Fire, Gas and Carbon Monoxide Safety Regulations:
what English social landlords need to know

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The Hyde Group
Making a lasting difference
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Health and safety is one of the most important issues for social landlords. The sector has a good record in avoiding fire, gas and CO fatalities and injuries, but it could do more.

This report sets out the legal and regulatory responsibilities on landlords in respect of fire, gas and CO health and safety.

In this guide we summarise these responsibilities, explore the opportunity for using new technology to improve safety monitoring and set out some of the key issues that need to be addressed if the sector is to maximise care for residents.

The main findings of this guide are:

- A consistent approach to fire, gas and CO risk assessment is required in social housing
- Landlords should review their risk assessment in terms of the installation of CO alarms
- Voluntary adoption by social landlords of the new PRS carbon monoxide (CO) safety standard is necessary if further legislation and regulation is to be avoided
- Social landlords can benefit from new technology, particularly when preventing CO poisoning
- Improved gas, fire and CO safety access rights are required by landlords
- Awareness of CO risk is increasing but landlords can do more to inform tenants of the risk
- A MOT-style approach to gas safety checks would be helpful
- Rationalising of health and safety rules and regulations could improve resident safety

HouseMark is publishing this report as part of its work on innovation, notably its desire to explain the business case for using new technology to better manage risk. Hyde Group has already adopted a prime focus on health and safety and is keen to promote debate on the issue. Hence this report is published jointly by HouseMark and Hyde Group.

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About this guide

This guide sets out the current responsibilities for English landlords in the social and private sectors on fire and gas safety; it examines rules and regulations; and sets out some key issues for social landlords to consider. We believe that it is unique in doing so.

The guide is aimed at informing the work of those at social landlords with operational responsibility for fire and gas safety.

It is also intended to serve as a reference point for executives and the councillors and board members of social housing providers who have governance responsibility for risk management.

The guide is part of a series covering the four nations of the UK. This series is the result of interviews with individuals and organisations across the UK (see ‘Acknowledgements’), supplemented by desk research. We are particularly grateful for the assistance given by the National Social Housing Fire Strategy Group, Hyde Group and River Clyde Homes.

Executive Summary

The scale of the issue

Awareness and the management of risk related to fire, gas and carbon monoxide (CO) poisoning has improved significantly in recent decades, particularly in the social housing sector.

In all sectors combined, reported incidents, injuries and fatalities have fallen consistently in over the last 30 or so years - but the numbers are still too high.

Department for Communities and Local Government statistics show that there were 215 people killed in England in fires in dwellings in 2013/14 and 6,117 injuries. By comparison in 1981/2 dwelling fires in Great Britain – for which England makes up more than 80 per cent – caused 745 deaths. However, an estimated 7,350 were injured.

The figures for carbon monoxide (CO) deaths, while less comprehensive, point to a similar trend, with 24 deaths in England and Wales in 2013 – down from 47 in 2007. However, an estimated 4,000 were injured.

The level of awareness of the dangers of domestic fires is far higher than a generation ago when, in 1988 just 8 per cent of households had smoke alarms, compared to almost 90 per cent today. There have been some major advances on tackling chip pan blazes and phasing out open-flue fires as a source of heating.

England’s social landlords house around 17 per cent of households and spend a large amount of time and resources each year doing their best to keep people safe. This is supported by the approach taken by the regulator, the Homes and Communities Agency, in enforcing the ‘serious detriment’ test in its consumer standard.

As a result, there are very few fatalities in social housing. Where they do occur, such as the Lakanal House and Shirley Towers disasters, the level of sector concern has led to campaigns by Inside Housing, new guidance from the Local Government Association and the formation of the National Social Housing Fire Strategy Group.

Social landlords have invested in a variety of technologies to improve fire, gas and carbon monoxide safety. This tends to involve integrated fire and heat detection systems that will automatically take a number of steps in the event of an alarm being triggered. These steps include alerting the fire service, returning all lifts to the ground floor (if relevant) and opening the fire escapes.

But can social landlords do more to evaluate and prevent injuries or fatalities?

A consistent approach to fire, gas and CO risk assessment

All research respondents were aware of the need to meet fire and gas safety requirements. However, the scope of the approach taken by social landlords varies considerably. Some are simply meeting their basic requirements on fire or gas and taking the risk that there will be no problems, while others are going far beyond this and planning for future changes in tenant lifestyles, changes in regulation and changes in technology.

Respondents were also aware of the risks of carbon monoxide poisoning, with several implementing CO alarm installation programmes. However, as there is no blanket requirement to install CO alarms in social rented homes, the approaches vary markedly and mean some tenants are protected by CO alarms, while others are not.

Concerns have also been expressed in the housing sector about the paucity of in-house skills available to conduct fire risk assessments. This has meant that the quality of assessments can vary. Feedback suggests a need for upskilling on fire risk assessment in the sector to address this.

As housing association boards and local authority councillors bear ultimate responsibility for the actions of their organisation, board members and councillors need to ensure they are fully informed on health and safety matters outlined in this report on fire and gas safety.

Landlords should review their risk assessment in terms of the installation of CO alarms

Carbon monoxide leaks can and do occur from appliances other than just gas boilers. For instance, a study by Hackney Homes raised a concern that, while gas boiler servicing is extremely effective at improving safety, greater risks from carbon monoxide poisoning are presented by other gas or solid fuel burning appliances, such as gas cookers, coal fires, etc.

Gas boilers may be well-regulated and as a result generally safe, but other gas or fuel-burning appliances (such as gas cookers) may not be. As a result, there is an emerging view that CO alarms should be installed in rooms wherever fuel-burning appliances are present, whether they belong to the landlord or tenant.
Executive Summary

Voluntary adoption of new PRS carbon monoxide (CO) safety standard by social landlords is necessary if further legislation and regulation is to be avoided

From October 2015, private rented sector (PRS) landlords are now required to provide working smoke alarms on at least every floor of their properties and a CO alarm in each room where there is a solid fuel-burning appliance.

Local authorities have to enforce many of the relevant fine and gas safety regulations. This gives rise to the rather odd situation that local authorities will be enforcing rules on private sector landlords that council properties are not required to meet.

The All-Party Parliamentary Carbon Monoxide Group (APPCOG) report of April 2015 recommended that “Building Regulations should be amended to require social housing providers to fit and maintain standard-compliant carbon monoxide alarms wherever a fuel-burning appliance is installed.”

A number of social landlord respondents to this research called for this step. However, the National Social Housing Fire Strategy Group suggests that voluntary adoption of this CO standard by social landlords would obviate the very real possibility of increased future legislation or regulation.

Social landlords can benefit from new technology, particularly when preventing CO poisoning

Advances in technology, particularly through the use of sensors placed in ‘smart’, web-enabled fire and CO alarms, will make it easier - and possibly cheaper in the long run – for landlords to offer a higher standard of care to tenants, while managing their own liability risk more effectively.

Improvements in technology and the advent of offer clear potential to improve the level of customer care and provide a more comprehensive approach to managing risks. Smart technology enables:

• Alarm sensors and batteries to be automatically and remotely tested and results/faults communicated to the landlord on a real-time basis
• Alerts sent if the devices are tampered with, e.g. tenant or contractor disables the device
• All information gathered can be retained at a central hub. This can help inform landlord asset management analysis and decisions, as well as helping landlords demonstrate they comply with their legal health and safety responsibilities

Some landlords, such as Kirklees Neighbourhood Homes and Hyde Housing Group, are piloting the use of smart CO alarms that can remotely and automatically provide 24/7 status updates on all levels of CO emission and offer the potential for significant cost savings as a result.

