

CROSS GOVERNMENT GROUP ON GAS SAFETY AND CARBON MONOXIDE (CO) AWARENESS

ANNUAL REPORT 2011/12

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Introduction

The Cross Government Group on Gas Safety and Carbon Monoxide (CO) Awareness reconvened in June 2009 to ensure a joined-up approach across departments, the devolved administrations and other governmental bodies to improve gas safety and tackle carbon monoxide risks from all fuels. The Group, whose members are listed below, also aims to develop effective government strategies and promote knowledge and understanding of gas safety and carbon monoxide (CO) risks and how to manage them.

- Department for Business, Innovation and Skills (BIS)
- Department for Communities and Local Government (DCLG)
- Department of Health (DH)
- Health and Safety Executive (HSE)
- Health and Safety Executive for Northern Ireland (HSENI)
- Health Protection Agency (HPA)
- Health Protection Scotland (HPS)
- Office of Gas and Electricity Markets (Ofgem)
- Partnerships for Schools
- Scottish Government
- Welsh Government

Gas safety and more broadly carbon monoxide awareness is a truly cross government issue with the majority of Government departments, the devolved administrations and other governmental bodies having an interest from their particular perspective. This report provides a summary of the work carried out by all members of the Cross Government Group on Gas Safety and CO Awareness under four key headings;

- Consumer Awareness
- Supporting Professionals
- Research
- Legislation and Securing Justice

Activities in this Report cover the period Autumn 2011 to Autumn 2012.

Members of the Group met with the policy lead of the All Party Parliamentary Gas Safety Group last year to discuss CO poisoning. Various members also gave evidence to the subsequent inquiry into low-level CO exposure. Since then, further progress has been made. The Group has been renamed as the All Party Parliamentary Carbon Monoxide Group (APPCOG). Further information: <http://www.policyconnect.org.uk/appcog/>

Carbon monoxide poisoning is a serious and preventable form of poisoning. Each year there are around 40 deaths from accidental CO poisoning in England and Wales (ONS Statistics) and in excess of 200 non-fatal cases that require hospitalisation. A recent DH estimate based on the A&E Hospital Episode Statistics database shows that approximately 4,000 attend A&E each year diagnosed with CO poisoning. Further statistical data from DH (covering England and Wales), Health Protection Scotland and HSE is provided in the final section of this Report.

The DH, HPS and HSE figures reflect the differences in the relevant data sources. The DH and HPS data are based on public health information and excludes self-harm where that has been coded, but it is likely that self-harm is under-reported. HSE collects data on incidents, which are reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR). The Regulations apply to events, which arise out of or in connection with work activities covered by the Health & Safety at Work etc Act 1974. Reporting of HSE CO incidents depends on the consequences of the exposure, i.e. whether exposure results in a death or major injury.

CONSUMER AWARENESS

DH/HPA: Work with stakeholders and charities

Following increased concern over the danger of carbon monoxide poisoning from misuse of barbecues the DH/HPA provided the following contribution to the consultation by the British Standards Institute on the revision of the European Union legislation concerning barbecues and barbecue fuels (EN 1860). DH/HPA asked for the introduction of suitable warnings and suggested the wording

“WARNING! Risk of fatal carbon monoxide poisoning. Do not use indoors, in a tent or enclosed space.”

DH has regular contact with stakeholders and attends stakeholder events. In support of Carbon Monoxide Awareness Week the Chief Medical Officer, Dame Sally Davies, published a communication on the dangers of carbon monoxide poisoning and highlighted the DH estimate of 4,000 attendances at A&E in England per year. Dame Sally also warned of the dangers of carbon monoxide poisoning as part of Winterwatch and carbon monoxide poisoning was recognised as a risk in DH's Cold Weather Plan.

<http://www.dh.gov.uk/health/2011/11/co-poisoning/>

DH sponsored a School Poster Competition run by CO Gas Safety to communicate the dangers of CO to families and schools.

HSE and HSENI: Gas Safe Register

Consumer awareness of gas safety risks, the dangers of CO and the problems caused by illegal, unqualified gas fitters, continue to be at the heart of the campaign activity undertaken by Gas Safe Register.

