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Parc Cathays
Caerdydd CF10 3NQFfôn
Swyddfa'r Wasg: 029 2089 8099
Ymholiadau
Cyhoeddus: 029 2082 5050Issued by
Statistical Directorate
National Assembly for Wales
Cathays Park
Cardiff CF10 3NQTelephone
Press Office: 029 2089 8099
Public Enquiries: 029 2082 5050Statistical Directorate Contact
Madog Williams 029 2082 3371
Stats.Inclusion@Wales.qsi.gov.uk<http://www.wales.gov.uk/statistics>Next Update
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Fire Statistics Wales, 2005

This bulletin presents fire incident statistics for Wales. The National Assembly for Wales compiles these statistics, from reports submitted by all Fire and Rescue Services in Wales to the Department of Communities and Local Government (DCLG) on all fires attended in 2005.

The bulletin covers the period 1994-2005 and provides the latest annual in-depth analysis of fire incidents attended by Welsh Fire and Rescue Services. Analysis includes details on location, cause, motive, casualties and false alarms attended.

Definitions of all terms used can be found in the glossary at the end of this bulletin.

Summary

Fires:

- The Welsh Fire and Rescue Services attended around 42,900 fires and false alarms (total attendances) in 2005, a decrease of 6 per cent on 2004.
- Primary fires in Wales decreased by 10 per cent since 2004.

Casualties:

- There were 31 fatal casualties from fires in Wales in 2005.
- Non-fatal casualties from fires fell by 10 per cent over the year to 744 in 2005.

False Alarms:

- In 2005 there were 18,800 false fire alarms in Wales, up from 17,800 in 2004.
- Overall the number of malicious false fire alarms has decreased by 11 per cent since 2004.

Smoke Alarms:

- In 41 per cent of fires in dwellings in Wales, no smoke alarm was installed.

Fires

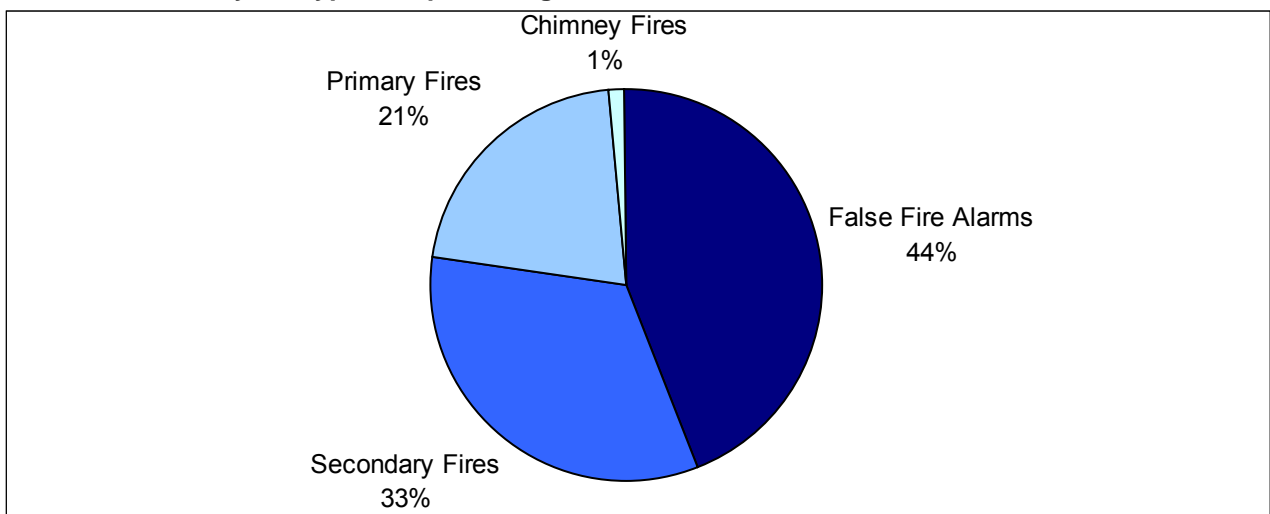
This section looks at the total number of fires that occurred as well as the total number of fires attended, which includes false alarms.

