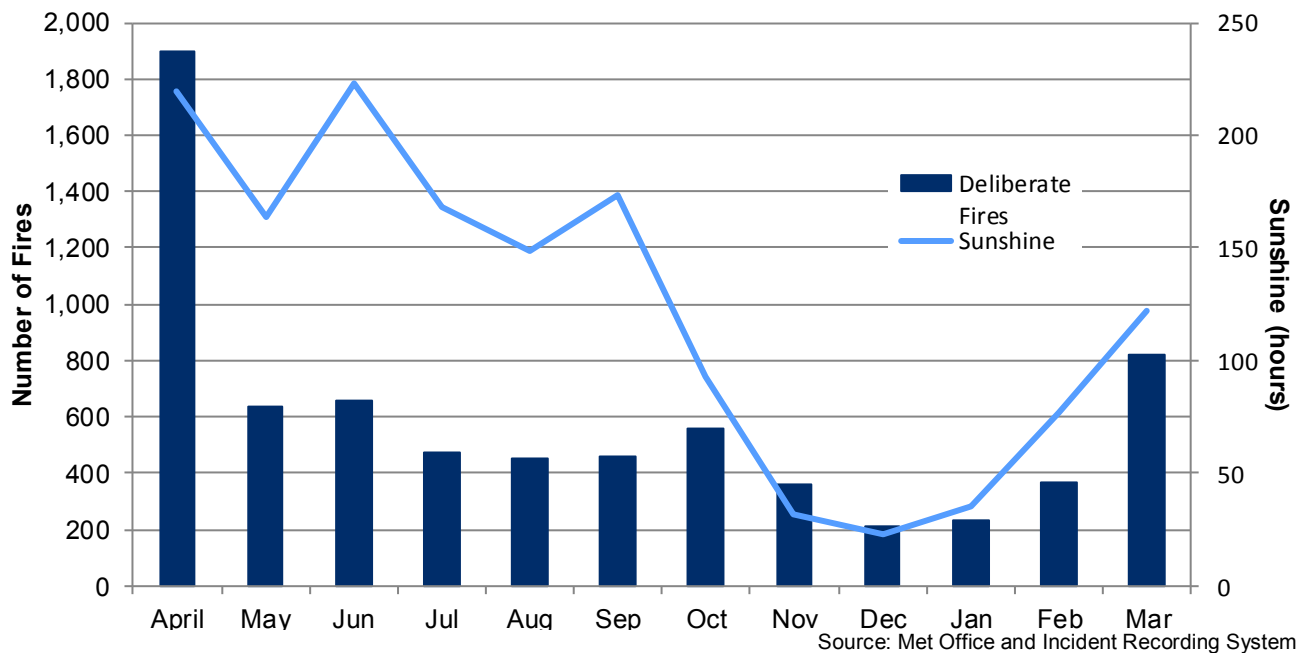
(r) Revised data.

(p) Provisional data.

As seen in charts 8 and 9 data from the Met Office shows that the months November to January saw the least hours of sunshine, the most rainfall and the fewest fires. However weather data cannot explain all fluctuations; whilst June had a similar number of hours of sunshine to April, it only had a third of the number of fires.

Weather data are available from the [Met Office](#)

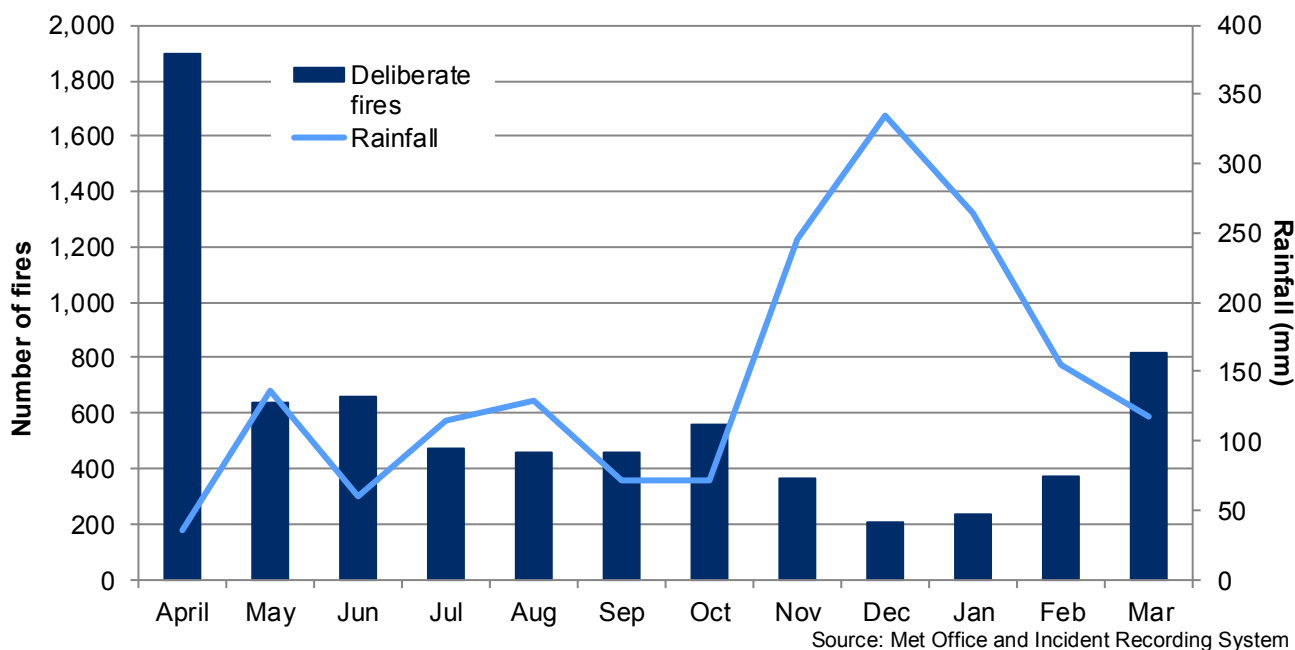
Chart 8: Total deliberate fires by total hours of sunshine, 2015-16 (p)



(p) Provisional data.

In the same year the months with the least rainfall and the most sunshine were April and June; these two months had the most and the third most deliberate fires of all the months in the year 2015-16.

Chart 9: Total deliberate fires by total rainfall, 2015-16 (p)



(p) Provisional data.

In 2015-16 the largest proportion of deliberate primary and secondary fires occurred between 6pm and midnight, with 41 per cent of primary fires and 54 per cent of secondary fires. Around 3 in 10 primary fires took place between midnight and 5.59 a.m., and a similar proportion of secondary fires took place between midday and 5.59 p.m. The proportions each year since 2009-10 remained relatively unchanged.

Table 6: Deliberate primary and secondary fires by time of day

	Number					Percentage				
	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)	2011-12	2012-13	2013-14	2014-15	2015-16
Primary										
Midnight - 5.59 a.m.	665	488	430	366	420	32	35	32	30	31
6.00 a.m. - 11.59 a.m.	184	125	116	112	125	9	9	9	9	9
Midday - 5.59 p.m.	340	209	223	223	235	17	15	17	18	17
6.00 p.m. - 11.59 p.m.	825	559	541	486	566	40	40	40	40	41
Late call (a)	37	24	35	27	25	2	2	3	2	2
Secondary										
Midnight - 5.59 a.m.	873	546	619	567	506	10	11	10	11	9
6.00 a.m. - 11.59 a.m.	511	332	371	332	365	6	7	6	6	6
Midday - 5.59 p.m.	2,661	1,442	1,976	1,492	1,750	31	29	32	29	30
6.00 p.m. - 11.59 p.m.	4,535	2,671	3,250	2,822	3,124	53	53	52	54	54
Late call (a)	16	2	8	7	12	0	0	0	0	0

