Fire deaths reach 45-year low

Fire-related deaths are at their lowest levels in the UK for 45 years.

This welcome news is revealed in the Office of the Deputy Prime Minister’s “Fire Statistics, United Kingdom, 2004”, which was published on 16 February 2006. The bulletin is the latest annual in-depth analysis of fire incidents attended by fire and rescue services (FRSs) throughout the UK.

The figures show that in 2004, there were 508 deaths, 14% fewer than the 593 deaths recorded in 2003. Fire deaths peaked in the 1970s, when there were over 1,000 deaths per year. The decline in fire-related deaths has coincided with the sharp increase in smoke alarm ownership, from 8% of households 20 years ago to around 80% currently. In addition to the reduction seen in fire-related deaths there was a 6% decrease in the total number of non-fatal casualties to 14,600 – the fifth consecutive annual fall.

UK FRSs attended 29% fewer fires during 2004 than in the previous year, a total of 443,000 – the lowest number since 1998. Although there was a decline in all types of fires recorded, a considerable decrease in the number of secondary fires, particularly grassland, contributed heavily to the overall reduction. In total, FRSs attended nearly 900,000 incidents of fire or false fire alarms – 18% fewer than in 2003.

There were 59,700 fires in the home, a fall of 6% compared with the previous year. The majority of dwelling fires (80%) were accidental. Good progress is being made towards the national targets of reducing accidental fire-related deaths in the home (20% fewer by 2010) and all deliberate primary fires (10% fewer by 2010).

Smokers’ materials (i.e. cigarettes, cigars or pipe tobacco) were the most frequent source of ignition causing accidental dwelling fire deaths, accounting for just over a third of all accidental dwelling fire deaths in 2004. The number of deliberate fires fell for the third consecutive year, by 21% from 115,000 in 2003 to 91,000 in 2004. The main reason for the fall in 2004 was a 25% reduction in deliberate fires in road vehicles, which account for 60% of all deliberate primary fires. A number of factors are behind the decrease – an improved vehicle licensing regime; the success of vehicle removal schemes, many of which have been funded by the Arson Control Forum; and recent increases in the price of scrap metal, which have raised the value of end-of-life vehicles, making them less likely to be abandoned.
Behind the scenes with the high volume pumping teams

The explosion in mid-December at the Buncefield fuel depot in Hertfordshire led to the biggest peacetime fire seen in Europe for 60 years. No lives were lost, thanks to the excellent response by Hertfordshire firefighters, assisted by personnel and equipment from fire and rescue services (FRSs) across the country.

Mutual aid
As the fire took hold on Sunday 11 December, long-standing mutual aid arrangements drew in firefighting support from neighbouring areas. At its peak 180 firefighters were on site. Sufficient quantities of foam, high quality equipment and personnel from around the country were mobilised in a very short time.

As well as traditional fire appliances, 15 high volume pumps (HVPs), funded by the Office of the Deputy Prime Minister’s New Dimension Programme, were called to the incident at Buncefield to provide the enormous volumes of water needed to bring the fire under control.

HVP incident log
FRS now looks at a section of the incident log for Buncefield, with the help of HVP commanders Gordon Macmillan, Martin Blunden, Gary Mattingley and Chris Arculeo.

Sunday 11 December
06.02 Explosion at Buncefield. Blast damage is felt up to one mile away.
09.00 Sixteen fuel tanks are on fire.
12.05 Request received from Gold Command in Welwyn Garden City for advice on attendance times of HVPs.
13.00 Silver Command in Watford are briefed on HVP capability, availability and attendance times.

15.45 Fire has spread to 20 of the 27 fuel tanks on site.
17.25 Request for 14 HVPs sent to the Fire and Rescue Service (FRS) Interim National Coordination Centre in West Yorkshire. HVPs are to meet at junction 8 of M1 motorway, accessible via the M10, as soon as possible.
22.09 Silver Command request water capacity of 25,000 litres of water per minute. This can be achieved by setting six HVPs into a 35 million litre holding reservoir, 2.4 km from the fireground. A further six HVPs will be set up as booster pumps. Majority of HVPs have now reached the M1 meeting point, with HVPs from Somerset, Greater Manchester and North Yorkshire still to arrive.

Monday 12 December
03.00 Under Environment Agency direction, Hertfordshire FRS use three HVPs for pumping out a 2.5 million litre interceptor into the bunds of oil tanks, away from the blast area. The interceptor will be used to keep all the expected water run-off on site. HVPs will supply water to the fireground, and maintain the interceptor at a low level; the foam operation will be entirely under control of Hertfordshire FRS.