Fires Attended

The Welsh Fire and Rescue Services attended around 42,900 fires and false alarms (total attendances) in 2005, a decrease of 6 per cent on 2004. Fire attendances consist of attendances at primary fires, secondary fires, chimney fires and false alarms.

In 2005 of all fires attended 9,100 were primary fires, 14,300 secondary fires and 632 chimney fires. A further 18,800, 44 per cent of all fire incidents attended, were false alarms.

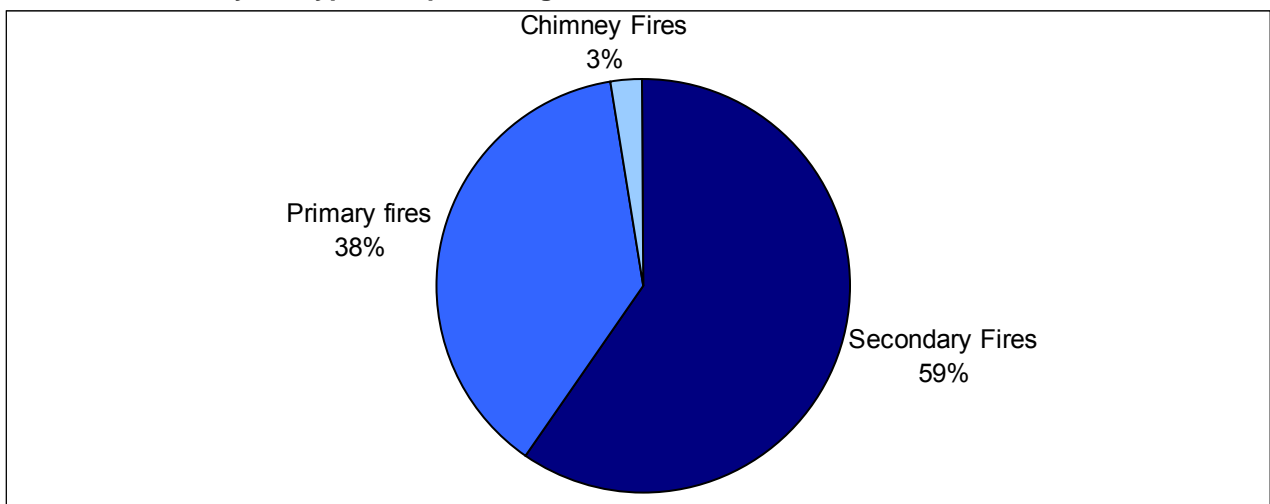
Chart 1 Fires by fire type as a percentage of all fire attendances, 2005



All Fires

In 2005 there were 24,100 fires in total in Wales. Of all fires, primary fires accounted for 38 per cent, secondary fires for 59 per cent and chimney fires represented 3 per cent.

Chart 2 Fires by fire type as a percentage of all fires, 2005



Fires by Type

Primary Fires

Primary fires are reportable fires in buildings - static or non-static (i.e. caravans) and outdoor structures, or any fire involving casualties, rescues or fires attended by five or more appliances.