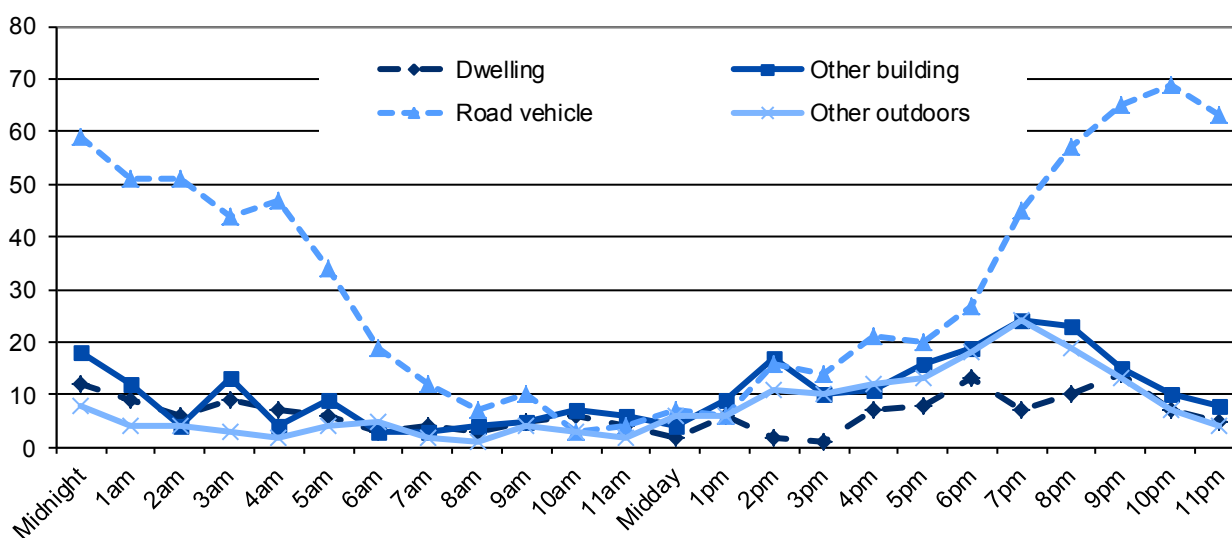
(a) A fire known to be extinguished when the call was made (or to which no call was made, e.g. a fire which comes to the attention of the fire and rescue service as a result of a press report or inquest) and the fire and rescue service attended.

(r) Revised data.

(p) Provisional data.

Chart 10 shows that deliberate fires in dwellings, other buildings and other outdoor deliberate fires follow a similar pattern in terms of the time of day. However for road vehicles, distinct peaks can be seen in the timing of these fires, with 67 per cent occurring between 8 p.m. and 4.59 a.m. during 2015-16.

Chart 10: Number of deliberate primary fires by time of day and location 2015-16 (p)



(p) Provisional data.

Road vehicle fires

In 2015-16, fires in road vehicles make up 55 per cent of deliberate primary fires in Wales; despite a 19 per cent increase compared with the previous year, overall the number has fallen year-on-year since 2002-03 (and by 85 per cent since 2001-02, the start of the time series). 2015-16 saw the first increase in road vehicle fires in over 10 years. Analysis of hourly data shows that most of this increase is due to more fires occurring between the hours of 2 a.m. and 5.59 a.m. (35 per cent increase) and 7 p.m. and 9.59 p.m. (a 45 per cent increase). The chart below also shows the proportion of primary road vehicle fires which were started deliberately; since 2012-13 fewer than half of all road vehicle fires were started deliberately.

Chart 11: Number of deliberate primary fires in road vehicles

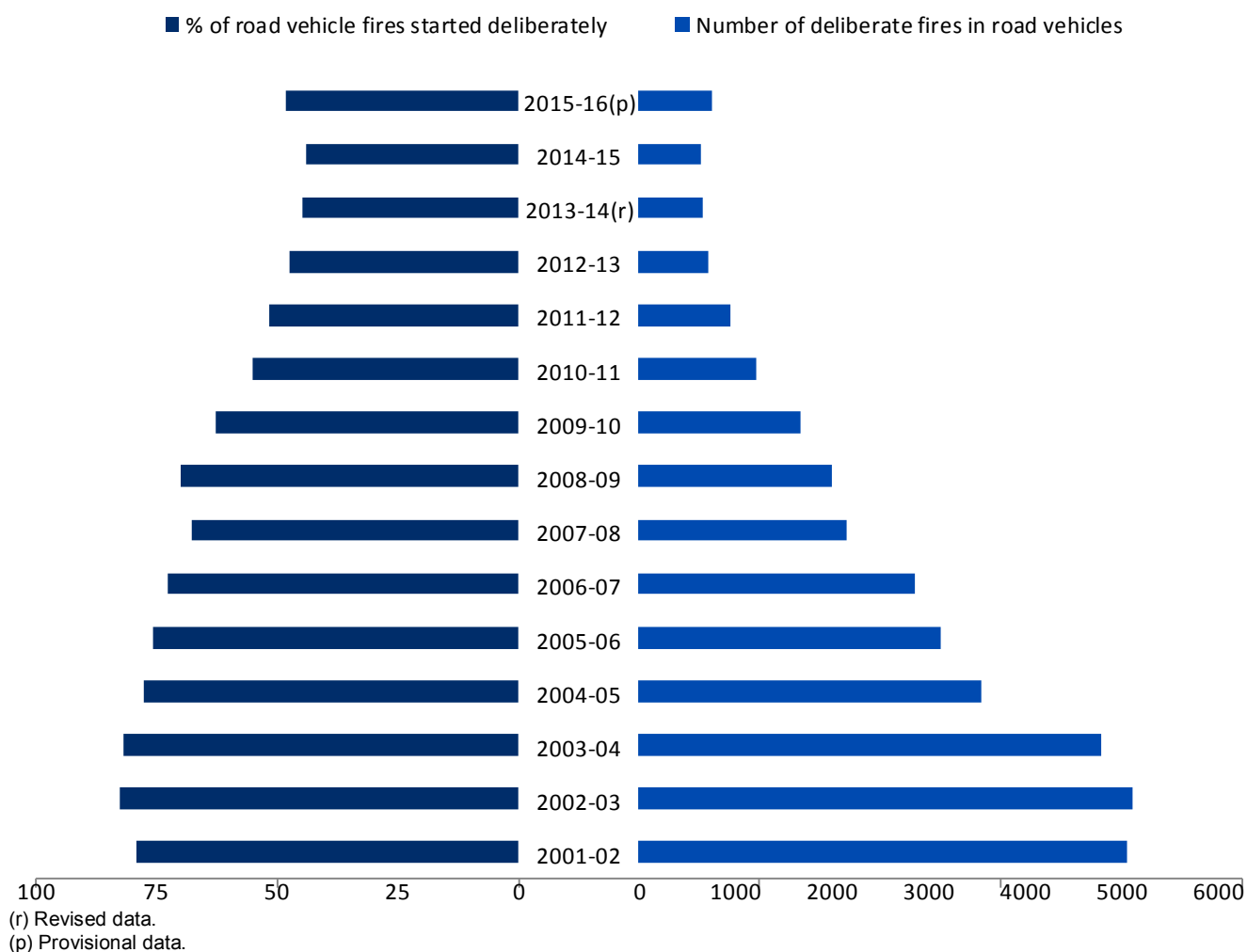


Table 7: Deliberate road vehicle fires by vehicle type

	Number					Percentage which are deliberate				
	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)	2011-12	2012-13	2013-14	2014-15	2015-16
Agricultural	6	4	2	3	2	9	5	3	6	3
Bus/coach	2	3	2	0	3	12	12	8	0	14
Car	708	526	446	445	547	55	50	46	45	51
Caravan (a)	7	23	25	27	36	64	82	78	75	69
Lorry/HGV	8	16	12	4	5	14	25	18	8	10
Minibus	2	4	3	6	1	20	67	43	67	13
Motor home	9	3	4	6	7	41	43	18	33	41
Motorcycle	65	54	91	59	70	75	81	88	83	83
Multiple vehicles	17	7	9	6	9	65	64	53	32	64
Van	84	57	50	56	64	50	49	38	46	44
Other (b)	32	21	22	21	12	42	34	45	46	27
All deliberate primary road vehicle fires	940	718	666	633	756	52	47	45	44	48
<i>of which</i>										
stolen vehicles	76	48	44	58	44	96	94	98	97	90
abandoned vehicles	326	231	236	230	291	96	94	95	93	93
All deliberate secondary road vehicle fires (c)	51	26	24	28	26	72	63	65	72	81
All deliberate road vehicle fires	991	744	690	661	782	52	48	45	45	49

(a) Includes caravans on tow.

(b) Includes bicycles, tankers and trailers.

(c) Derelict vehicles.

(r) Revised data.

(p) Provisional data.