Welcome to FRS 17
This edition of FRS looks at the increasingly wide range of work firefighters are doing to save lives in their communities. It includes a look behind the scenes at Buncefield with the high volume pumping teams and reports on how co-responders in Somerset saved a baby’s life. We also take a look at some of the successful community fire safety initiatives that are being pioneered in fire and rescue services across the country.

We are always interested in hearing your views and finding out what issues you would like to see covered in future editions. If you have any initiatives or good news that you would like to share with the whole of the fire and rescue service, please email us at frs@odpm.gsi.gov.uk

Photo: ODPM
The HVPs provided the enormous volumes of water needed to bring the Buncefield fire under control.
at Buncefield –

08.20 Thirteen HVPs start pumping water. The foam attack now commences, using 32,000 litres of aerated foam per minute. This attack can be sustained for up to four hours.

12.40 Thirteen HVPs and three foam monitors are now in use. Water supply is now reduced to 3,500 litres per minute.

13.32 Fires in 10 tanks have been extinguished. Additional foam will be on site by 16.00 hours.

16.30 Fire has now been extinguished in 12 of the fuel tanks.

19.55 Hertfordshire FRS’s attack plan is to apply foam as a separating blanket between the affected and non-affected oil tanks. Pumping operations will continue through the night.

Tuesday 13 December

00.07 Tactic is now to concentrate on a water cooling operation to protect seven tanks that are not on fire.

10.00 Northamptonshire FRS personnel are requested to attend with their HVP and double hosebox to prepare an on-site water supply while existing pumping is maintained.

15.55 Fires in two of the remaining tanks have been extinguished. An attack will soon be underway on the last remaining tank fire.

17.08 All tank fires now out. A few small bund fires still remain to be extinguished.

Wednesday 14 December

13.36 Water is now being taken from a 1 million litre reservoir on site, fed by a rising town main. Eight HVPs are in use and these will be needed for the next 24 hours.

14.15 Flash fires are expected to continue for some time as the foam blanket is being breached and then reapplied.

Ongoing Five HVPs from the Fire Service College have been sent to FRs across the country as strategic reserves, to enable an operational capability to be maintained.

Mobilisation and response

The Interim National Coordination Centre (INCC) in West Yorkshire played a key role in co-ordinating and mobilising the HVPs and Prime Movers from across the country to Buncefield. In the longer term this co-ordination function will be co-located within one of the new regional control centres.

Buncefield was the largest ever operation in Britain using foam to extinguish a fire. There are lessons to be learned from the incident, and work to take these forward is now underway.

The successful response at Buncefield would not have been possible without the exceptional levels of co-operation between services. Nor would it have been possible without the role played by the New Dimension Programme and the HVPs. But most of all, the success of the operation was down to the dedication and professionalism of the many firefighters who tackled the blaze on those four days before Christmas.

HVPs at Buncefield in facts and figures

| Number of HVPs to be purchased by New Dimension Programme | 50 |
| HVPs available in December 2005 | 20 |
| HVPs deployed at Buncefield | 15 |
| Foam used | 600,000 litres |
| Water used | 35 million litres pumped on to site; 15–20 million litres re-circulated on-site |
| Hose length used | 33 km |

HVPs mobilised to Buncefield

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Totals | 15 | 10 |
Somerset co-responders save a baby’s life

Three firefighters in Somerset helped keep a premature baby alive after he was born last September weighing little more than a bag of sugar.

Simon Bruford, Jeff Cross and Kevin Liddle, firefighters in the co-responder scheme operating out of the Williton station, provide a first response to medical emergencies ahead of ambulance paramedics.

A fortnight after spending 11 weeks in the Musgrove Park Hospital special care baby unit, little Daniel, who was born three months premature, developed a cough. His mother, Clarissa, subsequently found him motionless one morning in December.

His mother said: ‘I phoned 999 and asked for an ambulance and soon afterwards heard a vehicle coming round the corner near our house. It was a fire brigade Land Rover so I didn’t think it was anything to do with us.’

Firefighters arriving on the scene found Daniel grey and lifeless and could not find a pulse. They immediately began resuscitation techniques and administered oxygen.

‘After about 10 minutes the colour started to come back to the baby’s cheeks and he began to move of his own accord,’ Simon said.

‘The ambulance arrived soon afterwards and rushed him to hospital. This was definitely one of the worst scenarios we have had to face since we have been on the run for co-responder calls. The feeling you get when you know that you have helped save someone’s life really can’t be explained, especially when a baby is involved.’

Daniel spent eight days in the intensive care unit of a hospital in Cardiff before returning to Taunton for further treatment for bronchiolitis and hypothermia. He came home just a week before Christmas, and now weighs 9lbs 2oz.