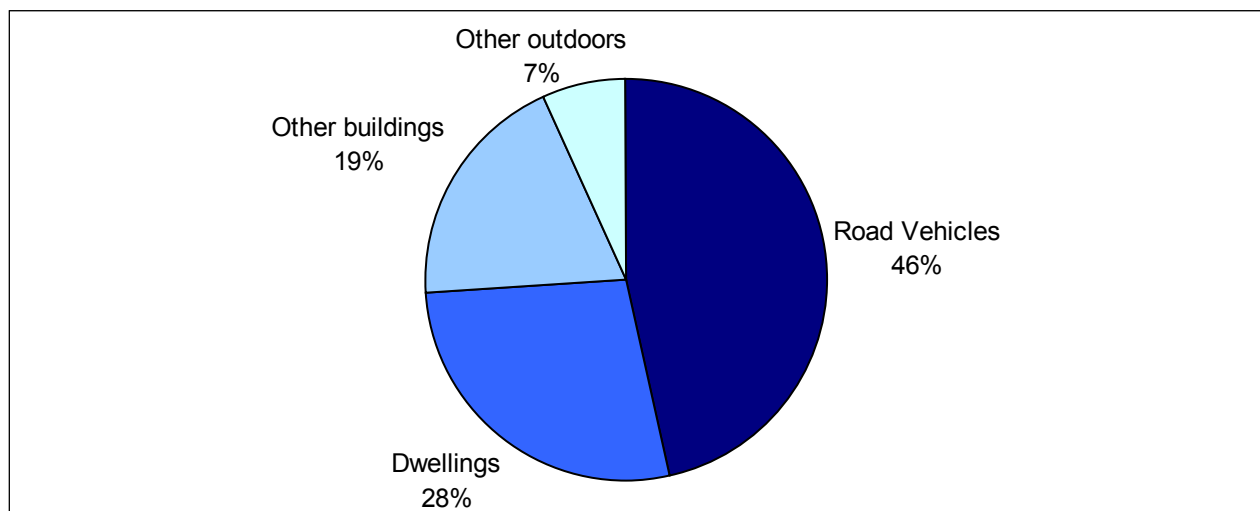
Overall primary fires decreased by 10 per cent over the last year to 9,100. All three Welsh Fire and Rescue Services saw falls in the number of primary fires.

Table 1 Primary fires by fire and rescue services

	2004	2005	Percentage Change 2004 - 2005
North Wales	1,955	1,775	-9%
Mid & West Wales	2,940	2,643	-10%
South Wales	5,266	4,722	-10%
Wales	10,161	9,140	-10%

Almost half, 46 per cent, of all primary fires in Wales in 2005 were in road vehicles, 28 per cent in dwellings, 19 per cent in other buildings and 7 per cent were other outdoor fires. Chart 3 below shows the breakdown of primary fires by location.

Chart 3 Locations of Primary Fires, 2005



Secondary Fires

Secondary fires are reportable fires not classified as primary fires, not in chimneys, not involving casualties or rescues and attended by 4 or fewer appliances.

The Welsh Fire and Rescue Services attended 14,300 secondary fires in 2005, a decrease of 17 per cent on 2004. This is the lowest number of secondary fires recorded in Wales since 1998. The individual Welsh Fire and Rescue Services each saw similar falls in the number of secondary fires.

Table 2 Secondary fires by fire and rescue services

	2004	2005	Percentage Change 2004 - 2005
North Wales	2,494	2,104	-16%
Mid & West Wales	4,366	3,396	-22%
South Wales	10,243	8,779	-14%
Wales	17,103	14,279	-17%

Chimney Fires

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 more than 4 appliances.

During 2005 there were 632 chimney fires in Wales, a decrease of 3 per cent since 2004. This continues the decrease seen in chimney fires since 1996 when 1,800 chimney fires were recorded.

Within individual Welsh Fire and Rescue Services the change in the number of chimney fires varied as shown below.

Table 3 Chimney fires by fire and rescue services

	2004	2005	Percentage Change 2004 - 2005
North Wales	300	266	-11%
Mid & West Wales	241	256	6%
South Wales	108	110	2%
Wales	649	632	-3%