In 2012 Gas Safe Register has continued to build on the levels of public awareness it has addressed since its launch in April 2009.

Central to this awareness raising activity is Gas Safety Week. This is the second year the Register has run a dedicated campaign week and it has continued to grow in popularity and influence. The week delivered a range of news stories, press advertising, social media activity and consumer facing events in a structured programme designed to maximise consumer awareness.

Gas Safety Week 2012 also explicitly reached out to industry to gain their support and to encourage manufacturers, retailers and registered businesses of all sizes to support the campaign with their own activity. Over 10,000 pledges were received from over 2,000 organisations. 593,000 leaflets and 14,000 posters were issued and the feedback has been almost universally positive.

A campaign summary report is available from marketing@gassaferegister.co.uk

Gas Safe Register has also undertaken specific campaigns to support other issues and groups. The All Party Parliamentary Gas Safety Group called for action to raise awareness of the CO risks posed by using barbecues inside enclosed areas such as tents. Gas Safe Register, alongside other members of the group, launched a summer campaign using social media, posters and leaflets, case studies and PR to communicate the messages to the public. This very timely message was enthusiastically supported. There was significant print media and broadcast coverage including ITV's Daybreak, Sky TV, Regional TV and 155 items of radio coverage.

A campaign summary report is available from marketing@gassaferegister.co.uk

Throughout the summer of 2012, HSENI promoted the Gas Safe Register's barbecue safety campaign in Northern Ireland. The campaign was launched to highlight the dangers of using BBQs in areas without an adequate supply of fresh air. Over 7,000 promotional items were distributed to campsites, caravan parks and forest parks in Northern Ireland. Promotional material, including leaflets and posters, were also delivered to major supermarkets, camping shops, boat marinas/retailers, garden centres, local councils, leisure centres, caravan dealers, airports and DIY stores.

HSE: Domestic gas e-Bulletin

Subscription to HSE's gas e-Bulletin has grown threefold since last year's report. <http://www.hse.gov.uk/gas/ebulletin.htm>

HSENI: Gas Safety Week

HSENI launched an advertising campaign in support of Gas Safety Week which ran from 10 to 16 September 2012. This campaign was aimed at the general public, gas engineers and trade stores. Northern Ireland's gas companies - Phoenix Natural Gas, Firmus Energy, Calor and Flogas backed the campaign, which was widely supported by local and national media and key online sites.

Social media also played a big part in getting the message out, as key influential media outlets such as NI4Kids helped drive conversation about the initiative across sites like Twitter and Facebook.

Stormont Assembly members added their weight to the campaign by reiterating the message and driving the message home to constituents across the region.

Emergency services including Northern Ireland Fire & Rescue Service (NIFRS) pledged their support and NIFRS instructed local fire-fighters to complete leaflet drops to help encourage householders to only use Gas Safe registered engineers to fit, fix and service their gas appliances.

Northern Ireland's Gas Safety Week also enjoyed strong support from local councils who got behind the campaign to help deliver the 'Get Gas Safe' message to thousands of people across Northern Ireland. Council staff pledged their support to Gas Safety Week by delivering leaflets, posting Facebook updates and circulating press releases to their local newspapers.

To mark the week, staff from HSENI were on hand to give advice at a series of gas safety 'road shows' which took place at key B&Q outlets near Belfast and Londonderry. HSENI staff also delivered over 20,000 leaflets to 150 local trade stores, with gas safety staff also taking the time to speak to gas engineers about the importance of Gas Safety Week.

Radio advertisements, leaflets and news stories in local and trade press also appeared as part of the Northern Ireland Gas Safety Week campaign.

HSENI: Carbon Monoxide Awareness Campaign

The second year of the HSENI "Watch Out - Carbon Monoxide Kills" awareness campaign went live throughout Northern Ireland on 1 November 2011. The campaign was delivered via a range of multi media including TV, radio, outdoor, press and online. Emphasis this year was placed on the importance of servicing and maintenance of home heating appliances. The campaign covered all fuels and was supported by both an information helpline and a dedicated website <http://www.hseni.gov.uk/watchout>

Consumer research before and after the campaign showed that the campaign performed very well and provided strong pointers for how it could be refreshed for a repeat campaign, which is currently being planned for winter 2012/2013, starting week commencing 5 November.