In 2015-16, there were 756 fires started deliberately in vehicles, and a further 26 in derelict vehicles; this is over a hundred more than in the previous year. Most vehicles set on fire were cars, 72 per cent of all deliberate primary road vehicle fires. In 2015-16, of the 1,065 (accidental and deliberate) fires in cars, 51 per cent were started deliberately, 6 percentage points more than in 2014-15. Until this most recent year this proportion has seen a steady decrease from 2009-10 when approximately two-thirds of all car fires were set alight deliberately. Motorcycle (83 per cent) and caravan (69 per cent) fires saw the largest proportion of deliberate fires in 2015-16 although numbers of such fires are not high. 40 per cent of deliberate primary vehicle fires involved stolen or abandoned vehicles, compared with 3 per cent of accidental primary vehicle fires.

The number of abandoned and stolen vehicles which are deliberately set alight has also been on a downward trend since 2009-10, decreasing by 58 per cent by 2015-16.

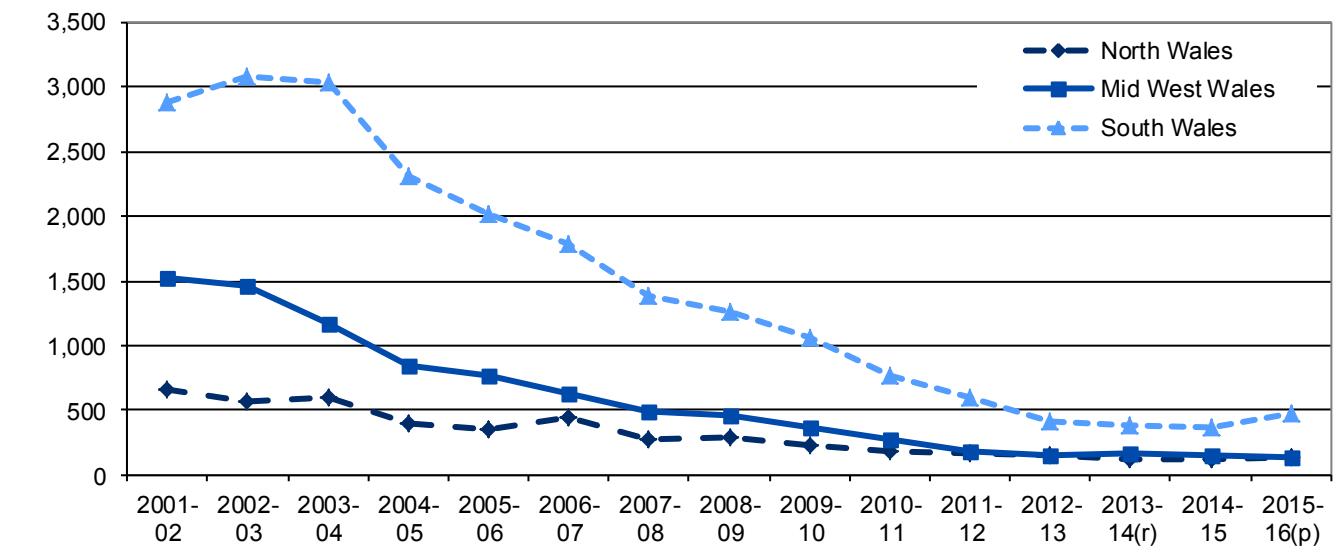
The majority (63 per cent) of deliberate primary fires in road vehicles occurred in South Wales in 2015-16, and throughout the time series; the proportion occurring in South Wales varying between 57 and 65 per cent.

Numbers of road vehicle fires in South Wales and North Wales both saw increases in 2015-16, of 31 and 22 per cent respectively; Mid and West Wales saw a decrease of 10 per cent. However these are the first increases since 2008-09 for North Wales and 2002-03 for South Wales. Overall there has been a fairly steady drop and since 2001-02; numbers in South Wales have fallen by 83 per cent. Both North Wales and Mid and West Wales have also seen decreases since 2001-02 of 79 and 91 per cent respectively.

The Wales Arson Reduction Strategy (reviewed in 2009 with an update strategy for 2012-15 published in 2012), highlighted two key factors contributing to arson, the need to promptly remove unwanted and abandoned vehicles and to reduce vehicle crime. The removal of abandoned vehicles on open land or any land forming part of the highway is the responsibility of the respective Local Authority.

The Wales Arson Reduction Strategy noted that vehicle crime continues to fall, reflecting that vehicles are designed and built more securely. According to police recorded crime data published by the Office for National Statistics, car thefts and vehicle offences in Wales have fallen since 2002-03, by 84 and 73 per cent respectively.

Chart 12: Number of deliberate primary fires in road vehicles by fire and rescue authority



(r) Revised data.
 (p) Provisional data.

School fires

In 2015-16 there were 5 deliberate primary fires in schools, 5 fewer than in the previous year and equating to 15 per cent of all fires in schools. The peak figure in the time series below was 79 deliberate fires in schools in 2002-03.

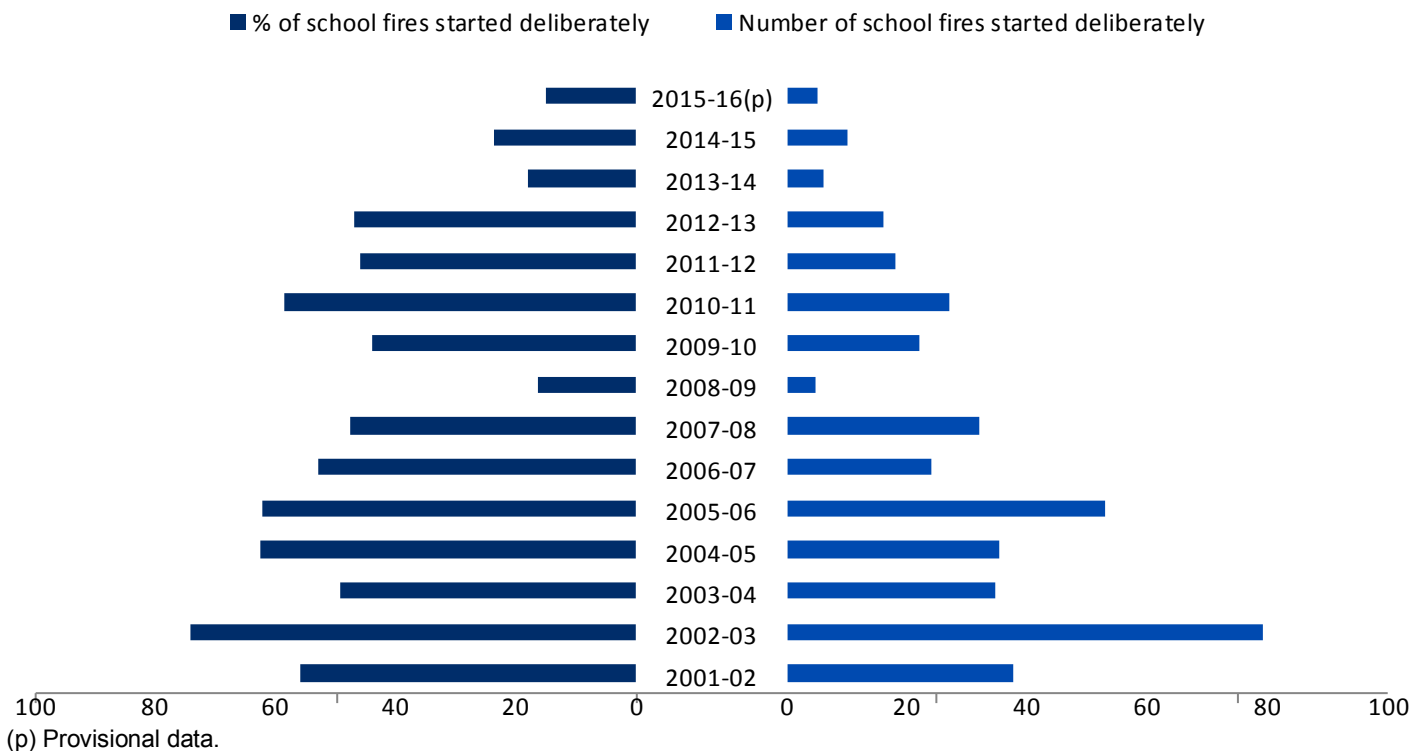
Table 8: Number of school fires by motive and fire and rescue authority

	North Wales		Mid and West Wales		South Wales		Wales	
	Accidental	Deliberate	Accidental	Deliberate	Accidental	Deliberate	Accidental	Deliberate
2001-02	6	0	10	1	14	37	30	38
2002-03	5	12	10	31	13	37	28	79
2003-04	13	9	6	6	17	19	36	35
2004-05	2	3	2	12	17	20	21	35
2005-06	6	21	12	9	14	23	32	53
2006-07	12	8	5	11	4	5	21	24
2007-08	0	9	12	6	23	17	35	32
2008-09	0	0	5	5	20	0	25	5
2009-10	7	2	6	6	15	14	28	22
2010-11	2	5	6	5	11	17	19	27
2011-12	0	5	11	5	10	8	21	18
2012-13	7	1	5	3	6	12	18	16
2013-14	4	1	12	3	11	2	27	6
2014-15	4	0	13	2	15	8	32	10
2015-16(p)	7	2	8	0	13	3	28	5

(p) Provisional data.