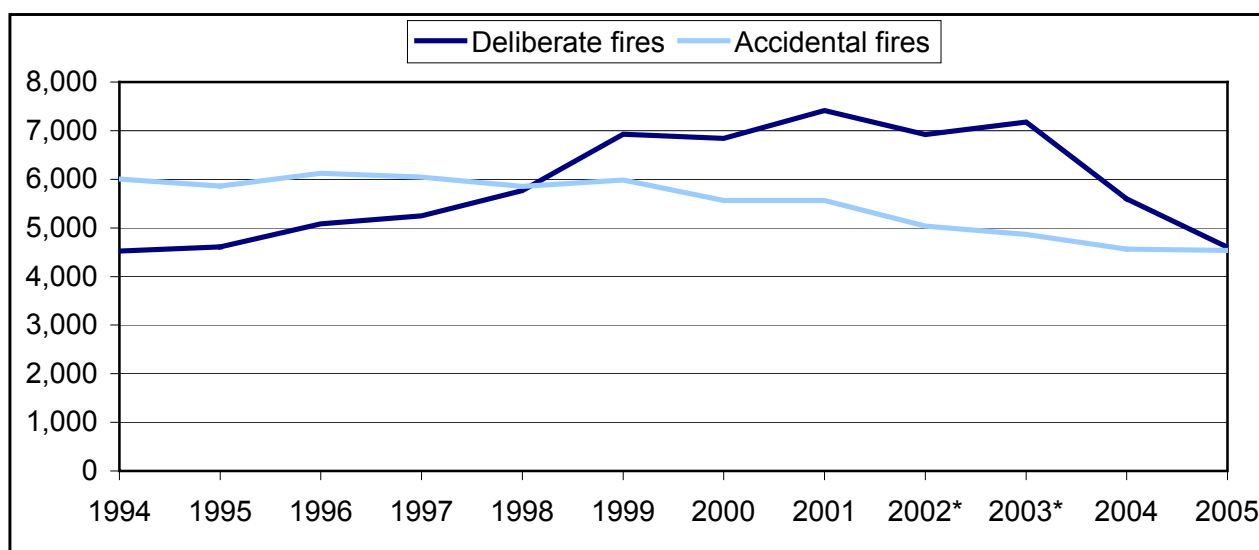
Fires by motive

This section looks at motive, in particular whether fires were caused accidentally or deliberately. Accidental fires are defined as fires where the fire was ignited by accident or the cause of the fire is not known or unspecified. Deliberate fires are defined as fires where the fire was ignited deliberately or if it is suspected or recorded as 'doubtful' by the fire and rescue service. Due to lesser detail being recorded for secondary fires and chimney fires, information in this section only refers to primary fires.

Accidental Primary Fires

Over the last year 50 per cent of all primary fires were caused accidentally, compared with 45 per cent in 2004. Whilst the proportion of accidental primary fires has increased the number of accidental fires has continued to fall.

Chart 4 Number of primary fires by motive



* Excludes incidents not recorded during periods of industrial action in 2002 and 2003

Of all primary fires that occurred in dwellings, 86 per cent were started accidentally, whereas 24 per cent of primary fires in vehicles were started accidentally.

Over the last year accidental primary fires in dwellings were relatively unchanged. Within Wales the Welsh Fire and Rescue Services saw the following changes.

Table 4 Accidental primary fires in dwellings by fire and rescue services

	2004	2005	Percentage Change 2004 - 2005
North Wales	491	517	5%
Mid & West Wales	786	729	-7%
South Wales	884	922	4%
Wales	2,161	2,168	0%

Deliberate Primary Fires

Primary fires caused deliberately have fallen considerably since 2003, with deliberate primary fires accounting for 50 per cent of all primary fires during 2005.

Of all deliberate primary fires, 69 per cent were fires in road vehicles, which was the same proportion as in 2004.