HSENI also showed its support at the launch of the Republic of Ireland's Carbon Monoxide Awareness Week at the Merrion Hotel, Dublin, on 24 September 2012.

HSENI: Girl Guides badge

Following a very successful three-month pilot scheme for a CO Girl Guides badge in June 2012, it was decided to roll this out to all the Girl Guides' Associations in Northern Ireland. There are over 12,000 members of the Girl Guides in Northern Ireland and this badge is aimed at all ages within their organisation (Rainbows, Brownies, Guides). This badge is aimed at improving awareness of CO poisoning amongst younger people, providing key information not only for their own future but also for their parents, grandparents and peers. The badge pack is generic in nature and it is anticipated that this can be rolled out to other youth organisations in Northern Ireland such as the Girls' Brigade, Boys' Brigade, Scouts, Church Organisations, and Youth Initiatives etc.

The Minister for Enterprise, Trade and Investment, Arlene Foster MLA, officially launched this badge on 19 October 2012.

HSENI: 'TOXIC' - Carbon monoxide drama

HSENI will be funding the roll-out of a CO production called 'TOXIC'. The drama, which has been developed by a local theatre company "Spanner in the Works", aims to highlight the dangers of CO to school children and local community groups in Northern Ireland. The primary objective will be to challenge perceptions and communicate a range of messages based on CO gas, its dangers and prevention messages. The drama can be used as a stand alone production or can be used as an introduction to workshop discussion or formal presentations.

HPA: Awareness material

HPA supports DH in the production of a number of materials which are issued over the winter period which provide information on and warnings of the dangers of CO poisoning: the joint Chief Medical Officer's and Chief Nursing Officer's letter to all GPs and nurses on CO; Cold Weather Plan; Winter Watch.

HPA: Press releases

HPA issued a press release to raise public awareness of the dangers from CO poisoning from inappropriate use of barbecues and issued a national press release to mark Carbon Monoxide Awareness Week to raise awareness about CO through the national media. HPA regional units produce regionally focussed press releases based on the national release to raise awareness through local media.

HPA: Stakeholder meetings and events

The HPA attends and organises stakeholder group meetings and events.

Ofgem: Gas distribution price control review

In 2007, Ofgem published the Supply Licence Review, which considerably increased the obligations of licensed gas suppliers to keep consumers aware of the dangers of natural gas and CO.

Ofgem: Theft of gas initiatives

Theft of gas increases the costs paid by customers and can have serious safety consequences. Following extensive industry engagement and consultation, Ofgem concluded that changes are necessary to:

- strengthen the obligations on gas suppliers to detect, prevent and investigate theft;
- improve the incentives on individual suppliers to detect theft;
- Improve the ability of suppliers to collectively assess the risk of theft occurring; and
- improve the standards of investigations into suspected theft.

In order to implement these changes, Ofgem has consulted on introducing a new licence condition for gas suppliers to support on these proposed new obligations. This would require gas suppliers to: put in place a central theft risk assessment service; set out the principles behind an incentive scheme to increase theft detection; and support industry participants in developing a code of practice for how gas suppliers and gas transporters should undertake theft investigations.

<http://www.ofgem.gov.uk/Markets/RetMkts/Compl/Theft/Pages/Theft.aspx>

Ofgem: Gas distribution price control review

The licensed gas distribution network operators (GDNs) are subject to price control mechanisms, which both regulate revenues and set standards for quality of service. Work undertaken as part of the current 2008-13 price control and the more recent engagement with stakeholders as part of the new RIIO-GD1 price control (effective from April 2013 to March 2021) have shown there is support for encouraging GDNs to consider measures that will raise awareness and reduce the dangers of CO. As a result, all the GDNs are engaged in a number of CO-related initiatives and trials. Ofgem anticipate these will assist in assessing how the GDNs can contribute further to reductions in occurrences of CO incidents in a cost-effective and measurable way. The RIIO-GD1 Customer and Social Issues Work Group (which includes HSE) has placed considerable emphasis on CO. The GDNs have submitted their RIIO-GD1 business plans and these all contain proposals to raise awareness and reduce the risks of CO. Ofgem published its response to these plans in Initial Proposals on 27 July 2012 and following further consultation will publish Final Proposals in December 2012. <http://www.ofgem.gov.uk/NETWORKS/GASDISTR/RIIO-GD1/Pages/RIIO-GD1.aspx>