The use of such technologies has been endorsed by the All-Party Parliamentary Carbon Monoxide Group (APPCOG) as they can help provide more data on carbon monoxide and gas safety, as well as the health risks to tenants and the landlord’s employees/contractors of constant exposure to low levels of CO.

It is to be hoped that the new fiscal pressures on social landlords will not prevent them from using planned maintenance programmes to install CO alarms or increased numbers of smoke alarms.

The government has significantly reduced the resources of social landlords in England by implementing a four-year rent cut of 1% a year from April 2016. This pressure on income is being compounded by ongoing reductions in the welfare benefits available to many households, which will in turn further reduce income collection and deplete resources.

One of the likely responses by social landlords is a reduction in, or delay, to planned maintenance programmes – the very programmes under which health and safety upgrades normally occur. For council landlords, this position will be exacerbated by lost revenue resulting from forced property sales if the current Housing and Planning Bill is enacted without amendment.

Social landlords should consider adapting asset management programmes to adopt an ‘invest to save’ approach, supported by technology where possible. When conducting risk assessments aligned to any rescheduling of planned maintenance, social landlords should ensure that the opportunity to benefit from new technology is not missed.

Awareness of CO risk is increasing but landlords can do more to inform tenants of the risk

A recent study by the Gas Safety Trust found only 13 per cent of the general public can identify the symptoms of carbon monoxide poisoning (headaches, vomiting, breathlessness, weakness, confusion, chest pain – which can be similar to flu symptoms). Regarding the ‘silent killer’, carbon monoxide (CO), why is awareness so low of the risks posed by a highly poisonous gas that cannot be smelled, tasted or seen?

Residents of social housing are a particularly high-risk group for CO poisoning, so steps taken by social landlords to ensure residents are aware of the dangers of CO are therefore particularly important.

Social landlords play a ‘trusted messenger’ role in their communities. They can thus play an important part in effectively communicating to residents about the dangers posed by fire, gas and carbon monoxide and how best to deal with them safely.

The importance of this role in effectively communicating the dangers posed by CO poisoning in particular, has been highlighted by APPCOG.

A MOT-style approach to gas safety checks would be helpful

Social landlords, particularly via the Gas Access Campaign, led by Home Group CEO Mark Henderson - and gas safety managers have called for a new approach to gas safety checks.

An MOT-style system means that gas safety checks could be carried out up to one month before the expiry of the current gas safety check record, but the new safety check record would be dated such that it is valid for a full twelve months from the expiry date of the current safety check record.

The Gas Access Campaign has also called for housing associations to receive the same legal powers of rapid access as local authorities, in cases where tenants refuse to grant access. At this point in time, however, the Government is not minded to adopt this approach.

Improved gas, fire and CO safety access rights are required by landlords

The Gas Access Campaign has also called for housing associations to receive the same legal powers of rapid access as local authorities, in cases where tenants refuse to grant access.
Executive Summary

Rationalisation of health and safety rules and regulations could improve resident safety

At present, social landlords and their tenants face a myriad of rules and regulations concerning fire, gas, and carbon monoxide safety in their homes - as well as dealing with an array of organisations responsible for monitoring and enforcing the regulations. At present, updates to regulation require to be cross-referenced with previous guidance, thus introducing scope for error.

These rules differ depending on a number of factors such as:
• Tenure - e.g. social housing, private rented
• Property type - e.g. HMO, sheltered housing, residential care home, single property dwelling, new build or existing property

Regulations on fire safety are monitored and enforced by local authority Environmental Health departments and the relevant fire service. Regulations on gas safety are monitored and enforced by the Health and Safety Executive and the Homes and Communities Agency has the power (used in a handful of occasions) to issue a regulatory downgrade where a registered provider fails to comply with health and safety requirements.

There is a general desire among social landlords for legislation and regulations to be more easily accessible. One suggestion was a simple ‘grid’ approach that could be used by landlords and their contractors that would contain all relevant fire, gas and carbon monoxide duties in one place. Further detail could then be linked to and explored as required. This guide provides a simple grid for illustrative purposes.

Overview on fire safety
The Department for Communities and Local Government statistics show the number of fire deaths in England has fallen from 458 in 2001/2 to 273 in 2013/14. Over the same period, injuries fell from 13,948 to 7,811. There were 215 people killed in fires in dwellings in 2013/14 and 6,117 injuries.

The general trend on fatalities and injuries from fires in dwelling in England is downwards. The government has taken further steps to continue this, with the Smoke and Carbon Monoxide Alarm (England) Regulations 2015 having come into force on 1 October 2015. There is further detail below on these requirements, but a key point is that they only apply to homes in the private rented sector. This opens up a discrepancy in the standards required by social landlords and their private sector counterparts.

The six deaths caused by a fire at council-owned Lakanal House in the London Borough of Southwark in July 2009, cast a long shadow across social landlords – especially those with high-rise blocks.

In the immediate aftermath of the tragic events at Lakanal House, there was an increased focus on the duties of social landlords regarding fire safety. In addition to the high-profile fire and gas safety campaign ‘Safe as houses’ run by Inside Housing magazine, the National Social Housing Fire Strategy Group was established. This latter body represents 188 council and housing association landlords in England covering 1.7 million homes. Updated fire safety guidance was also issued by the Local Government Association that, among other issues, outlined steps to take to ensure any renovation work complied with regulations.

This section outlines the key legislation and regulations social and private landlords are required to adhere to in England as regards fire safety. This should be read in conjunction with the reference guide on page 34, which illustrates what standards landlords are required to meet at present and what changes may be coming in future.

2 http://www.shfsg.info
Overview on fire safety

Fire, Gas and Carbon Monoxide Safety Regulations: what English social landlords need to know

The Housing Act 2004 and Housing Health and Safety Rating System (HHSRS)

The measures covering fire safety in the Housing Act 2004 apply to all dwellings in England and Wales. The Act introduced a Housing Health and Safety Rating System (HHSRS), which applies to residential premises, meaning:

- a dwelling
- an HMO
- unoccupied HMO accommodation
- any common parts of a building containing one or more flats

This is the tool for assessing the living conditions of a property. The system is based on 29 possible hazards to be assessed in terms of the risk faced by the most vulnerable occupier or potential vulnerable occupier of a property.

The HHSRS provides a means of assessing dwellings, the risks present and whether that risk is acceptable. Hazard bands have been devised with group ranges of scores, ranging from bands A to J, with band A being the most dangerous and J the safest.

Under this legislation, local authorities require landlords to remedy the most serious hazards, which include fire risks such as defective heating and electrical systems. In addition, the Decent Homes Standard – the set of requirements for social housing in England implemented in 2000 and ostensibly completed by 2010 – also requires homes to be free of these hazards.

Under the Housing Act 2004, the local housing authority is responsible for fire safety in residential premises. However, the legislation also covers common parts of the building and HMOs, overlapping with fire authorities’ legislation. As a result confusion often arises over which authority has primacy, but both regulatory bodies normally try to work closely together.

The local authority may make requirements for improvements in fire precautions. In the event of serious risk, the local authority has the power to take emergency remedial action.

General fire precautions include:

- measures to reduce the risk of fire occurring
- measures to reduce the spread of any fire through the premises
- means of escape and their safe use at all times
- firefighting
- means of fire detection and warning
- action to be taken in the event of fire and mitigating the effects of fire

Building Regulations (England and Wales)

These regulations form the basis of requirements for new and upgraded dwellings across England and Wales.

New, extended and remodelled homes have to comply with the Building Regulations. Part B of the regulations covers fire safety. For blocks of flats, the Building Regulations 2010 make requirements for various fire safety measures, including means of escape, structural fire precautions, smoke control and facilities for the fire and rescue services.

After the dwelling is occupied, control of fire safety is covered by the Housing Act 2004 (including the Housing Health and Safety Rating System) and the Regulatory Reform (Fire Safety) Order 2005.