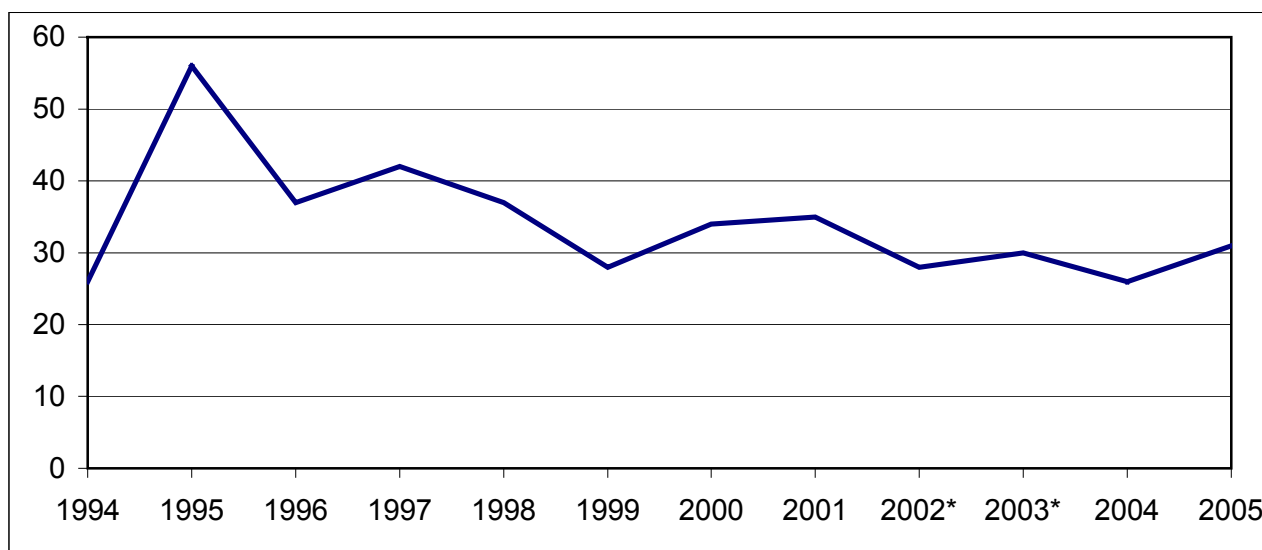
Casualties

Fatal Casualties from fires

A fatal casualty is defined as a person whose death is attributed to a fire, even if the death occurred weeks or months later.

Fatal casualties rose to 31 during 2005, from 26 in 2004. However the number of fatal casualties were still lower than those recorded during the late nineties.

Chart 5 **Number of fatal casualties from fires**



* Excludes incidents not recorded during periods of industrial action in 2002 and 2003

Accidental fires accounted for 81 per cent of fatal casualties, the same proportion seen in 2004. There were 6 fatal casualties from deliberate fires in 2005, 19 per cent of all fatal casualties, the same as the previous year.

As in 2004, the majority of fatalities were seen in accidental dwelling fires, accounting for 68 per cent.

During 2005 the main cause of death from fires in Wales was being overcome with smoke or gas, accounting for 52 per cent of all fatalities. In addition 26 per cent of fatalities were due to burns and a further 19 per cent were due to a combination of burns and being overcome by smoke or gas.

Non-fatal casualties from fires

A non-fatal casualty is defined as a person requiring medical treatment beyond first aid given at the scene of the fire, and those sent to hospital or advised to see a doctor or attend hospital.

In general, non-fatal casualties continued to show a downward trend, falling 10 per cent over the year to 744 in 2005. This consisted of 602 casualties (81 per cent) in dwelling fires, 82 (11 per cent) in other buildings, 37 (5 per cent) from road vehicle fires and 23 (3 per cent) in other outdoor fires.

Of the 744 non-fatal casualties from fires recorded, 81 per cent were from accidental fires.

Accidental fires in dwellings continued to account for the majority of non-fatal casualties, accounting for 67 per cent in 2005.

The most common non-fatal injuries from fires were precautionary check ups (40 per cent) and being overcome with smoke or gas (36 per cent).

False Alarms

A false alarm is defined as an event in which the fire and rescue service believes they are called to a reportable fire and then find there is no such incident. False alarms are categorised as follows:

- Malicious** where the call is deliberately for a non-existent fire-related event
- Good intent** in which the call was made in good faith in the belief that there was a fire to attend
- Due to apparatus** in which the call was initiated by the operation of fire alarm and fire-fighting equipment

In 2005 there were 18,800 total false fire alarms in Wales, up from 17,800 in 2004. These consisted of 11,900 due to apparatus, 5,200 good intent false alarms and 1,700 malicious false alarms.