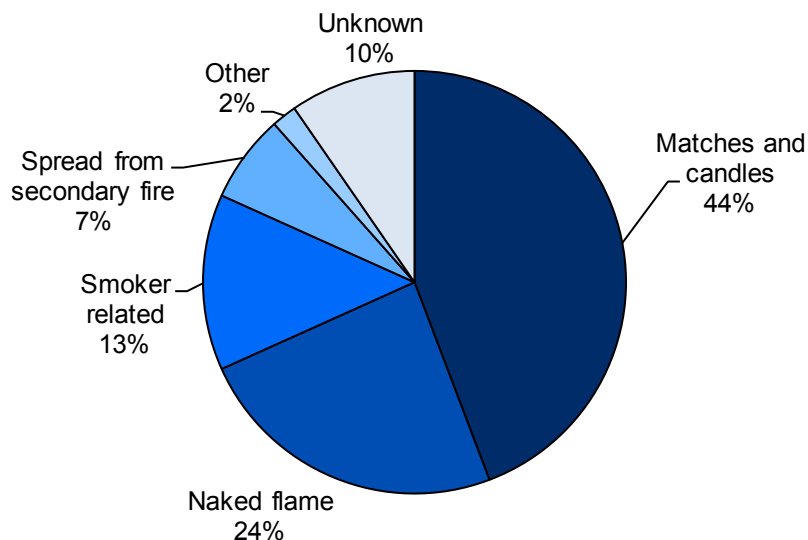
The chart below shows the number of deliberate fires in schools occurring each year, along with the associated percentage of fires in schools which were started deliberately. Since 2013-14 fewer than one quarter of fires in schools each year were started deliberately.

Chart 13: Number of deliberate fires in schools



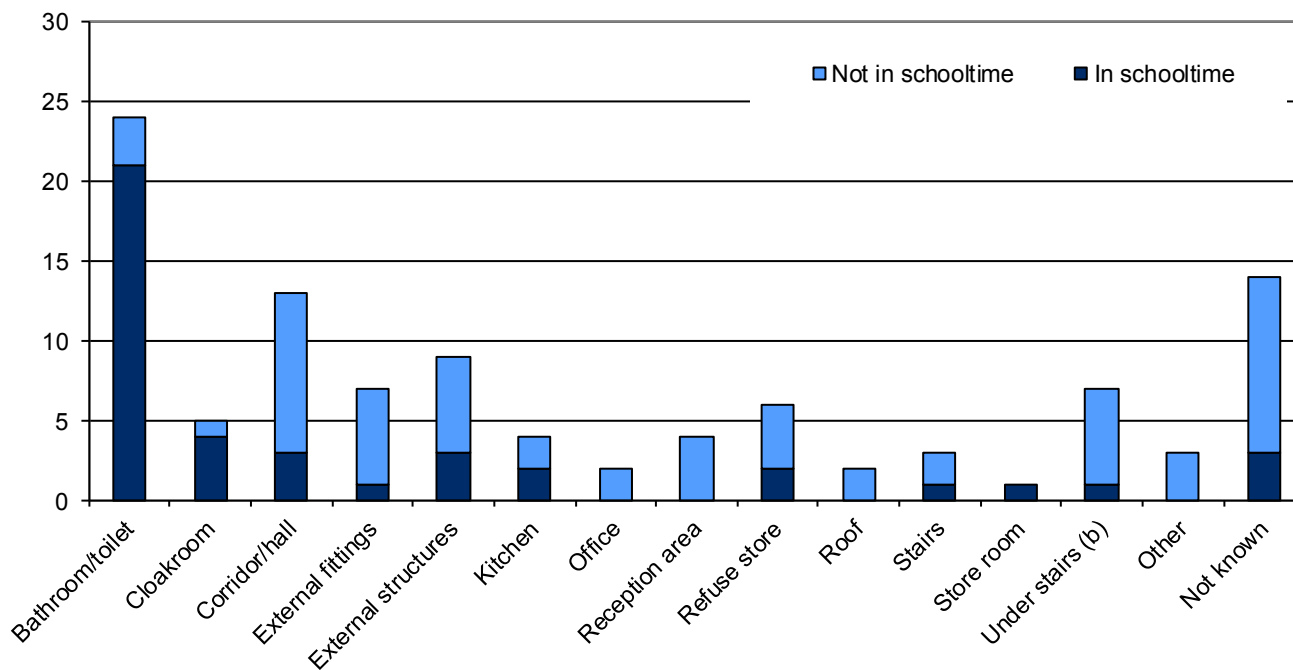
The most common source of ignition of deliberate fires in schools was matches and candles. Of the 104 deliberate fires in schools between 2009-10 and 2015-16, 44 per cent were started with matches or candles, 24 per cent with a naked flame and 13 per cent were smoker related.

Chart 14: Source of ignition of deliberate primary fires in schools, 2009-10 to 2015-16



Of the 104 deliberate fires in schools between 2009-10 and 2015-16, 42 (40 per cent) occurred in school hours. Deliberate fires in schools occurred most frequently in bathrooms or toilets, and of the fires starting here, almost all occurred during school hours.

Chart 15: Deliberate fires started in schools by room and time, 2009-10 to 2015-16(a)

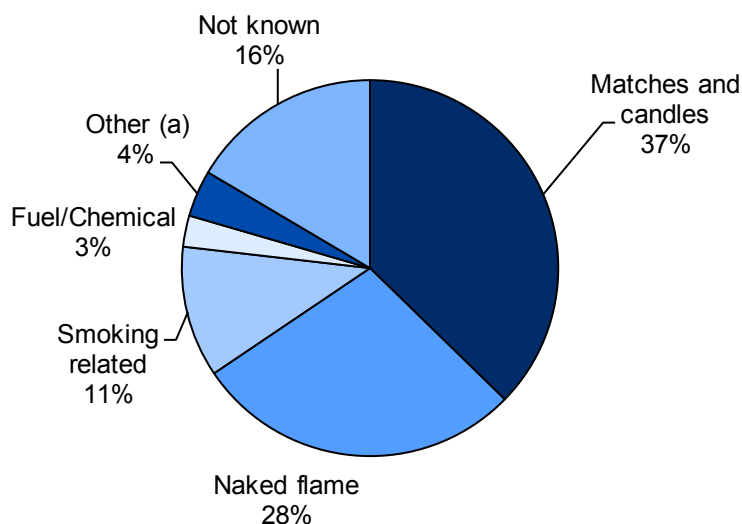


(a) School hours are 08:30- 15:59 and exclude weekends and the month of August
 (b) Enclosed, storage area

Source and hazardous materials

Detailed information is only available for the source of primary fires. In total there were 12,756 deliberate primary fires in the combined years 2009-10 to 2015-16. Over this period, the source of ignition of in 37 per cent of deliberate primary fires was matches and candles, and in 28 per cent naked flame. In each year these two categories have been the largest however in 2009-10 almost half were due to matches and candles and a fifth were due to naked flame; in 2015-16 the categories have switched, over a third being due to naked flame and a quarter due to matches and candles.