In terms of requirements for new homes and individual flats, Part B of the Building Regulations 2010 says there must be a fire alarm, smoke control arrangements such as ventilation systems, a smoke detector and emergency escape lighting.

Building Regulations also apply to alterations, as inappropriate and unauthorised alterations can undermine the measures provided to ensure safety of occupants from fire. Significant or ‘material’ alterations must be approved by Local Authority Building Control.

As Local Government Association guidance says: ‘Sometimes it can be difficult for the responsible person to judge whether or not an alteration is material. In practice, any proposals to carry out alterations – to fire alarm systems, means of escape or smoke control arrangements, structural alterations and alterations to facilities for the fire and rescue service – should be submitted to a building control body to determine if approval is necessary. A common contravention is the replacement of a self-closing, fire-resisting flat entrance door by a non-fire-resisting door or by a door that is not self-closing.’

Under the Building Regulations 2010, new homes must have at least one smoke alarm on every storey of a property.

LGA guidance concerning blocks of flats says: ‘Only in unusual circumstances will a communal fire detection and alarm system be appropriate for a ‘general needs’ purpose-built block of flats.’

Social and private landlords have major responsibilities relating to fire safety in housing and these are covered under two key pieces of legislation:

- The Housing Health and Safety Rating System (HHSRS) set out in the Housing Act 2004 – enforced by the local authority, usually through the Environmental Health department. Responsibilities are set out in two places: a guide by the now-defunct Local Authorities Coordinators of Regulatory Services; and in Fire safety in purpose-built blocks of flats, drawn up by the Local Government Association.
- The Regulatory Reform (Fire Safety) Order 2005 is enforced by the local fire and rescue service and sets out minimum requirements for places of work. Although its focus is primarily non-domestic property, its scope does extend to common areas of blocks of flats as well as houses in multiple occupation (HMO), sheltered housing and residential care homes

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Fire legislation, regulations and guidance: new and upgraded dwellings

Fire legislation, regulations and guidance: existing dwellings
Overview on fire safety

Fire, Gas and Carbon Monoxide Safety Regulations: what English social landlords need to know

Fire legislation, regulations and guidance: existing dwellings

The Regulatory Reform (Fire Safety) Order 2005

The Regulatory Reform (Fire Safety) Order 2005 or the Fire Safety Order applies across England and Wales and came into force on 1 October 2006. In terms of social landlords, the Regulatory Reform (Fire Safety) Order 2005 introduced duties in relation to fire safety in the common areas of houses in multiple occupation, flats, maisonettes and sheltered accommodation in which personal care is not provided. Common parts of blocks, include corridors, stairs, any communal recreational areas, bin stores, underground car parks, and so on.

In residential buildings, the Order only applies to the common parts of flats and the front doors to living areas. In houses in multiple occupation, it applies to both the living and communal areas. Individual private dwellings are not covered by the Fire Safety Order (see Housing Health and Safety Rating System, above).

The law places a duty on social landlords to ensure they carry out fire safety assessments and act on the recommendations. Fire authorities can carry out inspections of buildings, check the landlord’s own fire risk assessment and demand changes. They can also serve enforcement orders if landlords do not comply with legislation.

However, as John Turner, regulatory lead at Anthony Collins Solicitors, has pointed out, the Fire Safety Order has sometimes proved difficult to follow because it only covers the common parts of a landlord’s premises and stops short at the tenants’ or leaseholders’ front doors. He said: “Tenants and leaseholders have no legal obligations at all under the Fire Safety Order and neither the landlord nor the fire service have any rights of entry or enforcement inside leasehold flats themselves.”

The local fire and rescue service is responsible (under the 2005 Order) for enforcing all fire safety matters in common parts of blocks, including corridors, stairs, any communal recreational areas, bin stores, underground car parks, and so on.

Case Study

Peabody Fire Risk Management

Peabody has 1,738 purpose built blocks of flats that require fire risk assessments as defined by the Regulatory Reform (Fire Safety) Order 2005, writes Robert Groom, fire risk manager, Peabody. Our portfolio covers residential blocks, street conversions, community buildings, offices and sheltered housing schemes. Currently, 98.9% of our properties have current fire risk assessments – the remaining properties are undergoing refurbishment and will be inspected when the works are completed. We also have a detailed fire risk assessment re-inspection programme which ensures that assessments are re-inspected within the time frames detailed in the current fire risk assessment.

As a result of our approach, in 2014/15 there were only 42 accidental and arson fires reported. We only had 12 fires within our dwellings, which relates to 0.04% of our total stock and is well below the national average.

How do we approach fire safety? Following a review in 2012/13, Peabody has introduced an internal Fire Risk Team, which ensures a consistent approach to the assessment process and the accompanying documents. Our fire risk assessments comply with the guidance detailed in PAS 79 and are made up of 2 parts: the fire risk assessment and an action plan. All our fire risk assessments undergo a rigorous quality assurance process to ensure these documents are accurate and compliant.

The action plan details any significant findings that require rectification within time frames for completion. In 2014/15 Peabody provided an £11 million budget to carry out fire safety structural improvements to our properties.

Peabody has a Corporate Fire Safety Policy, which outlines the process by which our Executive Committee and management devolve their responsibilities for fire safety with regard to our residents, employees, service users, visitors and contractors, who have access to our buildings. Peabody’s fire safety policy is to take general fire precautions within all buildings under our direct control, to reduce the risk to people, property and the environment from fire to as low as possible and to ensure compliance with current statutory legislation.

Peabody also has a fire risk management system which is an organised systematic decision-making process that efficiently identifies risks, assesses, or analyses risks, and effectively produces mitigation plans to reduce or eliminate these risks and to achieve reasonable and practicable levels of fire safety. The fire risk management system is a series of policies and procedures which follow the guidance detailed in PAS 7: 2013 Fire Risk Management Systems. For instance, I am responsible for the implementation of the following sections of the FRMS: Communication (Residents, Staff, Visitors and the London Fire Brigade); Fire Risk Assessment Programme and Process (processing and delivering the actions coming out of the fire risk assessments rests with the Fire Precautions and Asbestos Team); and Training.

The areas covered by the fire risk management system are:

- Fire Safety Management Roles and Responsibilities
- Communication
- Fire Risk Assessment Programme and Process
- Training
- Work Control
- Maintenance and Testing
- Emergency Planning

We have a bespoke annual fire safety awareness training programme for the different areas of the business that visit our buildings or engage with our residents. This programme is external audited or reviewed every two years to ensure that it is effective and compliant with current legislation, guidance and best practice.
Fire legislation, regulations and guidance: existing dwellings

The Fire Safety Order places the emphasis on risk reduction and fire prevention and covers:

- Measures to reduce the risk of fire and the risk of spread of fire
- The means of escape from fire
- The measures necessary to assist people in the use of the escape routes, such as emergency escape lighting, fire exit signs and measures for smoke control. Some of these measures may not be necessary in all buildings: for example, where escape routes are straightforward, easily identifiable and likely to be well-known to occupants, fire exit signs will normally be unnecessary.
- Where necessary, fire extinguishing appliances. These are not normally necessary within common parts, but might be necessary within a plant room, caretaker’s office or other non-domestic parts of the block
- Any fire alarm system necessary to ensure the safety of occupants
- An emergency plan. In a small block of flats, this may include an examination of at least a sample of flat entrance doors since these are critical to the protection of the common parts. Where there are demountable false ceilings in the common parts, it may be appropriate to lift a sample of readily accessible false ceiling tiles.