Welsh Government: Carbon Monoxide Awareness

An article was included in the Chief Medical Officer Bulletin about the dangers of CO poisoning.

<http://wales.gov.uk/topics/health/ocmo/publications/cmo-updates/update54/?lang=en>

Welsh Government: Other activities

The Welsh Government issued a press release in May warning campers and caravan owners to be aware of the dangers of CO poisoning in the holiday season. This followed from some press reports of incidents of campers using disposable barbecues and gas-powered appliances indoors.

<http://wales.gov.uk/newsroom/healthandsocialcare/2012/6353195/?lang=en>

DCLG: Fire Kills Campaign

Although the Fire Kills campaign targets fire safety messages, some - such as barbecue safety and chimney safety - have clear crossovers into CO issues. The effective partnership between the Department and community safety teams at fire and rescue authorities across the country provides an avenue for CO messages to be delivered to consumers. Promotional material created by Fire Kills campaign partners - such as posters, leaflets and bespoke websites - is made available to authorities to use in their community outreach

activity. Additionally, the national Chimney Fire Safety Week coordinated by the Fire Kills campaign provides a hook on which fire and rescue authorities and the chimney and fuel sectors can hang awareness raising activity.

SUPPORTING PROFESSIONALS

DH and HPA: The Smoking Cessation Carbon Monoxide (CO) card

The card was reissued as part of the nationwide Stoptober campaign. This is an aid for health professionals to use with patients attending smoking cessation clinics. Levels of CO, which is present in tobacco smoke, are measured in the patient's breath to monitor progress towards stopping smoking. However, patients who are compliant with the smoking cessation programme but still record higher than expected CO levels may have been exposed to environmental sources of CO. The card is used to help identify such cases, which can have serious health consequences, but are notoriously difficult to diagnose.

http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1296683193634

HSENI: Gas Safety Working Group for Northern Ireland

HSENI continues to facilitate its bi-monthly Gas Safety Working Group for Northern Ireland in working with key stakeholders to drive joint initiatives. The group includes representatives from HSENI, Local Government, the General Consumer Council, Gas Safe Register and all the suppliers of liquefied petroleum gas and natural gas in Northern Ireland. There are also representatives from the Republic of Ireland's Commission on Energy Regulation and Bord Gais Energy. When appropriate, representatives from other organisations are invited to participate at group meetings.

During 2011/2012, activities of the group in the areas of gas safety and CO awareness focussed on landlords' duties, risks from gas cookers, ventilation in commercial kitchens, flues in voids and buried LPG pipe work.

HPA: Training

The HPA holds workshops through the country to assist local authority personnel, healthcare practitioners, emergency responders, HPA staff, government departments and industry in understanding their role in preventing and responding to CO incidents. 2012 – HPA South West region training day with the Centre for Radiation Chemicals and Environmental Hazards (London & Chilton).

HPA: Scientific Seminar on CO

In November 2011 HPA held a seminar on CO which was supported by the Department of Health. Dr David Penney (retired Professor of Physiology, Wayne State University, Detroit) was the guest speaker and presentations of work were also given by the Department of Health, HPA, Frimley Park Hospital and the Institute of Occupational Medicine, Edinburgh. The seminar was attended by local authority personnel, healthcare practitioners, emergency responders, university research fellows, HPA staff, government departments and industry.

HPA: Carbon monoxide response work

The HPA receives notifications from the emergency services, local authorities and GP and hospital staff about incidents of CO poisoning in England and Wales. To encourage the notification of such incidents, HPA staff provide ad hoc training to local partners and have participated in local CO initiatives to identify CO poisoning.