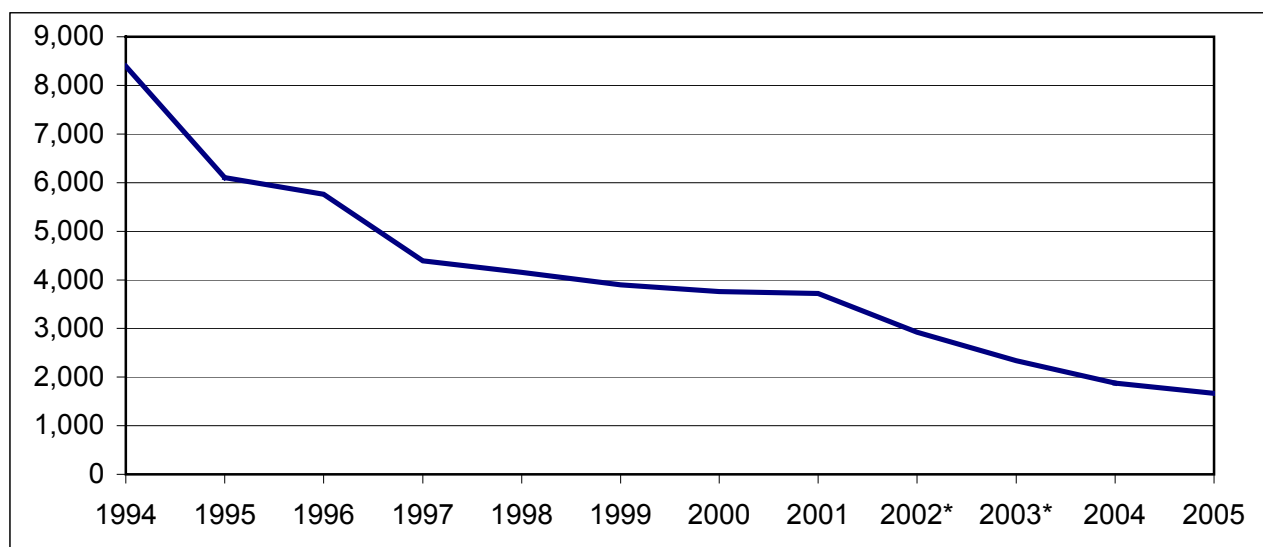
Overall the number of malicious false fire alarms has decreased by 11 per cent since 2004. Figures fell in each of the Fire and Rescue Service areas.

Table 5 Malicious false alarms by fire and rescue services

	2004	2005	Percentage Change 2004 - 2005
North Wales	301	256	-15%
Mid & West Wales	585	509	-13%
South Wales	992	899	-9%
Wales	1,878	1,664	-11%

Since 1994, the number of malicious false alarms has continued to fall, accounting for 9 per cent of all false alarms during 2005.

Chart 6 Malicious false alarms



* Excludes incidents not recorded during periods of industrial action in 2002 and 2003