Over and above this, Hydra has a Type 4 (intrusive) assessment process in place for properties housing vulnerable residents and those of a complex construction. A Type 4 fire risk assessment has the same scope of work as a Type 3

A Type 4 fire risk assessment is the most comprehensive fire risk assessment possible. This type of assessment is also appropriate when a new landlord takes over a block of flats in which the history of work carried out is unknown and there is a reason to suspect serious risk to residents from both a fire in their own flats and a fire in neighbours’ flats.

In May 2014, Hyde entered into a Primary Authority Partnership with London Fire Brigade. The partnership provides Hyde with a regulator’s review of the fire safety arrangements in place and a consistent enforcement approach to a geographically diverse property portfolio. In November 2014, Hyde entered into a Memorandum of Understanding (MOU) with London Fire Brigade. The MOU is a commitment by both parties to share information in order to ensure a consistent and joint approach to mitigating the fire risks faced by the most vulnerable in society.

In addition, Hyde has also actively engaged with the Chief Fire Officers Association in the review of BS 9991:2015 Fire safety in the design, management and use of residential buildings and is a member of the High Risk Accommodation Group.

Discussion points: Fire safety

Fire safety after Lakanal House and Shirley Towers

Fire safety rose up social landlords’ list of priorities after six people died in a blaze at the council-owned Lakanal House tower block in the London Borough of Southwark in 2009. This intensified when a blaze in the Shirley Towers high-rise block, owned by Southampton Council killed two fire fighters in April 2010.

Although much of the safety framework that applied to housing providers was in place long before these tragic events, they sharply focused attention on fire precautions.

As one interviewee said: ‘The number one issue is what happened with the decent homes programme and how can you guarantee the work didn’t compromise on safety. A lot of time was spent snagging, no doubt, but the process didn’t necessarily involve checking compartmentations and whether the work had compromised the [fire safety of the] whole block.’

Nick Cross, then head of housing services at Southampton City Council, agreed saying ‘The key issue for us now is not so much what contractors do – it’s us, making sure the correct checks are in place at the right time by us and our representatives to ensure the fire stopping has been undertaken.’

Mr Cross added that he and his colleagues at Southampton remain completely focused on the issues surrounding fire safety, since the Shirley Towers fire.

However, he said this was perhaps not the case for other council landlords. ‘My sense is that other councils are not talking much about fire safety or health and safety issues. There was a real focus after the fires at Lakanal House and Shirley Towers, but for the past couple of years this hasn’t been the case.’

Mr Cross said a reason for this was the tough financial times local authorities were currently experiencing. ‘The financial environment is a clear factor now and it will be a concern that health and safety compliance and issues connected to it may slip down the pecking order with competing priorities.’

Case Study

Hyde Fire Risk Assessments

Hyde undertakes 3,000 plus a year Type 1 fire risk assessments in order to discharge its statutory duties in respect of the Regulatory Reform (Fire Safety) Order 2005. A Type 1 fire risk assessment is the basic fire risk assessment required for the purpose of satisfying the Fire Safety Order. Unless there is a reason to expect serious deficiencies in structural fire protection, a Type 1 inspection will normally be sufficient for most purpose-built blocks of flats. The inspection of the building is non-destructive, but even this basic fire risk assessment will include an examination of at least a sample of flat entrance doors since these are critical to the protection of the common parts. Where there are demountable false ceilings in the common parts, it may be appropriate to lift a sample of readily accessible false ceiling tiles.

A Type 4 fire risk assessment includes the work involved in a Type 3 fire risk assessment, and also non-destructive, but goes beyond the scope of the Fire Safety Order by considering the fire precautions, such as means of escape and fire detection, within at least a sample of flats. This type of fire risk assessment was not possible in the case of long leasehold flats, as there is normally no right of access for freeholders.

Fire, Gas and Carbon Monoxide Safety Regulations: what English social landlords need to know Overview on fire safety

Overview on fire safety
**Discussion points: Fire safety**

**Fire safety notices**

Inside Housing's Safe as Houses campaign in October 2009 carried out a survey which found that one in five social landlords had stepped up fire safety work on their tower blocks following the Lakanal House disaster. 16 The magazine reported in Fire safety under scrutiny (Inside Housing 16 May 2014) that the London Fire Brigade handed out 35 fire safety enforcement notices against social landlords in the year to March 2014. These notices were issued in cases where a landlord breaches fire safety laws – specifically the Regulatory Reform (Fire Safety) Order 2005. Of the 1,348 inspections of blocks of flats of four storeys or higher, 20 per cent of residences were found to require a variety of improvements. Only four of the 35 notices for social landlords were served on local authorities, with 28 given to housing associations (two were served against landlords were served on local authorities, with 28 given to housing associations (two were served against landlords). 

Social landlords we spoke to said that there were a number of reasons for the apparent difference in performance between councils and housing associations. These included differing approaches to obstruction in corridors (considered a fire risk – see below) and, in some instances, more focussed political scrutiny on the safety of the housing service. However, this is not always the case as the testimony from Southampton’s former head of housing demonstrates (see above). Andy Frankum, vice chair of the National Social Housing Fire Safety Group, said: “Existing fire safety law is open to interpretation both by enforcers and organisations. One of the common discussions in our network is about storage in communal areas and on escape routes. Fire services want everything to be sterile with nothing along the path of escape routes – especially when giving consideration to fire fighter safety. This helps prevent the spread of any fire and ensures protected escape routes can be used safely if they are needed.”

**Regulation and Governance**

Housing association boards and local authority councillors are responsible for ensuring a landlord complies with its responsibilities, as set out in the Homes and Communities Agency’s Consumer Standards. 17 If the HCA deems a housing provider has failed to meet a consumer standard and this failure has placed its tenants at risk of ‘serious detriment’, or that without intervention tenants will be at risk of serious detriment, the HCA will act. Board members will want to ensure they are managing the risk around ‘serious detriment’. For instance, that the organisation is conducting and acting on actions outlined by fire risk assessments, or that clear policies and procedures are in place so that a landlord is not simply passing responsibility for fire safety to tenants.

**Complexity of rules and regulations**

As the table on page 34 demonstrates, there are several items of legislation and accompanying regulations and guidance that social landlords must keep on top of if they are to comply with their legal obligations on fire safety. At present, updates to regulation require to be cross-referenced with previous guidance, thus introducing scope for error. Several respondents to the research identified this as an area where less complexity would simplify the role of compliance, without reducing tenant safety.

A clearer and more straightforward set of requirements for landlords would also have the benefit of potentially freeing up resources otherwise expended on ensuring legal compliance. One suggestion was a simple ‘grid’ approach that could be used by landlords and their contractors that would contain all relevant fire, gas and carbon monoxide duties in one place. Further detail could then be linked to and explored as required. The table on page 34 provides a suggested template.

**Sprinklers**

There has been much discussion since the Lakanal House and Shirley Towers fires about the installation of sprinkler systems in high-rise blocks. In their findings in both fires, coroners highlighted the vital role sprinkler systems could play in saving lives. Yet retrofitting sprinklers is expensive. In an article in July 2015, 18 Inside Housing found just 18 of 2,925 council-owned, high-rise blocks in England had sprinklers in some of their flats.

Under current regulations sprinkler systems must be installed in all new buildings in England that are higher than 30 metres. In Scotland, this rule applies to all buildings above 18 metres. Wales has gone further still and, from January 2016, all new or converted homes must contain a sprinkler system. This follows an earlier step in Wales in April 2014 when sprinkler systems were required in new and refurbished care homes, HMOs and hostels.

The National Social Housing Fire Strategy Group’s Mr Frankum said he would like to see England follow the Welsh lead and make it compulsory to install sprinklers in new homes. He added that in the past, where landlords had fitted sprinklers, the fire service has in some instances contributed to the cost through partnership working.