HPA: Tools to aid diagnosis

The HPA is updating its tool for healthcare professionals to aid diagnosis of CO poisoning through the use of the acronym 'COMA' to assist in remembering four simple questions that could be asked to either raise or reduce suspicion of CO poisoning in a patient:

- C** - Cohabitees/companions: Is anyone else in the property affected (including pets)?
- O** - Outdoors - do your symptoms improve when out of the building? (better outdoors')
- M** - Maintenance - Are your fuel-burning appliances and vents properly maintained?
- A** - Alarm - do you have a CO alarm?

This acronym has been included in a poster at the British Toxicology Society meeting and aired on Radio 4. Letters informing healthcare professionals of this acronym have been published in the Emergency Medicine Journal and the British Journal of General Practice

HPA: Presentations

At the HPA conference 2012, oral presentations were given and posters displayed on the subject of CO.

HPA: Publications

The HPA published a paper "Carbon monoxide from neighbouring restaurants: the need for an integrated response" Journal of Public Health

<http://jpubhealth.oxfordjournals.org/content/early/2012/03/16/pubmed.fds023.full?keytype=ref&ijkey=6n6ZQosPHiwB1PT>

Publications have also been made on CO in the HPA's Chemical Hazards and Poisons (CHaP) reports.

<http://www.hpa.org.uk/Publications/ChemicalsPoisons/ChemicalHazardsAndPoisonsReports/>

HPA was represented on the Zero Carbon Hub Ventilation and Indoor Air Quality Task Group which reported on 'Mechanical ventilation and heat recovery in new homes'. This included consideration of exposure to CO.

http://www.zerocarbonhub.org/resourcefiles/ViaqReport_web.pdf

The Scottish Government: Building Standards Division Scotland: Guidance document covering biomass installations to new and existing buildings

This guidance document raises the issue of CO poisoning and provides guidance on how to reduce the risks. The guide is available on the Building Standards section of the Scottish Government website (www.scotland.gov.uk/bsd).

Health Protection Scotland: Supporting local authorities in investigating elevated CO levels in accommodation directly above takeaways

Health Protection Scotland has been involved in supporting local authorities in Scotland in relation to a number of incidents where elevated CO levels have been identified within residential properties situated directly above fast food takeaways. In most cases, these incidents have, initially, been reported to the local authority as odour complaints, with subsequent investigations identifying elevated CO and carbon dioxide levels. It was hypothesised that residents living above fast food takeaways may be at risk of CO exposure, which could potentially be identified through using odour from the takeaway as a proxy for CO presence.

In order to investigate the extent of this problem in Scotland, a pilot study was conducted within several residential properties located above hot food takeaways within, in the first instance, one local authority area. The key aim of the investigation was to develop and validate a methodology that could subsequently be applied to a wider study covering a larger geographical area and a larger number of premises.

The follow-up study highlighted the problems that may be encountered in conducting a larger-scale investigation into this topic. Whilst, in previous incidents, odours in the form of strong cooking smells from takeaway restaurants were detected within residential properties and, when investigated, were found to be accompanied by rising combustion gases from the kitchens below, it appears unlikely that concentrations of CO will be high enough within all adjacent properties to allow useful statistical investigation

However, investigations did demonstrate that, with adequate intervention, e.g. increased ventilation or interlocking, the exposure to individuals could be minimised.

The recommendations from the study were, therefore:

1. Due to the difficulties in securing premises and issues with obtaining meaningful data, a wider survey was not recommended.
2. Environmental Health professionals should always consider the possibility of CO emissions when investigating an odour complaint in high-risk residential properties (associated with commercial cooking premises).
3. Air monitoring data from such high-risk premises should be collated centrally and studied in more detail to gather evidence on the links between odour and presence of combustion gases.
4. Successful mitigation of CO exposure, through increased ventilation, has been demonstrated and should be promoted by enforcers investigating odour issues in premises of this type.

RESEARCH

DH: Report into the international experience of pre-hospital monitoring for CO

DH commissioned a report into the international experience of pre-hospital monitoring for CO in the environment and patients. The report demonstrated that both are in use in several countries but that evaluations of cost/benefit of measuring levels of CO in the environment or in patients prior to hospital have not been carried out.