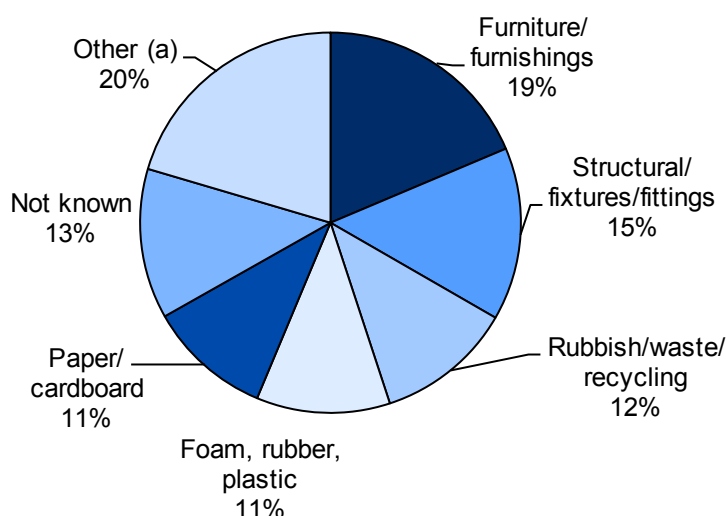
Chart 16: Source of ignition of deliberate primary fires, 2009-10 to 2015-16



(a) '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 12,756 deliberate primary fires for the combined years 2009-10 to 2015-16, furniture and furnishings was the material first ignited in 19 per cent of cases. Over 70 per cent of primary fires where the first ignited item was furniture or furnishings were started deliberately. Around two-thirds of fires where the first ignited items were rubbish/waste/recycling or paper/cardboard were started deliberately.

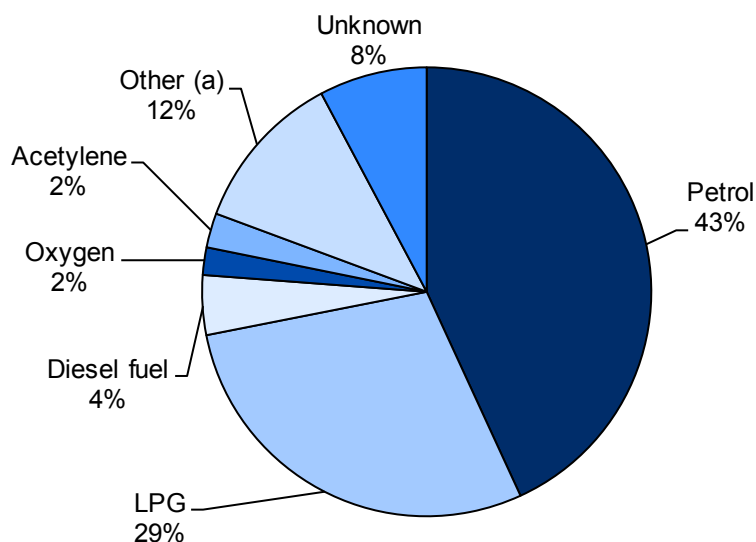
Chart 17: Materials first ignited in deliberate primary fires, 2009-10 to 2015-16



(a) 'Other' includes 'vegetation', 'clothing/textiles', 'explosives, gas, chemicals', 'wood', 'none', 'decoration/celebration', 'food' and 'animal'.

In the combined years 2009-10 to 2015-16, there were a total of 568 deliberate primary fires involving hazardous materials (4 per cent of all deliberate primary fires), of which, 33 involved multiple hazardous materials. In total there were 605 instances of hazardous materials being involved in deliberate primary fires. The largest proportions of instances involved petrol (43 per cent) and liquefied petroleum gas LPG (29 per cent).

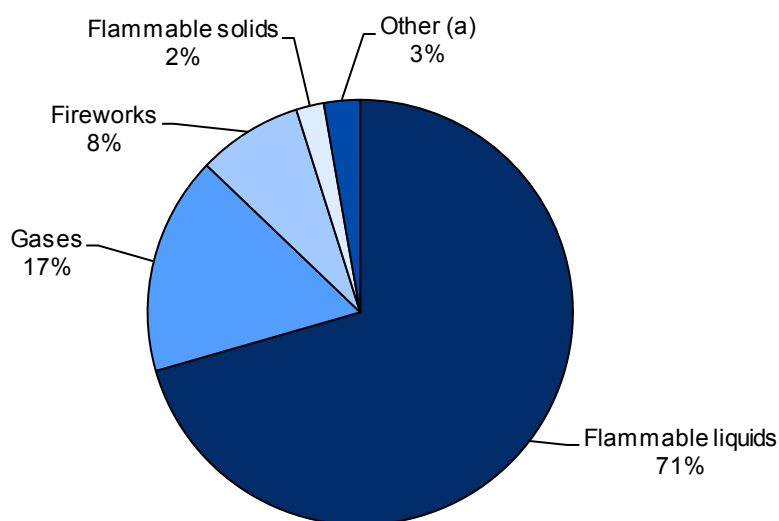
Chart 18: Hazardous materials involved in deliberate primary fires, 2009-10 to 2015-16



(a) 'Other' includes 'Oxygen, refrigerated liquid', 'Kerosene', 'Hydrochloric acid' and 'Sodium hydroxide solution', 'Butane', 'Methane' and 'White Asbestos'.

There were 2,663 instances of dangerous substances being involved in primary fires in the combined years 2009-10 to 2015-16, of these 1,090 (41 per cent) were involved in deliberate primary fires. The majority of these involved 'flammable liquids' (71 per cent), the next largest proportion was 'gases' (17 per cent). These were also the largest categories in accidental primary fires although the percentages were closer (58 per cent and 32 per cent respectively).

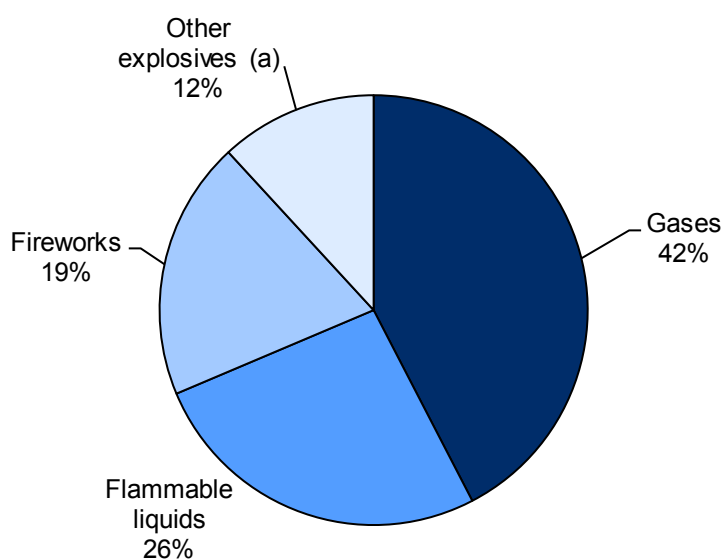
Chart 19: Dangerous substances in deliberate primary fires, 2009-10 to 2015-16



(a) 'Other' Includes 'Other Explosives', 'Acetylene' and 'Ammunition'

There were 416 explosions involved in primary fires between the years 2009-10 and 2015-16. These may have occurred before the fire, during the fire, both before and during, or the sequence of events maybe unknown. Of these 118 explosions (28 per cent) were deliberate fires. Gases caused the largest number of explosions (42 per cent) in deliberate fires and flammable liquids caused 26 per cent of explosions. These were also the largest causes of explosions in accidental primary fires, equating to over 80 per cent during the same period. For most materials causing explosions, between 20 and 30 per cent of fires were deliberate. However 85 per cent of fires where an explosion was due to fireworks were deliberate.

Chart 20: Materials causing explosions in deliberate primary fires, 2009-10 to 2015-16



(a) 'Other explosives' includes acetylene, ammunition, flammable solids and 'other'.

Casualties

There were 62 non-fatal casualties and 2 fatal casualties due to deliberate fires in 2015-16. 65 per cent of non-fatal casualties from deliberate fires in 2015-16 occurred in dwellings. Cumulatively, over the last decade around 1 in 5 fatalities and 1 in 8 non-fatal casualties in fires occurred in deliberate fires.