**Front doors**

A number of those we spoke to expressed concerns that front doors fitted by leaseholders may not adequately protect against fire risk in the block. There is no scope under the Order at present for compelling such leaseholders to comply. But the Department for Communities and Local Government says that local authorities can take enforcement action through the Housing Act 2004. However, there is little confidence among social landlords participating in this research that such an approach by councils (in partnership with housing associations where relevant) would stand up to a test in court, so the issue remains unresolved for the moment. 19

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16 Inside Housing, ‘Safe as Houses’ campaign. 
18 ‘Fire and gas: why don’t we have sprinklers?’, Inside Housing, 16 May 2014. 
Discussion points:
Fire safety

Case Study
Midland Heart Fire Safety

Midland Heart already fits smoke detectors as standard. Andy Frankum, health and safety business partner at Midland Heart, said:

‘It’s not a legal requirement, but we find it difficult to justify not putting them in as customer safety is paramount.’

For houses in multiple occupation and new-build premises, mains-powered smoke detection is installed as required by Building Regulations. But in older occupied stock, where smoke detectors are not fitted, Midland Heart fits battery-operated smoke alarms at the annual gas service or as properties become void. Batteries are checked annually until such time when the property becomes void, then mains-powered detection is installed before they are re-let.

One good example of partnership working saw Midland Heart making funds available to the local fire service to offer home fire safety checks to vulnerable customers via referrals. The fire service used some of the money to help equip homes with safety measures.

Andy said: ‘This enabled us to use the expertise of the local fire service while ensuring safety measures were targeted to those most at risk.’

He went on to say: ‘We have commissioned a big piece of work in the West Midlands which we believe is unique. Through partnership working we effectively share our property database in a secure system with the fire service – although not tenant information. The system is invaluable and something I would like to see rolled out at a national level with all fire and rescue services.’

If the fire service gets a repeat call out from a customer or anytime a fire appliance attends any Midland Heart property, the fire service enters this into a database and an email is received by Midland Heart giving details of attendance and reason for the callout.

Andy said the use of new technology should be a part of any landlord’s approach to managing health and safety and fire risks. This includes using systems and smart technology to channel data.

Andy added: ‘You have to weigh up that investment against the benefit. It means you can have good, accurate data which provides confidence and assurance that landlords have a good risk management system.’

Overview on carbon monoxide and gas safety
Carbon monoxide is known as the silent killer, with 24 deaths recorded in dwellings in England and Wales in 2013 and the Department of Health estimating 4,000 people attended A&E the same year after suffering CO poisoning.

Carbon monoxide
Carbon monoxide is known as the silent killer, with 24 deaths recorded in dwellings in England and Wales in 2013 and the Department of Health estimating 4,000 people attended A&E the same year after suffering CO poisoning. Although the fatalities are down from 47 a year in 2007, figures have fluctuated in recent years and there is a view that the statistics could be more accurate. As a result steps are being taken by Public Health England to improve the statistics by establishing a protocol for coroners conducting post mortems.

Despite the risks presented by an odourless and colourless gas, a recent survey in 2014 of the general public by the Gas Safety Trust, found only 13 per cent of 2,000 respondents were aware of the symptoms of CO poisoning (headaches, vomiting, breathlessness, weakness, confusion, chest pain – can be similar to flu symptoms).18

A report in January 2015 by the All-Party Parliamentary Carbon Monoxide (CO) Group found a widespread lack of awareness among members of the public that CO is also produced by fuel-burning appliances other than gas boilers, such as wood-burning stoves or gas cookers.19

It is also the case that recent studies have found a lack of awareness in the medical profession of the symptoms of CO poisoning. The APPC/OG has, again, been prominent in this area.20 Despite this situation, a 2015 report21 by Kings College London and Public Health England found a pattern of increasing CO poisoning admissions to hospital with increasing levels of deprivation. As social housing tends to be in more deprived areas, this finding means social tenants are therefore at higher risk of CO poisoning.

The government has been taking action to enhance the regulations requiring the provision of carbon monoxide alarms in housing. Yet, the Smoke and Carbon Monoxide Alarm (England) Regulations 2015 that were effective from 1 October 2015 only apply to private landlords. The details are outlined below, but social landlords have no requirement to install CO alarms in their homes.

Landlords participating in our research expressed concern that there is such variation in the standards required dependant on tenure and whether a property is new, upgraded or an existing home.

The table on page 34 clearly illustrates the scope for confusion and the need for social landlords to keep on top of their requirements. The benefits set out in the previous chapter of a more straightforward approach to compliance with fire requirements apply equally to those for gas and carbon monoxide.

However, the political landscape is changing. The All-Party Parliamentary Carbon Monoxide Group – which published the Carbon Monoxide: From Awareness to Action report in January 2015 – has called for social landlords to be required to meet tougher standards on CO. In its report it said: ‘Building Regulations should be amended to require social housing providers to fit and maintain standard-compliant carbon monoxide alarms wherever a fuel-burning appliance is installed.’

19 http://www.policyconnect.org.uk/appcog/research/inquiry-behavioural-insights
21 http://jpubhealth.oxfordjournals.org/content/early/2015/03/27/pubmed.5519258.full.pdf+html
Overview on carbon monoxide and gas safety

Moreover, local authorities which have retained their housing stock are in a difficult position if they are enforcing CO legislation in the private rented sector but not applying that standard to their own property. If, as seems likely, authorities move towards voluntary compliance, housing associations may feel impelled to follow them. The HCA, which has acted to classify health and safety breaches as ‘serious detriment to tenants’ and intervened accordingly as we note below, may wish to review its Consumer Standards in the light of these developments.

In its contribution to the research, the APPCOG also outlined the potential for social landlords and their operatives to play a ‘trusted messenger’ role in spreading information about the risks of CO poisoning.

Gas safety

The regulator the Homes and Communities Agency has played a more prominent role in recent years in enforcing gas safety requirements. This has centred on landlords ensuring their annual gas safety checks have been conducted as required.

An issue highlighted in this regard by housing association respondents is the difference in access powers between local authorities and housing associations. In an instance of a refusal by a tenant to grant access to a property to permit the annual gas safety check to be carried out, councils are able to obtain a court order to force access a property on the same day. The rules are different for housing associations and, as a result, it can take up to four months for permission to force access to be granted.

The Gas Access Campaign has calculated this delay and the associated legal fees cost the housing sector almost £500 million over a 10-year period.

Gas safety and carbon monoxide legislation, regulations and guidance: existing, new and upgraded dwellings

Building Regulations – part J

These cover the requirements in terms of flues, ventilation and storage for all new or refurbished homes in England that contain combustion appliances. Part J was updated in October 2015 to include requirement J3 that covers the ‘warning of release of carbon monoxide for solid fuel burning appliances’. This states: ‘Where a new or replacement fixed solid fuel appliance is installed in a dwelling, a carbon monoxide alarm should be provided in the room where the appliance is located.’ This requirement on CO alarms does not extend to gas-burning appliances.

Gas Safety (Installation and Use) Regulations 1998

The key legislation covering gas safety in the UK is the Gas Safety (Installation and Use) Regulations 1998. These specify that landlords must ensure that the gas fittings and flues are maintained in a safe condition and that a gas safety check is carried out annually on each appliance/flue. The Approved Code of Practice (ACOP) and guidance gives practical advice on the Gas Safety (Installation and Use) Regulations.

If a tenant has concerns about gas safety they may raise it with Gas Safe Register (the replacement for CORGI) or the Health and Safety Executive. The HSE may make enquiries or investigate, for example where landlords have failed to maintain gas appliances, or where unsafe gas work has been carried out. This may result in enforcement action where appropriate. Further information from the HSE can be found at: http://www.hse.gov.uk/gas/domestic/index.htm.