HSE: Gas Safe Register

HSE has been working with Gas Safe Register on addressing consumer behaviours, identifying what can act as barriers or triggers for different types of consumers, e.g. on whether to have gas appliances serviced. Gas Safe Register has carried out research, and held focus groups into what customers think about gas safety, and how this can have an impact on their behaviour. This has led to consumers being categorised into six segments, ranked in terms of gas safety behaviour from 'Safest' to 'Riskiest'.

Gas Safe Register has begun an innovative project looking at behaviour change among gas consumers. Current consumer campaigns are mainly aimed at raising awareness of issues, but this project takes activity one step further – by encouraging consumers to act. A comprehensive research project identified the attitudes, motivations and barriers held by consumers. This was used to develop a targeted pilot project based on the improved understanding of gas consumers.

Gas Safe Register is now conducting the pilot programme in the north west of England which is utilising a number of tools, including a digital 'Gas Map' tool. This has been designed to help consumers assess their own levels of risk and then sign up for reminders to have annual gas safety checks undertaken.

A research report 'Being Gas Safe – Audience research and segmentation to support behaviour change' is available from marketing@gassaferegister.co.uk

HSE/HPA: Merseyside FRS and John Moores University

HSE has worked as part of the CO monitoring study run by Merseyside Fire and Rescue Service. HSE has advised on the development of the project as well as the regulatory aspects of the work. HSE has facilitated joint working on the project with Gas Safe Register.

The HPA is providing ongoing advice to the Merseyside Fire and Rescue Service and John Moores University research work on CO awareness in Merseyside.

<http://www.merseyfire.gov.uk/aspix/pages/LatestNews/NewsDetail.aspx?id=427>

HPA: Environmental public health tracking

The HPA is involved in ongoing research on an environmental health tracking project which is investigating reasons behind CO alarm activation in residential premises.

<http://www.hpa.org.uk/ProductsServices/ChemicalsPoisons/EnvironmentalPublicHealthTracking/>

HPA: Indoor Air Working Group

Research work has been identified on CO. Scoping projects are being discussed.

HPA: Neuroepidemiology network

A network has been developed between HPA and London School of Hygiene and Tropical Medicine to develop research ideas in the field of neuroepidemiology.

LEGISLATION AND SECURING JUSTICE

BIS: Product Safety

The European Commission are still working towards revision of the gas appliance product safety legislation, BIS remain actively engaged to ensure the proposal builds on the experiences gained from the current legislation and that the legislative measure continues to provide a high level of safety for the consumer while ensuring burdens on business are justifiable.

BIS have been actively engaged in resolving cross Europe safety issues such as the tragic deaths of UK and other Europeans citizens from exposure to CO from solid fuelled outdoor barbecues used indoors by consumers both for cooking and as a source of heat.

BIS continues to participate in national and European activities to both encourage understanding and compliance with the product safety legislation to work for a common understanding of the requirements of the legislation and for its observance. For the next year BIS, while dealing with continuing budgetary constraints, intend to remain closely engaged in ensuring that new products being made available on the market are safe and the product safety legislation is fit for purpose. BIS will continue to engage to support the stakeholders and enforcement regime.

HSE: enforcement activities

HSE continues to work to secure justice and provide consumer protection where gas safety incidents are highlighted. This may be through the issue of an enforcement notice or prosecution in the event of a breach of the law. 13.8% of HSE's prosecution informations¹ are brought under the Gas Safety (Installation and Use) Regulations 1998. This is the highest percentage other than informations laid under the broader cover of the Health and Safety at Work etc Act 1974.

Significant cases have included that of a builder in Leyton who was fined £75,000, ordered to pay £25,452 costs and was given 150 hours community service. He had caused the death of an elderly couple from CO poisoning by not taking into account the effect of his work on the safety of gas appliances in their property. Another gas fitter was jailed for 8 months for ignoring a prohibition notice issued by HSE and continuing to work while not Gas Safe registered.