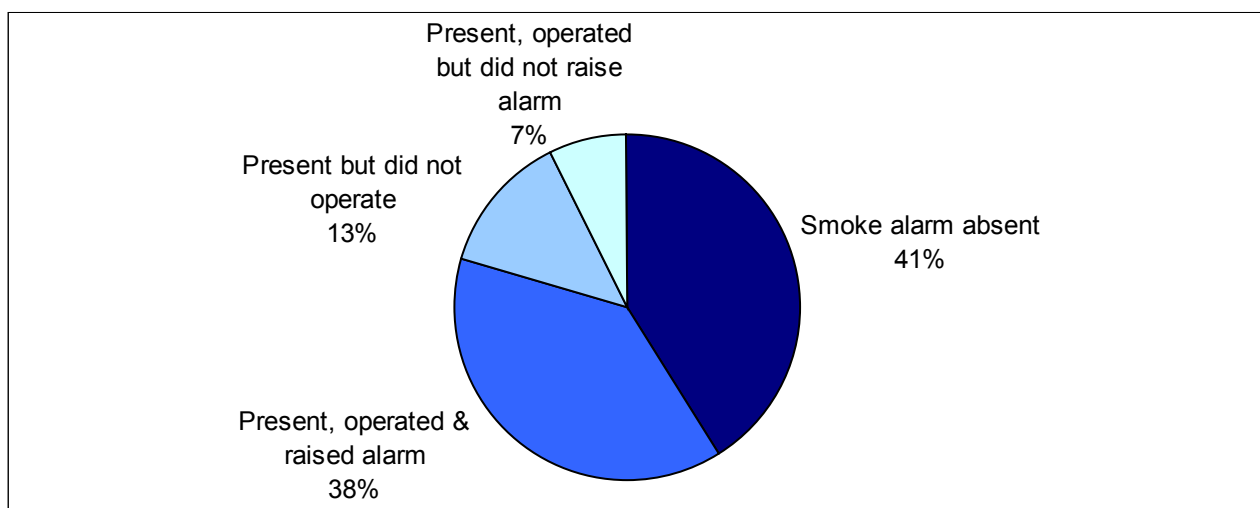
Smoke Alarms

This section looks at fires in dwellings attended by the fire and rescue service and the effectiveness of a smoke alarms. Any fires involving alarms where no emergency call was made to the service will not be recorded, and therefore the figures reported should understate the effectiveness of smoke alarms.

A smoke alarm was present and operated correctly in 45 per cent of fires in dwellings. In a further 13 per cent of cases a smoke alarm was present but failed to operate. Whilst in 41 per cent of dwelling fires a smoke alarm was absent.

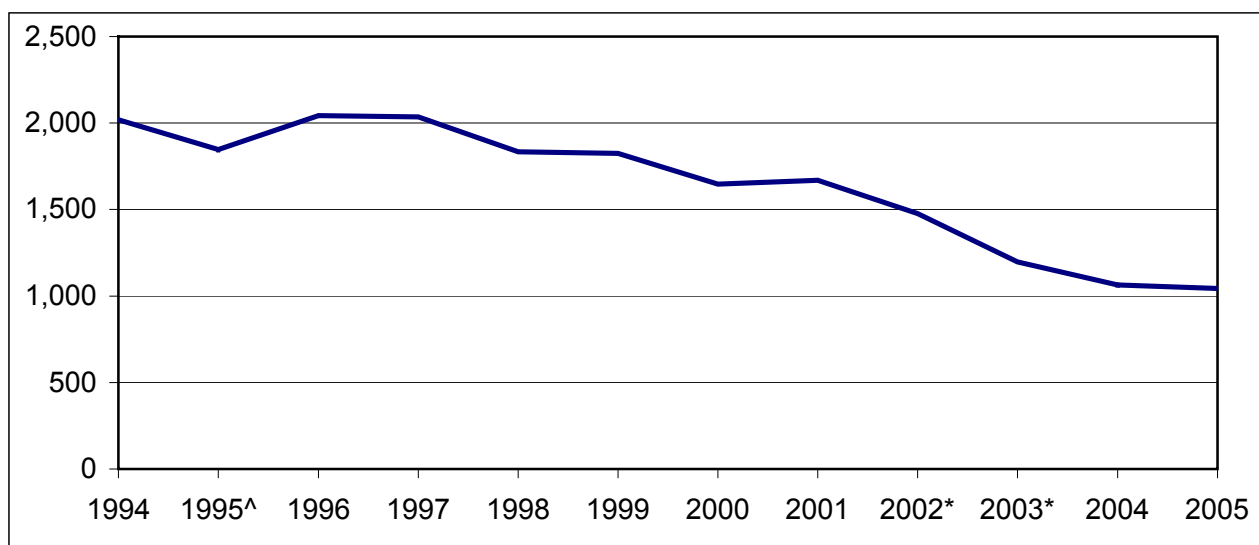
The main reasons for smoke alarm failures each year is missing or flat batteries or other deliberate acts of preventing operation (including being turned off). This was the case in 46 per cent of all primary dwelling fires where an alarm failed to operate.

Chart 7 Fires in dwellings by presence and operation of smoke detectors, 2005



The absence of a smoke alarm in dwelling fires continued the downward trend seen since 1996, falling to 1,044 in 2005. These fires accounted for 12 fatalities (55 per cent of all fatalities in dwelling fires) and 196 non-fatal casualties (33 per cent of all non-fatal casualties in dwelling fires).