Overview on carbon monoxide and gas safety

Fire, Gas and Carbon Monoxide Safety Regulations: what English social landlords need to know

Gas safety and carbon monoxide legislation, regulations and guidance: existing, new and upgraded dwellings

Fire, Gas and Carbon Monoxide Safety Regulations: what English social landlords need to know

23 http://www.agsm.uk.com/access-campaign/

22 http://www.agsm.uk.com/access-campaign/


Gas safety and carbon monoxide legislation, regulations and guidance: existing, new and upgraded dwellings

The Smoke and Carbon Monoxide Alarm (England) Regulations 2015

Since 1992, Building Regulations have required new homes of all tenures to have at least one hard-wired smoke alarm installed. There is no such overarching requirement on CO alarms.

In March 2010, the Communities and Local Government department announced it would alter Part J of the Building Regulations to require carbon monoxide alarms to be installed in homes with new or replacement solid fuel heating systems, which burn wood or coal.

The Smoke and Carbon Monoxide Alarm (England) Regulations 2015 came into force on 1 October 2015.16 The new rules apply to all private rented properties in England. Social housing is not covered by these regulations.

The new legislation means that private landlords will be required by law to install a working smoke alarm on every storey of the property and a CO alarm in every high-risk room, such as those with a solid fuel-burning appliance.

As mentioned earlier, the law does not, however, require carbon monoxide detectors to be fitted into all homes with gas appliances – though some social landlords are now choosing to do so (see discussion points, on page 27).

Local authorities are responsible for enforcing the new regulations and those private sector landlords who fail to install smoke and carbon monoxide alarms face sanctions and a civil penalty.

If a private landlord has been notified by the relevant local authority of a requirement to take action at a property to adhere to the regulations, it must do so within 28 days of receiving the notice. If it fails to do so, the local authority is empowered to appoint a contractor to carry out the required work – subject to the tenant granting entry. A fine of up to £5,000 can then be levied by the local authority on the landlord. The local authority will determine the size of the fine, based on a set of principles it has published. A landlord can appeal against the fine to the local authority and again to a first-tier tribunal.

England’s 46 fire and rescue authorities are expected to help private landlords to meet their new responsibilities with the provision of free smoke and CO alarms, with grant funding from the government. For example, the London Fire Brigade is offering free smoke and carbon monoxide alarms through government funding to all qualifying private landlords. Private sector landlords or managing agents within Greater London can apply for one free smoke alarm per floor and one carbon monoxide alarm for every room that has a solid fuel-burning appliance.

There is a limited supply, but landlords are invited to apply for up to five properties. The London Fire Brigade says it will be prioritising applications on a risk-basis and will inform landlords or agents if their application is successful.


Will the 2015 CO regulations be extended to English social landlords?

Although the regulations exclude social housing, many social landlords we contacted already install CO alarms in rooms where there are solid fuel burning and gas appliances. This is partly because they consider it to be good practice, but also in anticipation of future legislation and/or regulation requiring the practice to be mandatory in the social housing sector.

In its report in January 2015 – Carbon Monoxide: From Awareness to Action15 – the All-Party parliamentary Carbon Monoxide (CO) Group (APPCOG) called for Building Regulations to be altered to require social landlords to fit and maintain British Standards Institution-compliant carbon monoxide alarms wherever a fuel burning appliance is installed.

Andy Frankum, vice chair of the National Social Housing Fire Strategy Group, said social landlords see the requirements in the regulations as ‘the minimum requirement’ for all landlords to ensure tenant safety.

He said: ‘While this regulation is targeted at the private rented sector due to the number of fire deaths occurring in that sector, in our view it sets a minimum requirement to achieve across the housing sector.’

He added: ‘While this empowers the social rented sector to self-regulate, other relevant legislation exists – as duty of care requirements – that will ensure providers assess their stock and ensure that effective maintenance programmes are in place. This will extend to installing the relevant early warning systems where needed, to ensure that residents remain safe from the effects of fire and carbon monoxide.’


Hard-wired or battery-operated alarms?

The traditional view when installing fire and CO alarms is that they are most effective when they are hard-wired into a property, with a battery back-up. However, this view is changing. This is principally because of the additional cost and disruption of installing hard-wired alarms. Also, hard-wired alarms are required to have a back-up battery that landlords need to ensure is working. Such checks are usually carried out during the annual gas service for the property.

The current thinking at some social landlords is mixed. For some battery-powered CO alarm products are worth exploring, as they are cheaper to install and would require the battery to be on-site or remotely checked anyway on at least an annual basis were they to be hard-wired. Others, like Lincoln below, are continuing with the hard-wired approach.

The issue of ensuring residents can’t simply remove batteries is tackled by better positioning of alarms and designing products where removing the battery is much less straightforward for the resident and/or where sensor technology alerts the landlord to the removal of batteries.

Talking point – City of Lincoln Council

The City of Lincoln Council is implementing a programme to install carbon monoxide alarms in all its 7,800 council homes by 2018. The council has decided to install a mains hard-wired carbon monoxide detector in each of its properties to enhance the safety of its tenants. The programme, which will cost over £845,000 during a 10-year period, covers both installation and maintenance.


Discussion points:

Carbon monoxide and gas safety

Discussion points:

Carbon monoxide and gas safety
Discussion points: Carbon monoxide and gas safety

Case Study
Kirklees Neighbourhood Housing trialling smart CO alarms

Kirklees Neighbourhood Housing in West Yorkshire has recently completed installation of 150, BSI approved battery-powered, ‘smart’ carbon monoxide alarms in the homes of vulnerable tenants. This is part of a trial being funded by the north of England’s gas distributor, Northern Gas Networks (NGN). KNH, which manages 23,000 homes on behalf of Kirklees Council, works with NGN and gas safety campaigner Stacey Rodgers, as part of the Kirklees Carbon Monoxide Awareness Group, and so was keen to take part in the pilot. Ms Rodgers’, 10-year-old son, Dominic, died of carbon monoxide poisoning from a neighbour’s flue and faulty boiler. Ms Rodgers set up The Dominic Rodgers Trust in 2004 to raise awareness of the dangers of CO.

Smart Compliance is the manufacturer that has developed the new Smart CO1 detectors used in the trial scheme. All carbon monoxide emissions (including low levels) are remotely monitored on a 24/7 basis and where CO is detected, the device issues text message notifications to a nominated mobile phone, whether the tenant, homeowner, a close friend or family member. Simultaneous alerts also go to the landlord and emergency services, where relevant.

This ensures vulnerable people in particular can be kept safer at home. The detectors also issue weekly reports to confirm that they are fully functional and send alerts to landlords when the batteries need to be replaced and where the device has been tampered with. This information is stored in a secure, central database.

Smart Compliance estimate these features of the CO1 detector could save landlords tens of thousands of pounds a year on attending false alarms and the associated administration costs.

Paul Goodwin, who manages KNH’s Gas and Electric team, said: ‘It’s great technology and you get a lot of information out of these alarms. The database can show different levels of CO at different times of days. This information could be useful when dealing with claims of potential CO poisoning.’

Paul added that the trial had reported a number of false alarms, although the reduction in response times to potential activations was important. At the moment KNH only offers standard carbon monoxide alarms to homes in limited circumstances, such as homes containing solid fuel appliances, open flue boilers and where someone is sleeping in the lounge and there is an open-flue fire. It has no plans to alter this approach at present.

Tom Bell, head of social strategy at NGN, said of the trial scheme: ‘Raising awareness of the dangers of carbon monoxide poisoning is an issue we take extremely seriously, as is the health and safety of all our customers. Other gas distribution networks across the country are also taking part in the scheme and we hope that together we will be able to make significant progress in informing people of the risks associated with exposure to CO.’