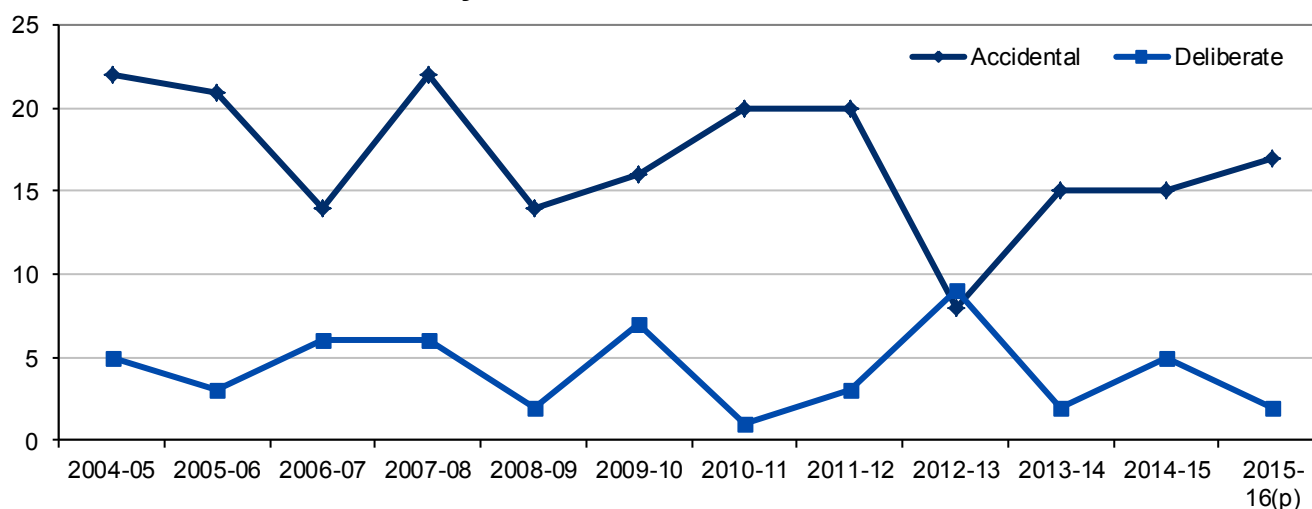
Table 9: Number of casualties in deliberate fires by location

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16(p)
Dwellings										
Fatal	2	4	2	3	1	0	8	1	4	0
Non-fatal	66	81	98	65	31	49	30	51	32	40
Other buildings										
Fatal	0	0	0	0	0	1	0	0	0	2
Non-fatal	14	12	15	21	13	6	1	18	4	14
Road vehicles										
Fatal	2	1	0	4	0	0	0	1	1	0
Non-fatal	3	5	4	6	5	4	4	3	2	3
Other										
Fatal	2	1	0	0	0	2	1	0	0	0
Non-fatal	10	5	9	15	5	10	5	1	3	5
All										
Fatal	6	6	2	7	1	3	9	2	5	2
Non-fatal	93	103	126	107	54	69	40	73	41	62

(p) Provisional data.

For most of the years shown in the chart below deliberate fires accounted for fewer than half the number of fatalities compared with those from accidental fires. The 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).

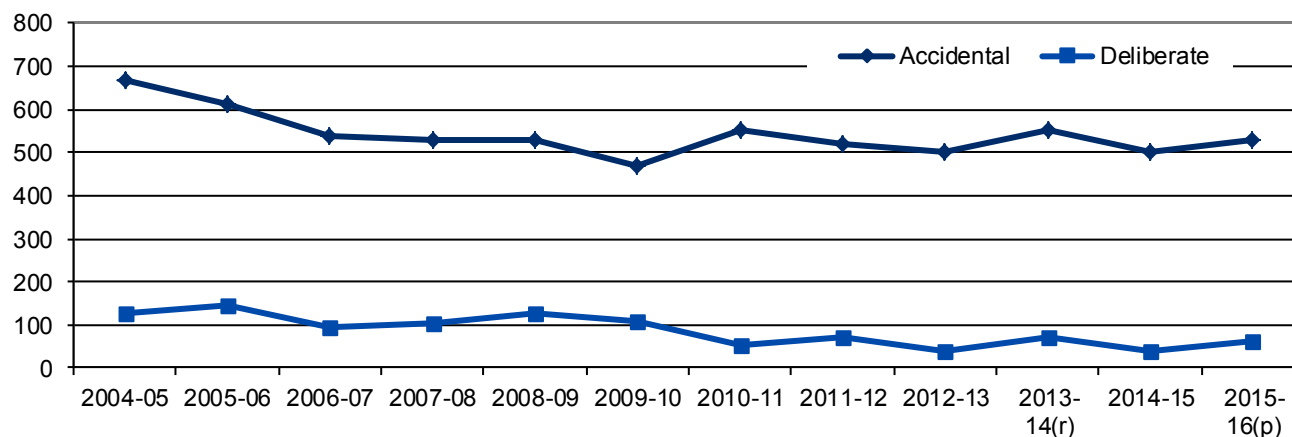
Chart 21: Number of fatalities by motive



(p) Provisional data.

In the years 2006-07 to 2009-10 there were on average 107 non-fatal casualties resulting from deliberate fires each year. In the 6 years since then the average has fallen to 57 a year. This equates to around 10 per cent of all non-fatal casualties from fires. In 2015-16 there were 62 casualties, 21 more than in 2014-15.

Chart 22: Number of non-fatal casualties by motive



(r) Revised data.

(p) Provisional data.

In 2015-16, 34 non-fatal casualties (55 per cent) from deliberate fires went to hospital. Of the 31 who were judged to have slight injuries, 22 were overcome by gas or smoke.

Table 10: Nature of injury sustained in deliberate fires

	Number					Percentage				
	2011-12	2012-13	2013-14	2014-15	2015-16(p)	2011-12	2012-13	2013-14	2014-15	2015-16
First aid (a)	17	7	14	7	20	25	18	19	17	32
Precautionary check recommended	17	14	14	7	8	25	35	19	17	13
Slight injuries (b)	28	17	33	21	31	41	43	45	51	50
Burns	6	3	2	3	4	9	8	3	7	6
Burns and overcome by gas or smoke	2	0	1	0	0	3	0	1	0	0
Overcome by gas or smoke	10	8	23	10	22	14	20	32	24	35
Physical injury	2	3	5	0	0	3	8	7	0	0
Shock	0	0	0	0	0	0	0	0	0	0
Other medical	3	1	2	6	3	4	3	3	15	5
Other/not known	5	2	0	2	2	7	5	0	5	3
Serious injuries (c)	7	2	12	6	3	10	5	16	15	5
Burns	3	2	5	3	1	4	5	7	7	2
Burns and overcome by gas or smoke	1	0	0	0	1	1	0	0	0	2
Overcome by gas or smoke	1	0	3	2	0	1	0	4	5	0
Physical injury	0	0	2	1	1	0	0	3	2	2
Shock	1	0	0	0	0	1	0	0	0	0
Other	1	0	2	0	0	1	0	3	0	0
All	69	40	73	41	62	100	100	100	100	100

(a) First aid given at scene

(b) Casualty went to hospital, injuries appear to be slight.

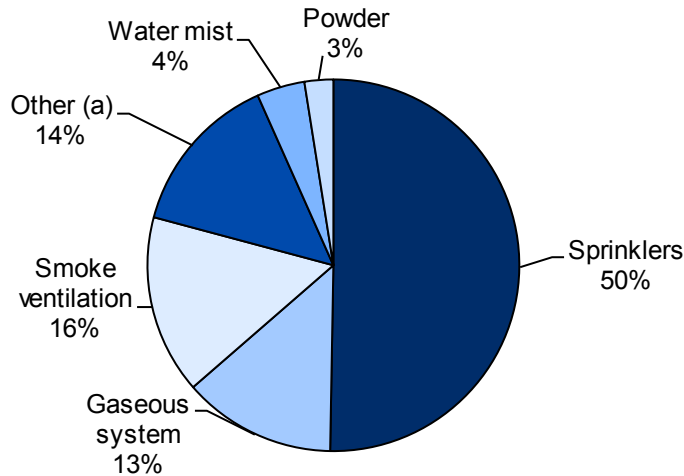
(c) Casualty went to hospital, injuries appear to be serious.

(p) Provisional data.

Prevention

In the aggregated figures for 2009-10 to 2015-16, fire safety systems were present at 348 accidental and deliberate primary building fires. However, some buildings have more than one system and there were a total of 360 safety systems present at primary fires. Sprinklers made up 50 per cent of these safety systems. 9 per cent of these primary fires where safety systems were present were deliberate. Throughout the time series sprinklers have been to most common safety system is use.