Chart 8 Number of fires in dwellings where smoke alarm was absent



** Excludes incidents not recorded during periods of industrial action in 2002 and 2003*

[^] A small number of late call and heat and smoke damage only incidents were not recorded in 1995

The fall in the number of dwelling fires where smoke alarms were absent was also seen in two of the Welsh Fire and Rescue Service areas.

Table 6 Number of fires in dwellings where smoke alarm was absent by fire and rescue services

	2004	2005	Percentage Change 2004 - 2005
North Wales	227	198	-13%
Mid & West Wales	297	320	8%
South Wales	541	526	-3%
Wales	1,064	1,044	-2%

Further Information

All tables are available on the Welsh Assembly Government StatsWales site in the crime and justice folder: www.statswales.wales.gov.uk under "Community Safety".

Glossary

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'.

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).

Dwellings are 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. All analyses from 1994 to 1998 relating to dwellings were retrospectively revised to include the new categories of dwellings.

False Alarms Due to Apparatus are calls initiated by fire alarm and fire-fighting equipment operating (including accidental initiation of alarm apparatus by persons).

Fatal Casualty is a person whose death is attributed to a fire even if the death occurred weeks or months later. However it is not always the case that fire was the cause of death and the figures for fatalities are thus subject to revision, as information supplied by the fire and rescue service needs to be cross-checked against the cause of death that appears on the death certificate. The main area of uncertainty is whether fire was the cause of death in road accident fatalities. All figures in this publication are the finalised death figures for all years.

Good Intent False Alarms are calls made in good faith in the belief that the fire and rescue service really would attend a fire.

Heat or smoke damage only incidents are reportable fires where there is not fire damage. The damage reported may be due to any combination of heat, smoke and other which will include any water damage.

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) and which the 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.

Malicious False Alarms are calls made with the intention of getting the fire and rescue service to attend a non-existent fire-related event, including deliberate and suspected malicious intentions.

Non-fatal casualty is a person requiring medical treatment beyond first aid given at the scene of the fire and those sent to hospital or advised to see a doctor for a check-up or

observation (whether or not they actually do). People sent to hospital or advised to see a doctor as a precaution, having no obvious injury, are recorded a precautionary check-ups.

Primary fires include all fires in 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 derelict buildings.

Quality Information

1. The information collected gives details on all fires in buildings, vehicles and outdoor structures and any fires involving casualties or rescues (i.e. "primary" fires). Less detailed aggregated information is collected on "secondary" and chimney fires; so subsequent analysis of them is limited.
2. Due to no reporting of fires during the 15 days of industrial action in 2002 and 2003, figures for these years are subject to a slight under reporting. Therefore care should be taken when using these figures.
3. For ease of interpretation by the reader, some of the commentary figures that accompany the tables within this bulletin have been rounded.

Percentages have been rounded to the nearest percentage point, however calculations have been done using unrounded figures.

Example

- 17.65 per cent would be rounded to 18 per cent in the commentary whilst 16.45 would be rounded to 16.
 - The percentage points difference between 17.65 and 16.45 would be 1.2 and would be rounded to 1 in the commentary.
4. Tables displayed within this bulletin contain actual unrounded figures, based on data received from The Department for Communities and Local Government (DCLG), formerly known as The Office of the Deputy Prime Minister (ODPM).
 5. Databases for 1994 to 2004 contain all fires with casualties, but only a sample of other non-casualty fires with approximate sampling fractions of: 10% (for 1994), 40% (for 1995), 20% (for 1996 to 2004). The data has all been weighted to agreed fire and rescue totals. The detailed analysis of the data other than for casualties, or fires involving casualties is based on the sampled data grossed to fires and rescue service totals.
 6. For 2005, 100% of information on non-casualty fires has been processed by DCLG.

Fire Statistics are part of the National Statistics series. For more information on National Statistics see www.statistics.gov.uk