The British Standards Institute is the body responsible for setting the required standard for fire and CO alarms. The relevant standard for CO alarms is BS EN 50291-1:2010+A1:2012. The relevant standard for fire alarms is BS EN 14604:2005.

Discussion points: Carbon monoxide and gas safety

Investment in CO alarms

A HouseMark report in 2010, Provision of Carbon Monoxide Detectors in Social Rented Homes, surveyed 138 social landlords covering 1.13 million homes and found that 86 per cent had installed CO alarms to ‘some or all of their homes with gas or solid fuel heating’ appliances. It concluded that priority was given by these landlords to installing CO alarms in properties with solid fuel-burning appliances and that ‘a few’ organisations were fitting CO alarms to all properties supplied with gas and solid fuel-heating, or planned to do so.

The report cited part of the reason for this as being that the government of the time was not minded to require CO alarms where any fuel-burning appliance is installed. This was due to a report in September 2009 commissioned by the Department for Communities and Local Government that found ‘installing CO detectors alongside new gas appliances (already incorporating secondary safety systems) gives low cost benefit’. The DCLG expanded on this point in evidence to the DCLG select committee of MPs in February 2012 when then minister Andrew Stunell said: ‘Solid fuel appliances are about, 10 times more likely than gas to generate CO emissions when they should not do.’

It should be noted that the HouseMark report dates from 2010, but the resistance from some social landlords to installing CO alarms ‘in all homes was based on the following:

- ‘Most of our [gas] boilers are modern ‘fail safe’ appliances and we therefore believe that these do not need a [CO] detector adjacent to them.’
- ‘These aren’t fitted as a rule but we have installed CO detectors into properties where the tenant is sleeping in the front room and refuses an electric [fire] alternative. These are normally exceptional circumstances where there’s no other practical alternative.’
- ‘We only fit CO alarms where we are aware that a resident is sleeping in a room that has an open-flued appliance, e.g. a back boiler. A letter is sent to the resident to raise their awareness of the risk.’
- ‘Some tenants, particularly those who are vulnerable, may be less safe if they become reliant on the device and that this may make gaining access to carry out the annual service more difficult.’
- ‘We analyse every gas boiler and get a recording of CO emissions. If this is above the regulation limits then the boiler will be investigated. All our boilers are checked every year and there is an active plan to replace open flues with room sealed flues.’

In the light of further research – see references to Hackney findings on page 30 – the APPCOG recommendations and recent developments in technology, these views may well be becoming outdated.

Case Study
Hyde Group

The approach Hyde takes to protecting tenants against CO poisoning is three-fold.

First, if a property has a solid fuel-burning appliance, Hyde will install a CO alarm. Second, if there are concealed flues, Hyde will install a CO alarm. Third, if a gas engineer says a particular property needs a CO alarm for reasons that Hyde feel it is not, then the landlord will be consulted.

Daren Jones, gas manager at Hyde, said: ‘We’d like to see Building Regulations amended to require CO alarms to be installed in all homes. It would be much easier if it was in black and white and then everyone knew where they stood. There are always costs but you cannot put a cost on lives and safety.’

Hyde is conducting a pilot using ‘smart’ CO detectors in partnership with manufacturer Smart Compliance. Five CO alarms are being installed in each of Hyde’s three regions: Peterborough-Northampton, London and the South Coast. Data from the alarms is collected in partnership with manufacturer Smart Compliance. Five CO alarms are being installed in each of Hyde’s three regions: Peterborough-Northampton, London and the South Coast. Data from the alarms is collected by Hyde and analysed to determine the potential benefit of rolling out CO alarms more widely.

Daren said: ‘We want to see what the benefits are compared to the other approaches we take. Technology has a big role to play in the future of fire and gas safety. The key thing for us at present is to ensure the systems are reliable and robust.’

* * *
Data collection on CO incidents and ‘trusted messengers’

In its report in January 2015 – *Carbon Monoxide: From Awareness to Action* – the All-Party parliamentary Cartoon Monoxide (CO) Group (APPCOG) highlighted the need for better data on CO incidents. Improved data would help tenants and landlords to mitigate the risk of CO poisoning.

The APPCOG report emphasised the need for the UK to establish a central data hub which would be empowered to collate all relevant CO performance data. The report highlights the opportunity afforded by the advent of ‘smart’ CO alarms that communicate remotely with a central hub to convey performance information (see Kirklees Neighbourhood Housing case study, above).

Writing in the report’s foreword, Baroness Finlay, co-chair of the APPCOG, said there was an opportunity for the data from smart CO detectors to feed into the central hub.

The Gas Safety Trust maintains the central CO hub that was launched31 in January 2015, at the same time as the APPCOG report. The hub at w.corporal.org provides a comprehensive database of information on standards and legislation as well as data on CO incidents.

In the same report, the APPCOG also highlighted the importance of the role played by social landlords in ensuring CO safety information is correctly provided to residents. In its response to this research, the APPCOG said: ‘As well as identifying unsafe appliances, engineers allowed into properties can also act as ‘trusted messengers’ to deliver CO safety messaging.’ The APPCOG argues that CO deaths and injuries will only be reduced by increased awareness of the dangers – as previously mentioned, such awareness levels among the general public are not high. The more trust an individual has for the messenger, the greater the likelihood of that message being heeded. As the 2015 research32 by Kings College Hospital and Public Health England demonstrated, residents of social housing are a particularly high-risk group for CO poisoning.

Cookers and other fuel-burning appliances as a greater CO risk

In 2010, London arm’s-length management organisation Hackney Homes, conducted a study with Public Health England to estimate the prevalence of carbon monoxide exposure in dwellings33.

Hackney Homes installed CO detectors in its 23,000 homes and Public Health England monitored the results. There were 106 CO incidents reported in the six months from November 2011.

The study revealed that, even within homes where gas boilers were fully serviced and maintained, CO risk remained in a relatively large number of properties. Following further investigation, Hackney Homes discovered that almost a third of incidents (29.9 per cent) were caused by faulty gas cookers. An additional 10.6 per cent were due to improper cooking methods. These included using foil round the gas hob ring and using oversized pots and pans on small rings, hence increasing the concentration of CO due to greater flame dispersal.

This means that other gas appliances, such as gas cookers that are not subject to the same regulations and checks as gas boilers, are as much, if not a greater risk. The study found that, even if gas boilers are fully serviced, if other gas appliances are present in homes, CO alarms should be installed.

Talking Point: Recommendation 7 of ‘Carbon Monoxide: From Awareness to Action’34 proposes that Building Regulations should be amended to require social housing providers to fit and maintain standard-compliant carbon monoxide alarms wherever a fuel burning appliance is installed.

**Gas safety compliance**

In 2014 the topic of gas safety hit the headlines in England when, in the space of five months, the Homes and Communities Agency reimplemented three housing associations for failing to carry out gas safety checks on appliances and flues in all their properties, as required under the Gas Safety (Installation and Use) regulations 1998.

The landlords breached the ‘serious detriment’ threshold that applies in cases where there is a risk of serious harm to tenants. Two of the three had their governance rating downgraded after the breaches were announced. The HCA reports these failures of serious detriment in its 2013/2014 Consumer Standards Review, published in September.35

The HCA does not monitor safety with respect to gas or fire compliance – rather it investigates cases referred to it by external organisations including the Housing Ombudsman and the HSE. The statement said: ‘It is up to boards to ensure that the housing association meets consumer safety standards. If someone comes to us with evidence that tenants are in serious harm than we review – and go to the landlord to get their side of the story.’