Clarissa said: ‘When we got to the hospital the doctors said that if it had not been for the co-responder initiative Daniel probably wouldn’t be here now.’

The Williton co-responder team has received more than 50 calls since its launch last September, proving its undoubted need.

The Portfolio Holder for Community Safety in Somerset, Councillor Jim Mochanaz said: ‘The co-responder scheme in Somerset has been gradually expanded over the years with a quarter of our stations on the run. It is particularly useful in the very rural parts of the county where attendance times for the ambulance service are long. This incident clearly demonstrates the worth of the scheme and the benefits of partnership working. I am personally delighted with the outcome of this incident and wish Daniel and his family the very best for the future.’

For further information, contact Martin Carnell, Somerset Fire and Rescue Service, on 01823 364582 or email: mcarnell@somerset.gov.uk

Window of opportunity for home fire safety

Inspired by the success of the home fire safety check referral ‘postbox’ (see FRS 10), firefighters from County Durham and Darlington Fire and Rescue Service Blue Watch have come up with another new way to bring home fire safety to local communities.

They are piloting a scheme which aims to increase the provision of smoke alarms and home fire safety check referrals on a street-by-street basis.

Durham Blue Watch have developed a leaflet which states that a fire engine and crew will be in a particular area at a specified time.

Residents are simply asked to display the leaflet in their front window if they would like the crew to call to complete a home fire safety check and fit smoke alarms.

Residents are also provided with the information they need to contact the Service and arrange a home fire safety check at another time at their convenience, as well as the offer of information in alternative languages or formats.

The crews from Durham station target particular residential areas on a street-by-street basis and deliver the leaflet themselves, which is proving to be more efficient in terms of time for the crews and also increases the opportunity for residents to obtain advice and help on community safety matters.

Durham District Manager, Keith Wanley, is delighted with the initial results from the pilot project. ‘By providing a designated time and a quick and easy way for residents to indicate whether they wish us to make contact, the leaflet is proving incredibly effective for increasing the number of home fire safety checks completed in specific areas,’ he said.

The team will shortly be undertaking an evaluation of the scheme before further consideration is given as to whether it will be adopted formally throughout the Service.

For further information on the referral box scheme, contact the Community Safety Team on 0191 332 4222 or email: kwanley@ddfire.gov.uk
Sniffing out arson

London Fire Brigade has gained two new canine additions to the dedicated dog team, completing a highly skilled set of four dogs and four fire investigation officers who have been trained as handlers. The team will support the investigation of arson all over London, 24 hours a day, seven days a week.

Labradors Jet and Sam undertook a five-week training programme before joining existing team members Roscoe and Sapphire. They then settled into a work routine and are now ready to accompany their handlers out to an incident. At the scene of incidents, a fire investigation dog wears specialist protective ‘fire wellies’ on his or her paws to guard against injuries from broken glass or hot material.

They were trained by Clive Gregory, the first hydrocarbon detector dog handler in the UK, who taught the dogs to detect minute qualities of hydrocarbon accelerants in minutes. This procedure would normally take a fire investigator using specialist equipment hours before samples can be taken away for scientific evidence.

‘Extensive research has shown that the best response to arson detection is to have four teams on the watch shift system to ensure cover in London all year round,’ said Val Shawcross, Chair of the London Fire and Emergency Planning Authority.

For further information, contact Ailsa Mellor, London Fire Brigade, on 020 7587 4063 or email: ailsa.mellor@london-fire.gov.uk

Pedal power for Arson Task Force

Merseyside Fire and Rescue Service is bringing in mountain bikes to help its Arson Task Force access rural and parkland areas.

During the summer months there is an increase in grassland fires that are started deliberately in some of Merseyside’s remote areas. This type of incident can cause significant disruption for operational crews, as the fires are often physically demanding, spread over a large area and need several crews to tackle them.

Last year, Wirral’s Arson Reduction Advocate, Lowell Williams, noted an increase in these fires on Caldy, Blackhorse and Grange Hills, West Kirby. On closer investigation he found that many coincided with school lunch times or the end of the school day.

As part of a pilot scheme, he visited the area on a mountain bike, along with Arson Reduction Advocate John Arslanian, and engaged with young people.

Lowell explained: ‘Caldy Hill was becoming a particular target – last summer there were dozens of fires there. One in particular had six crews at the scene for hours and it’s physically demanding as the firefighters have to use beaters because of a lack of hydrants.

‘We went up there to have a look if there was a way of reducing potential targets but it’s a huge expanse, so we decided to use mountain bikes. Within half an hour we found three children about to light a fire, so we talked to them about the potential consequences. On that first afternoon we ended up talking to about a dozen young people and a dozen adults and they were really interested in what we had to say.’