Chart 23: Safety systems present at primary fires in buildings by system type, 2009-10 to 2015-16



(a) 'Other System' includes 'Drencher', 'Pressurisation', and 'Foam'.

For the aggregated years 2009-10 to 2015-16, where safety systems were present, over half operated correctly (although not all of these raised the alarm). Where systems failed to operate, a third of cases were due to the fire occurring in an area not covered by the safety system.

There were 33 deliberate building fires in the years 2009-10 to 2015-16 where safety systems were present; 13 of these fires the safety system did not operate.

Table 11: Number of safety systems in building fires, by operation and failure reason(a)

	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)
Operated and raised alarm	32	19	20	14	17
Operated, but did not raise alarm	4	10	12	3	6
Did not operate	38	27	21	24	17
Fire in area not covered by system	14	6	11	6	6
Fault in system	1	0	0	0	0
System damaged by fire	1	0	0	0	0
System turned off	3	2	0	1	0
System not set up correctly	0	1	0	1	0
Other	9	15	8	13	9
of which insufficient heat to activate system (b)	8	10	6	11	4
Not known	6	3	2	3	2
Not applicable	4	0	0	0	0

(a) The table refers to the number of safety systems not the number of building fires. Data includes some instances where more than one safety system was present at a fire.

(b) Includes fires which were too small to be detected. Derived from a 'free text' field which defines 'other' reasons for system failure.

(p) Provisional data.

In 2015-16 there were smoke alarms present in 71 per cent of accidental primary dwelling fires, and 57 per cent of deliberate fires. For other buildings in 2015-16, smoke alarms were present in 64 per cent of primary accidental fires, falling to 36 per cent of deliberate fires.

Table 12: Numbers of primary fires in buildings by presence of smoke alarms and motive

	Accidental					Deliberate				
	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)
Dwelling										
No alarm	554	479	502	456	462	114	82	71	86	72
Alarm present(a)	1,235	1,246	1,230	1,179	1,149	119	104	107	87	94
All primary fires (a)	1,789	1,725	1,732	1,635	1,611	233	186	178	173	166
Other building										
No alarm	284	209	270	296	254	283	244	212	193	168
Alarm present(a)	490	472	451	475	447	102	60	62	70	95
All primary fires (a)	774	681	721	771	701	385	304	274	263	263

(a) Includes where it was not known whether the building had a smoke alarm.

(r) Revised data.

(p) Provisional data.

At deliberate dwelling fires in 2015-16 where smoke alarms were present, 66 per cent of smoke alarms successfully operated and 34 per cent did not. In accidental dwelling fires where smoke alarms were present, around three-quarters of smoke alarms operated and almost a quarter did not. In deliberate other building fires 81 per cent of smoke alarms operated correctly, whilst for accidental fires in other buildings the proportion was 75 per cent.

Table 13: Number of smoke alarms present at primary fires in buildings by operation (a)

	Accidental					Deliberate				
	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)	2011-12	2012-13	2013-14(r)	2014-15	2015-16(p)
Dwelling										
Alarm present										
but did not operate	285	336	305	284	272	34	24	37	23	30
operated:										
and raised alarm	708	672	699	677	661	57	54	45	40	47
but did not										
raise alarm	238	224	211	198	190	20	25	16	22	12
Total (a)	1,231	1,232	1,215	1,159	1,123	111	103	98	85	89
Other building										
Alarm present										
but did not operate	104	104	100	117	103	20	14	9	16	17
operated:										
and raised alarm	301	293	270	281	259	50	30	36	30	62
but did not										
raise alarm	60	56	55	62	54	17	10	7	9	9
Total (a)	465	453	425	460	416	87	54	52	55	88

(a) The table refers to the number of smoke alarms, rather than the number of fires and so where buildings have multiple alarms, all have been included. For this reason figures may not match between tables 12 and 13. Table only refers to alarms which were known to be present.

(r) Revised data.

(p) Provisional data.

Great Britain comparisons

The table and chart below show the number and rate per 10,000 population of deliberate fires in England, Scotland and Wales. Compared with 2001-02 England has seen the largest reduction in the number of deliberate fires, 75 per cent, whilst the figure in Wales fell by slightly less, 73 per cent (in Scotland the number fell by 65 per cent). However between 2014-15 and 2015-16 the number of deliberate fire has risen in each of the countries; Wales saw the biggest increase, 11 per cent, compared with 9 per cent in Scotland and 7 per cent in England.

Table 14: Number of deliberate fires in England, Scotland and Wales

	England (a)			Scotland (b)			Wales		
	Primary	Secondary	All	Primary	Secondary	All	Primary	Secondary	All
2001-02	104,468	184,870	289,338	8,819	33,456	42,275	7,319	18,739	26,058
2002-03	96,078	188,885	284,963	8,323	32,747	41,070	7,117	20,212	27,329
2003-04	93,214	234,462	327,676	7,710	39,523	47,233	6,850	21,614	28,464
2004-05	73,127	151,453	224,580	6,104	26,050	32,154	5,161	14,631	19,792
2005-06	64,438	153,322	217,760	5,869	29,682	35,551	4,524	13,223	17,747
2006-07	57,715	158,524	216,239	5,700	30,197	35,897	4,323	15,228	19,551
2007-08	49,830	136,653	186,483	4,706	28,308	33,014	3,418	14,553	17,971
2008-09	41,860	103,564	145,424	4,572	23,820	28,392	3,091	10,433	13,524
2009-10	35,552	94,460	130,042	4,614	18,276	22,890	2,886	10,022	12,908
2010-11	29,481	87,495	116,997	4,088	21,601	25,689	2,484	11,812	14,296
2011-12	26,728	88,987	115,732	3,780	16,197	19,977	2,051	8,596	10,647
2012-13	19,429	49,492	68,943	2,833	12,252	15,085	1,405	4,993	6,398
2013-14	17,933	59,699	77,670	2,581	13,446	16,027	1,345	6,224	7,569
2014-15	17,354	51,127	68,504	2,413	11,167	13,580	1,214	5,220	6,434
2015-16(p)	19,338	54,215	73,574	2,582	12,275	14,857	1,371	5,757	7,128

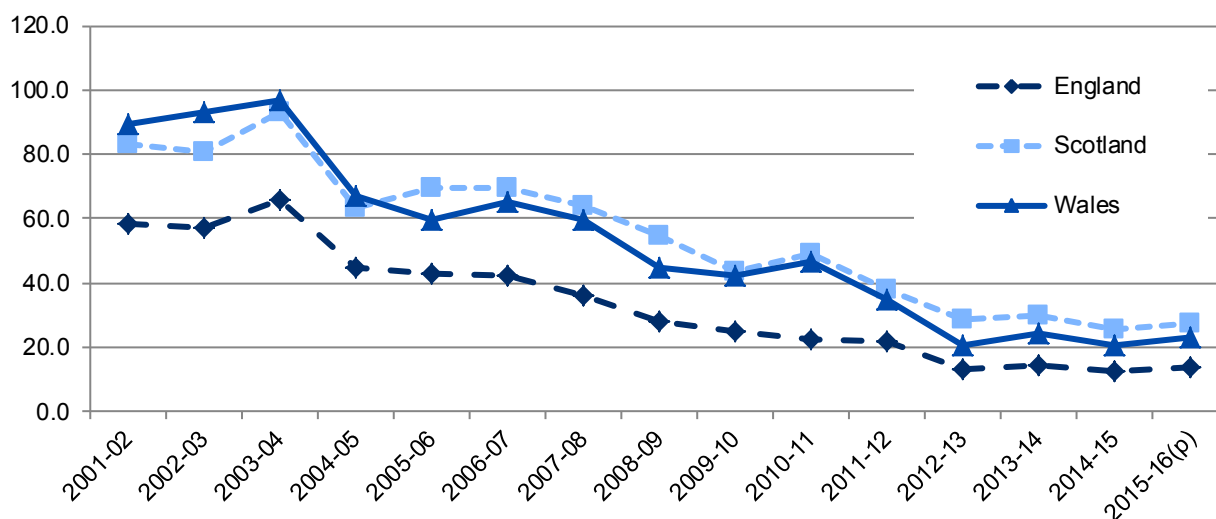
(a) Data for England are taken from The Home Office publication [Fire Statistics: England](#)

(b) Data for Scotland are taken from [Scottish Fire and Rescue Service](#)

(p) Provisional data.