A number of landlords, ranging from individuals to large organisations, were also prosecuted for failing to ensure that gas appliances in their properties were safe. In one case a London Local Authority was fined £83,600 and ordered to pay £15,533 in costs for failing to arrange annual safety checks. In another case, two Sheffield landlords (a husband and wife) were handed a three-month suspended prison sentences. In addition, the husband was ordered to carry out 150 hours of community service as well as paying £2500 in costs; and the wife was ordered to carry out 200 hours community service and pay £5000 in costs. They had not arranged annual safety checks nor maintained appliances and flues in their property.

¹ In health and safety cases, criminal proceedings are commenced by the laying of an Information in the magistrates' court. The Information is normally accompanied by a summons, which is intended to secure the accused's attendance at court, in order to answer the allegation(s) made against him/her contained in the Information.

HSE and Gas Safe Register: Enforcement Review

Gas Safe Register has completed an industry review of the investigation and enforcement activities undertaken by all parties involved in the enforcement of gas safety legislation. This has been published on Gas Safe Register's website

http://www.gassaferegister.co.uk/pdf/Enforcement_Review_-_Final.pdf.

Gas Safe Register supports enforcement activity through incident investigation and operational support; they undertake joint visits with HSE, HSENI and local authorities. The field operations teams also complete inspections to identify unsafe gas work and assess engineers' competence.

HSENI: enforcement and consumer protection

HSENI works through its gas team, in close co-operation with Gas Safe Register, to ensure that where legislation is breached and/or recommended guidance is not followed, appropriate action is taken to protect the public and to raise standards in the gas industry. Information is provided to engineers, businesses and the public where appropriate, enforcement notices are served when necessary and prosecutions are pursued. Similar actions are also taken with regard to liquid and solid fuels.

The Scottish Government: Building Standards Division Scotland: Consultation on requirements for CO detection within building standards

The Scottish Government is currently consulting on a series of proposed amendments to the building standards and associated guidance contained within the Technical Handbooks. One of these draft proposals involves the introduction of a requirement to provide CO detection in dwellings and non-domestic buildings containing sleeping accommodation. The proposals apply where a fixed combustion appliance that operates on carbon containing fuel, such as gas (natural or bottled), oil, coal, coke and wood is to be installed in a new or existing building.

The consultation, which opened on 20 September 2012 and will run for three months, is available at <http://www.scotland.gov.uk/Publications/2012/09/5905>. The views and opinions of all interested bodies or individuals is important to the drafting process and all responses are welcomed.

STATISTICS

The statistical section includes statistical data from DH and HSE on CO fatalities. DH and HSE use specific, but different criteria in what they record. The DH and HSE figures reflect the differences in the relevant data sources.

The DH data is based on public health information and excludes self-harm where that has been coded, but it is likely that self-harm is under-reported. HSE collects data on incidents, which are reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR). The Regulations apply to events, which arise out of or in connection with work activities covered by the Health & Safety at Work etc Act 1974. Reporting of HSE CO incidents depends on the consequences of the exposure i.e. exposure results in a death or major injury

CO mortality data

For information on Northern Ireland CO data please contact Health.Protection@dhsspsni.gov.uk

For information on Scottish CO, data please contact ceu@scotland.gsi.gov.uk

For information on England and Wales CO data, please contact COfeedback@hpa.org.uk

DH:Departmental analysis

Carbon monoxide poisoning – Department of Health analysis finds thousands affected.

DH has produced an estimate of the impact of non-fatal CO poisoning, based on the Hospital Episode Statistics (HES) A&E database. This shows approximately 4,000² people attend A&E each year diagnosed with carbon monoxide poisoning. Even though the 4,000 individuals were not admitted to hospital, this sub-lethal poisoning may lead to lasting neurological harm. Previously, DH figures have shown that there are approximately 200 serious injuries in England and Wales that require hospitalisation each year. The new estimate shows that non-fatal CO poisoning affects many more people than had been demonstrated before.

CO poisoning is difficult to diagnose as symptoms can be mistaken for common ailments such as flu or food poisoning. GPs have been alerted to this new estimate through the DH GP and Team Practice Bulletin and will be able to download a diagnostic tool to aid diagnosis and a previously published joint CMO/CNO letter, which gives the most up-to-date information on CO poisoning.