The outcome was a reduction in grassland fires in that particular area.

Deputy Chief Fire Officer, Mike Hagen, said: ‘We found the pilot to be highly successful. Now we want to expand the initiative to try and reduce these anti-social behaviour fires in other similar areas in Merseyside. That way, we will not only reduce demand on our operational crews but also protect the community and their green spaces.’

The Arson Task Force is now to be equipped with mountain bikes and the team will receive training similar to that given to police officers who use mountain bikes during patrols.

For further information, contact Sam Grady, Merseyside Fire and Rescue Service, on 0151 296 4417 or email: SamGrady@merseyfire.gov.uk
Fire crews have the X factor

Firefighters at one of Shropshire’s far-flung rural fire stations have the X factor when it comes to community spirit.

The 12-strong crew at Bishop’s Castle are giving up their evenings and weekends to fit smoke alarms and door chains as part of a campaign to protect Bishop’s Castle’s 2,000 inhabitants. They have so far knocked on more than 500 doors and fitted 465 smoke alarms in the exercise.

Leading firefighter Tony Barnes, who is spearheading the initiative, said that it makes people in Bishop’s Castle feel safer and helps to reduce serious fires.

The crew, who have full-time jobs as well as working as retained firefighters, have put their hobbies on hold and many of them have swapped their weekend lie-ins for duty on the doorsteps of Bishop’s Castle.

“We turn out whenever they want us. You do get a lot of satisfaction out of doing something worthwhile and it is good for everyone to see fire crews in the street,” said leading firefighter Steven Marpole.

Firefighter Carl Lewis, a garage mechanic, has given up his weekend kick boxing for the community initiative. He said: ‘Any hobbies do have to take a back seat. You join the brigade to serve the community.’

Firefighter Steve Thomas, a team leader at Embreys, added: ‘It’s something you are committed to. We all enjoy it.’

They still have 250 more doors to knock on and then plan to re-visit the homes where the householder was not in.

Fire crews have now linked their smoke alarm campaign to the Bogus Caller Task Force involving police, local councillors and Shropshire Care and Repair to fit door chains, spy holes and mirrors in every home that wants them.

For further information, contact Shropshire FRS Community Fire Safety Officer Tony Barnes on 01743 260200 or email: publicity@elaineadams.com

New radio system for the fire and rescue service

Fire Minister Jim Fitzpatrick has announced that the Office of the Deputy Prime Minister has let a contract for a new multi-million pound digital radio communications system that will help provide a modern and more resilient fire and rescue service (FRS).

Q: Airwave will deliver a new radio system across England – Firelink – capable of both voice and data transmission. The £350m contract was subject to open competition, which was run in accordance with EU guidelines.

The new radio system will replace the current 46 systems around the country and will also improve the current capability. For the first time, the FRS system will be interoperable across all FRSs and with the radio systems used by the police and ambulance services. Firelink will be rolled out across FRSs in England from 2006/07. The contract also provides for the extension of Firelink into Scotland and Wales.

The Minister said: ‘Today’s emergency services increasingly face large-scale incidents that require a multi-agency response and it is important that our fire and rescue service is equipped to be a resilient and modern service capable of meeting the demands and challenges of today’s environment. We are investing heavily to ensure we have the best possible service and the new radio communications system is central to this.

‘For the first time ever the different fire and rescue services will be able to communicate with each other via the same radio network and with other emergency services.

‘This project has the support of all key stakeholders, including the unions. The fire and rescue service itself has contributed directly to developing the technical and operational specifications of the project as well as evaluating the proposals and it will continue to be central to the successful delivery of the project.’

The new radio system will be fully operational in 2009 and in England will be co-ordinated with the establishment of regional fire control centres.

Firelink is critical to the delivery of the regional FiReControl project, which also forms part of the fire resilience programme. It provides the voice communications link between the nine regional control centres and mobile resources within individual FRSs. Delivery of the two projects will be within an overall co-ordinated programme that will ensure improved protection through the best available communications technology.
Successful lifestyle scheme fires up young people

A healthy lifestyle scheme run for young people at Wallasey Community Fire Station has proved so successful it is being extended.

A dozen young people have been meeting at the station every week since October to develop a healthy eating and exercise plan.

They have thrown themselves into the project with enthusiasm and although the main aim was not weight loss, their new healthy lifestyle has contributed to a combined weight loss of a staggering 40kg in just six weeks.