The chart below shows rates of deliberate fires in Wales and Scotland have consistently been higher than in England, although the gap has narrowed in recent years.

Chart 24: Rate of deliberate fires in England, Scotland and Wales per 10,000 population (a)



(a) 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

Glossary

Accidental fires include those where the cause was not known or unspecified.

Buildings are 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'.

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

Chimney fires are any fires in occupied buildings where the fire was confined within the chimney structure (and did not involve casualties or rescues or attendance by five or more appliances).

Dangerous substances can spread fire, intensify fire, intensify smoke, render water unsuitable or produce toxic gases. Unlike with the hazardous materials 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 are defined as buildings occupied by households, excluding hotels, hostels and residential institutions (these fall under 'other residential'). 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 caravans, houseboats etc.

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 are events in which the Fire and Rescue Service believes they are called to a reportable fire and then find there is no incident.

Fatal casualty is 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 transpires subsequently that fire was not the cause of death. The figures for fatalities are thus subject to revision.

Fire Data Reports (FDR1 and FDR3) were 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 (FRA) are the three regions (North Wales, Mid and West Wales and South Wales) into which Wales is divided in relation to the fire service.

Hazardous Materials 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 [Dangerous Goods Emergency Action Codes List book](#).

Incident Recording System (IRS) is 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 is a fire known to be extinguished when the call was made (or to which no call was made, e.g. a fire which comes to the attention of the fire and rescue service as a result of a press report or inquest) and which the fire and rescue service attended.

Location is 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 are 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.

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

Reportable fire is an event of uncontrolled burning involving flames, heat or smoke and which the fire and rescue service attended.

Secondary fires are 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 derelect buildings. They are reported in less detail than other fires and consequently less information concerning them is available.

Source of ignition is the source of the flame, spark or heat that started the fire.

Key quality information

On 10 November 2004 the Fire and Rescue Services Act 2004, which devolved fire and rescue services to the National Assembly for Wales, 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 over 690,000 across a geographical area of 2,400 square miles. It employs over 800 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 almost 900,000. There are 58 fire stations and over 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 over 1,700 staff including nearly 1,400 fire-fighters who operate from 47 fire stations throughout South Wales.

Wales arson reduction strategy

The Joint Arson Group produced the Wales Arson Reduction Strategy in 2007³ (it was reviewed in 2009 with an update strategy for 2012-15 published in 2012⁴). The strategy states the priorities of Welsh Arson Reduction Teams (ARTs) are to reduce the numbers of wildfire incidents, deliberate fires in schools, car arson, deliberate fires associated with anti-social behaviour and the number of void and derelict buildings subject to arson. The Wales Arson Reduction Strategy in 2007 proposed measures to reduce the number of deliberate grassland and forest fires.

These include:

- National Curriculum to include “care of the environment”, educating children on the issue outside of the classroom.
- Several initiatives seek to address this issue i.e. the All Wales School Liaison Core Programme, Crucial Crew, Forest Schools Safety Zone.
- Implement initiatives which bestow ownership and a sense of pride in communities regarding their immediate environment.
- Key partnerships should work together to provide a consistent message on grass and forest fires.
- Youth groups must be supported to deliver diversionary activities for young people during school holidays and to deliver a message on the responsible use of fire.

³ [Wales Arson Reduction Strategy - Report of the Joint Arson Group August 2007](#)

⁴ [Wales Arson Reduction Strategy](#)

Relevance

The tables and charts in this bulletin attempt to show the breadth of data available and some of the possible analyses.

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

The data are used by the fire and rescue services for comparisons and benchmarking. The data aids the allocation of resources and providing community safety projects.

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 held by the Home Office. IRS does not currently collect data from FRAs in Northern Ireland.

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' on page 33.

The incident data are extracted from IRS annually (around May/June) and marked provisional at first publication. All bulletins and StatsWales tables excluding the quarterly data published in January/February 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. 2015-16 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.

Rounding and symbols

Data collected via the FDR1 and FDR3 paper forms (i.e. data prior to 2009-10) are based on sampled datasets. Items and totals have been rounded separately to the nearest final digit, and

therefore totals shown may differ slightly from the sum of the items. No rounding has been applied to data from 2009-10 onwards.

The following symbols may have been used in this release:

- negligible (less than half the final digit shown)
 - .
 - ..
 - ~
 - *
 - p
 - r
- not applicable
- not available
- not available yet
- disclosive or not sufficiently robust for publication
- provisional
- revised

Timeliness and punctuality

All outputs adhere to the Code of Practice by pre-announcing the date of publication through the through the Due Out Soon part of the UK Government Statistics and research web pages and the Publication Hub. 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 May each year. This bulletin is published biennially, usually in the February around 11 months after the year end, but may be brought forward if resources allow.

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. An RSS feed alerts registered users to this publication. Simultaneously the release is also published on the [National Statistics Publication Hub](#). All releases are available to download for free.

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 [StatsWales](#).

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 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 Fire and Rescue Authority performance 2015-16 exclude those casualties and so the data are not directly comparable.

The Fire Statistics Quality Report covers the general principles and processes leading up to the production of our fire statistics. The report covers various topics including definitions, coverage, timeliness, relevance and comparability. You can see a copy of the report on the [Welsh Government website](#).

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](#)

[Fire statistics monitor](#)

Data for Scotland (published by Scottish Fire and Rescue Service since 2015)

[2015-16 data](#)

[Pre 2014-15 data](#)

Limited Northern Ireland data (published by [Northern Ireland Fire and Rescue Service](#)).

Other data sources

Deliberate fires include those where the motive for the fire was ‘thought to be’ or ‘suspected to be’ deliberate. This includes fires to an individual’s own property, others’ property or property of an unknown owner. Deliberate fires are not the same as arson. Arson is defined under the Criminal Damage Act of 1971 as ‘an act of attempting to destroy or damage property, and/or in doing so, to endanger life’. Table 15 shows a comparison between the numbers of arson incidents as recorded by the police and the number of deliberate primary and secondary fires. It is expected that the majority of deliberate secondary fires would not be counted as arson.

Table 15: Comparison of police recorded crime and fire and rescue service fire incident data in Wales

	2006-07	2007-08	2008-09(a)	2009-10(b)	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Police Recorded Crime (c)										
Arson	2,495	2,255	2,149	2,040	1,734	1,514	1,244	1,163	1,247	1,496
Fire and Rescue										
Deliberate Primary	4,323	3,418	3,091	2,886	2,484	2,051	1,405	1,345	1,214	1,371
Deliberate Secondary	15,228	14,553	10,433	10,022	11,812	8,596	4,993	6,224	5,220	5,757
Total	19,551	17,971	13,524	12,913	14,297	10,648	6,399	7,569	6,434	7,128

Source: Arson data from the Home Office, fire data from FDR1 and FDR3 fire and Rescue Forms, Incident Reporting System (from 2009-10)

(a) From 2008-09 arson figures are the sum of 'Arson endangering life' and 'Arson not endangering life', and so may not be comparable with earlier data.

(b) In April 2009 collection of fire data changed from the FDR1 and FDR3 paper forms to the Incident Recording System (IRS).

(c) Following an assessment of crime statistics by the UK Statistics Authority, published in January 2014, the statistics based on police recorded crime data were found not to meet the required standard for designation as National Statistics.

National Statistics status

The [United Kingdom Statistics Authority](#) has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Official Statistics](#).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

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

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being 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 Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on indicators and associated technical information - [How do you measure a nation's progress? - National Indicators](#)

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 well-being assessments and local well-being plans.

Further details

This document is available at: <http://gov.wales/statistics-and-research/deliberate-fires/?lang=en>
[Fire Statistics Data Quality Report](#)

[Incident Recording System Questions and Lists](#)

More information is available in the form of [StatsWales tables](#).

Analysis of annual Welsh fire incident data can be found in the bulletin '[Fires Statistics, 2015-16](#)':

The bulletin includes charts and information on causes of fires and the presence of smoke alarms.

The [Evaluation of the Arson Prevention Programme](#) focuses on three of the main initiatives; Arson Reduction Teams (ARTs); the Arson Small Grants Programme; and the Grassland Fire Initiative.

Next update

Deliberate Fires 2017-18 to be published in February 2019

We want your feedback

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

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