Prevention remains the key to tackling this “silent killer” – people and families can protect themselves by:

- Having all appliances, flues and chimneys correctly installed and serviced by trained, competent and registered engineers³.

² In 2009/10 13 out of 172 units reporting in A&E HES recorded at least 50% of their cases with ICD 10, amounting to over 1,000,000 records (6.5% of the total attendances recorded in A&E HES). Within these trusts, 255 attendances with a mention of carbon monoxide poisoning were recorded. On the assumption that these trusts make up a representative sample of the country as a whole, a simple calculation scaling up to the England total, would suggest there were about 4,000 attendances in total as a result of carbon monoxide poisoning.

³ Gas Safe Register (gas appliances), HETAS (solid/fuel biomass) and OFTEC (oil appliances).

- Keeping rooms well ventilated while using an appliance.
- Installing an audible approved CO alarm in the home.

DH analysts have also compiled mortality statistics from the Office of National Statistics for accidental carbon monoxide poisoning 2001-2011.

Number of deaths from accidental poisoning by carbon monoxide, England and Wales, 2001-11^{1,2}											
Provisional England and Wales breakdown based on analysis by DH. Figures not yet confirmed by ONS.											
	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
England	49	40	33	32	16	32	45	30	34	28	33
Wales	8	6	3	2	6	9	1	8	4	4	1
Non-resident	2	-	-	-	-	-	1	1	1	-	-
Total registrations	59	46	36	34	22	41	47	39	39	32	34
¹ Cause of death was defined using the International Classification of Diseases, Tenth Revision (ICD 10). Deaths were selected where the underlying cause of death was accidental poisoning due to other gases and vapours (ICD 10 code X47), and where the secondary cause of death was the toxic effect of carbon monoxide (ICD 10 code T58).											
² Deaths registered in each calendar year.											
Source: Office for National Statistics											
Analysis by DH HIPD Analysis Team											

Scotland: Mortality Figures 2001 - 2011

Carbon monoxide deaths (ICD 10 code: X47) data from the General Register Office for Scotland. Data range 2001 – 2011.

Mortality statistics for accidental CO poisoning in Scotland

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Deaths by CO (X47)*	2	1	0	0	2	1	0	2	1	2	2

National Records of Scotland, Vital Events Reference Table 6.12

*X47 Other gases and Vapours (Carbon Monoxide)

Health and Safety Executive published statistics

<http://www.hse.gov.uk/statistics/tables/ridgas.xls>

Table RIDGAS

Incidents relating to the supply and use of flammable gas (a) 2007/08 - 2011/12p

		2007/08	2008/09	2009/10	2010/11	2011/12p
Number of incidents (b)	Explosion/fire	31	27	21	36	26
	Carbon monoxide poisoning	147	172	196	229	168
	Other Exposure	12	4	6	13	8
	Total	190	203	223	278	202
Number of fatalities	Explosion/fire	2	2	1	3	1
	Carbon monoxide poisoning	13	15	9	13	3
	Other Exposure	3	1	-	1	.-
	Total	18	18	10	17	4
Number of non-fatalities	Explosion/fire	37	30	27	48	35
	Carbon monoxide poisoning	191	289	292	368	289
	Other Exposure	10	5	11	12	9
	Total	238	324	330	428	333

Notes:

p = Provisional

(a) Mainly piped gas but also includes bottled LPG.

(b) An incident can cause more than one fatality or injury

Regulation 6(1) of RIDDOR places a duty on certain conveyors of gas (including LPG), to notify HSE of an incident involving a fatal or major injury that has occurred as a result of the distribution or supply of flammable gas. The statistics published above are as reported to HSE. When a report is made under Reg 6(1), it will be at an early stage of the incident, thus the detailed circumstances of the incident will not have been confirmed.

HSE also provides details of members of the public who have died in reportable domestic gas incidents on their website. For 2011/12 <http://www.hse.gov.uk/foi/fatalities/2011-12.htm>