Doreen Phoenix, from St George’s Medical Centre, who co-ordinated the initiative, said: ‘We are delighted at how the young people have involved themselves, working very hard and enthusiastically within the exercises and cooking courses provided. The venue has proven to be superb facility for this scheme.

‘The group have very quickly gelled together. One of the great aspects has been how participants are now supporting each other and encouraging hard work. This has also involved their families, who have subsequently undertaken health changes themselves and have very much become active participants in helping.’

Now the 12-week scheme, called All Fired Up, is also to be run at Birkenhead Community Fire Station.

Young people can be referred onto the programme by their GP and there is already a waiting list following the first course.

During the 12 weeks, they have access to the fire station gym, sponsored by Wirral Heartbeat, and to the kitchen, with a personal trainer and dieticians providing them with information, advice and inspiration to get fit, eat well and increase energy. The initiative was put together by the Confidential Adolescent Service and Merseyside Fire and Rescue Service, and is the first of its kind in the country. It all came about following the concerns of one GP in Wallasey, Dr Alan Roberts, who had a young patient who needed some support with diet and fitness.

Divisional Officer Daryl Oprey, District Manager for the Wirral for Merseyside Fire and Rescue Service, said: ‘We have been developing close links with the health service and other organisations, particularly over the last few months, as we have a number of common goals within the community, such as healthier communities. This is one of the innovative activities we have introduced to meet those aims. We are looking forward to expanding this scheme and hope it will have the same success in Birkenhead.’

For further information, contact Sam Grady, Merseyside Fire and Rescue Service, on 0151 296 4417 or email: SamGrady@merseyfire.gov.uk
A stakeholder says...

RNID, the largest charity representing the nine million deaf and hard of hearing people in the UK, is aiming to reduce the number of people who are at risk from fire.

While, in some cases, conventional smoke alarms provide sufficient protection against fire for people with hearing loss, research carried out by RNID shows that a third of people with a hearing loss would still have difficulty waking up to a conventional smoke alarm, especially since hearing aids are taken out at night. Almost a quarter (23%) say they would struggle to know if the alarm went off during the day.

RNID acknowledges that many fire and rescue services (FRSs) already install a range of specialist devices for deaf and hard of hearing households and, in doing so, we urge them to provide life-saving smoke alarms that comply with the new British Standards Institution (BSI) specification for those deaf and hard of hearing people who need specialist alarms across the UK.

Earlier this year, BSI published a national standard on smoke alarms for deaf people. Smoke alarms that comply with the important new standard must have a flashing light, standard audio alert and a vibrating pad, which is placed under the mattress or pillow to shake the user awake when the alarm detects smoke. Products of this type have, of course, been around for a while but the new standard creates clear cut and demanding performance requirements to help ensure the protection offered is the best possible.

We would like to see all local FRSs providing these BSI-compliant smoke alarms to deaf and hard of hearing people in their communities. These smoke alarms could make the difference between life and death for a deaf or hard of hearing person, and mark an important development in fire safety.

RNID's BSI-compliant smoke alarm, and other equipment designed for deaf and hard of hearing people, can be purchased through RNID's not-for-profit products division. We look forward to continuing to work closely with FRSs to ensure the safety of deaf and hard of hearing people and are always happy to discuss the latest developments.

Please contact RNID by telephone on 0870 789 8855, by textphone on 01733 238020 or visit www.rnidshop.com

IPDS: Next steps

The Integrated Personal Development System (IPDS) project has achieved its objectives. The fire and rescue service (FRS) now has a largely complete system. This includes:

- national occupational standards that set out what is expected of people
- guidance on the phased development process of acquisition
- application and maintenance of people's competence in their job and
- guidance on assessing people in the workplace (which can usefully include vocational qualifications) and guidance on assessment processes and associated personal development records.

The project has also delivered a complete set of Assessment Development Centres that the FRS can use to identify the potential for people to move into higher level roles.

Although the IPDS hub closed on 31 December 2005, the FRS requested on-going national stewardship for some parts of IPDS, for example national standards and Assessment Development Centres. While a final home for this has yet to be decided, in the short term the Office of the Deputy Prime Minister has funded a small interim support team at the Fire Service College. This team will continue to support the FRS through the provision of advice and guidance and will take responsibility for developing the establishment of ongoing guardianship arrangements.

A recently published brochure called “Moving On” is designed to answer many of the questions that have been asked about IPDS in the last two years. It gives advice about the components of the system and what they might mean for individuals. It explains what will happen in the future and where to go for further information.

HR managers can receive free copies of the “Moving On” brochure by contacting Margrit Hudson on 01608 812967. Copies can only be supplied in bulk, so individuals wishing to receive one should ask their line managers or HR departments.