This approach is spelt out more fully in Regulating the Standards, produced by the DCLG,36 which sets out the changes the HCA is making to regulation. It says the HCA’s Consumer Regulation Panel examines any issue ‘indicative of a possible consumer standards breach’. It adds that any statutory referrals – including from bodies such as the Health and Safety Executive and fire or rescue services – will almost always be examined.37 Grounds for the HCA to conclude that tenants have or could face ‘serious detriment’ include health and safety considerations.
Gas maintenance and servicing

Annual Landlord Gas Safety checks and maintenance requirements generally apply to gas appliances, flues and fittings installed in rented residential properties. Appliances owned by the tenant such as gas cookers are not however covered, within the terms of the Gas Safety Installation and Use Regulations 1998. Nevertheless, open flued gas fires installed by a tenant can lead to some uncertainty for landlords because the Health and Safety at Work Act 1974 contradicts the Gas Safety Installation and Use Regulations 1998 and places a duty of care on the landlord to undertake testing of the flue which is part of the fabric of the building. The Health and Safety at Work Act 1974 requires a landlord to ensure that any purpose provided flue (chimney) within a rented property that has a gas appliance attached is safe and fit for use. This will inevitably require a gas engineer to remove the gas fire, check the opening dimensions are correct, of a solid construction, made of suitable materials and will also require a flue flow test to ensure potential products of combustion will have clear passage to atmosphere. Subsequently, the gas service engineer will need to ensure that the tenant’s fire is then refitted as per the manufacturer’s instructions and that it is ultimately safe for use. In order to do this the engineer will therefore need to test and service the appliance as per manufacturer’s instructions or where manufacturer’s instructions are not available make the appliance safe and disconnect it from the gas supply. This means that in order for a landlord to meet their legal requirement under this act they will either need to adopt the tenant’s appliance within their maintenance contract and service it in accordance with manufacturer’s instructions within 12 month intervals or service the appliance at the time of the annual maintenance service and charge the tenant for the service. In addition, the Gas Safety Installation and Use Regulations 1998 specifies that any appliances and flues serving a rented property – such as district central heating boilers not installed in tenants’ accommodation, but used to heat them – are covered.

The Health and Safety Executive (HSE) also point out in their leaflet ‘A guide to landlords’ duties: Gas Safety (Installation and Use) Regulations 1998’ that a landlord cannot delegate these duties to a tenant. In addition, the HSE states in its guidance that a landlord should not assume that an annual service inspection meets the safety check requirement, or that a safety check will, on its own, be sufficient to provide effective maintenance. The only way to provide effective maintenance is to undertake a service of the appliance as per the specific manufacturer’s instructions. This also raises the question of whether an annual gas safety inspection will provide adequate protection to tenants from the risks of CO poisoning. As highlighted in the recent carbon monoxide report 39 by the All Party Parliamentary Carbon Monoxide Group and explored in the case study above on Kirklees Neighbourhood Housing, one additional safe guard that landlords could take would be to install ‘smart’ CO alarms. As well as automatically contacting the landlord and fire service if there is a CO leak, these smart alarms provide a 24/7 evidence base of intelligence on gas and CO safety.

Case Study
Hyde Group

Daren Jones, Hyde’s gas manager, said Hyde has 25,500 properties with gas and operates a 10-month gas safety service cycle. To enforce this Hyde operates a two visit strategy to gain access and if these fail to gain access, it works with resident services to explore whether the tenant may have vulnerabilities. If this is not the case, Hyde commences legal proceedings to gain forced entry. Around 40–100 properties with access issues are being tracked at any one time. This ensures a very low rate of non-compliant homes of 0.01%.

Daren described the current situation on gaining access to difficult properties as ‘frustrating’. He said: ‘We need to jump through so many hoops, compared to local authorities. It costs us more than £1 million a year in legal fees. Gas safety compliance is our number one priority. If anything we are investing more in this area than less.'
## Fire safety rules for social and private rented sectors (PRS): England

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<td><strong>PRIVATE RENTED SECTOR</strong></td>
<td>Part B – Building Regulations</td>
<td>Local Authority Building Control</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>None.</td>
</tr>
<tr>
<td></td>
<td>The Housing Health and Safety Rating System (HHSRS)</td>
<td>Health and Safety Executive (HSE)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>The Regulatory Reform (Fire Safety) Order 2005</td>
<td>Smoke and Carbon Monoxide Alarm (England) Regulations 2015</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Only if any alteration is deemed significant by Local Authority Building Control and impedes fire safety

## Gas and Carbon monoxide rules for social and private rented sectors (PRS): England

<table>
<thead>
<tr>
<th>TENURE</th>
<th>RELEVANT GAS AND CO LEGISLATION</th>
<th>RESPONSIBLE ENFORCING BODY</th>
<th>CO ALARM REQUIRED IN ALL HOMES?</th>
<th>CO ALARM REQUIRED IN ALL NEW HOMES?</th>
<th>CO ALARM REQUIRED IN ALL UPGRADED OR RETROFITTED HOMES?</th>
<th>UPCOMING REGULATION OR LEGISLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SOCIAL HOUSING</strong></td>
<td>Part J – Building Regulations</td>
<td>Local Authority Building Control</td>
<td>NO</td>
<td>NO*</td>
<td>NO*</td>
<td>None.</td>
</tr>
<tr>
<td></td>
<td>Gas Safety (Installation and Use) Regulations 1998</td>
<td>Homes and Communities Agency</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Health and Safety Executive (HSE)</td>
<td>Health and Safety Executive (HSE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRIVATE RENTED SECTOR</strong></td>
<td>Part J – Building Regulations</td>
<td>Local Authority Building Control</td>
<td>NO*</td>
<td>NO*</td>
<td>NO*</td>
<td>None.</td>
</tr>
<tr>
<td></td>
<td>Health and Safety Executive (HSE)</td>
<td>Health and Safety Executive (HSE)</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* A CO alarm is required in every room with a solid fuel-burning appliance (such as a wood burning stove)
Appendix 1
Research questions on health and safety issues around fire, gas and carbon monoxide

Questions for social landlords:
1. What aspects of health and safety do you actively monitor and measure performance on, focusing on fire, smoke and gas?
2. What legislation is this complying with? Are you working towards meeting new legislation coming in the future?
3. What is your strategy here and how are you delivering it?
   (We are looking for case studies of innovative approaches)
4. Do you keep extensive records that need to be submitted to a regulating body?
   Apart from the risk of accident, what policing is there of your approach to gas / smoke / fire risk monitoring?
5. To what extent has your organisation invested in new technology to help your performance in health and safety on fire, smoke and gas?
6. Are you working with any partners as part of your strategy?
   If so whom please?
7. What are the key challenges in this area of health and safety as you see it?
   What are your key achievements?
8. What would you like to see changed in terms of regulations to make your job/responsibilities more straightforward?

Appendix 2 – Glossary of terms

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery-powered</td>
<td>Carbon monoxide (CO), smoke and other alarms/detectors that are run from batteries and not hard wired to an electric power source</td>
</tr>
<tr>
<td>CO</td>
<td>CO is the chemical symbol for carbon monoxide, a colourless, odourless, tasteless and highly poisonous gas that is commonly produced when carbon-based fuels (such as wood, oil and gas) do not burn properly. If present in high concentrations and undetected it can be fatal. Chronic (persistent and long-term) exposure to lower levels of CO, as can occur with faulty domestic boilers, may go unrecognised. The symptoms include milder versions of those seen in acute CO poisoning, with headache, nausea, dizziness, light-headedness, fatigue and sleepiness, difficulty concentrating and memory problems, as well as changes in mood. People may be aware that something is wrong, but be unable to identify exactly what is the matter, or may attribute the problems to overwork, stress or depression. If symptoms disappear while away at work, reappearing on returning home, or if other people in the same premises develop similar symptoms, it may become more obvious that there is an environmental cause. Although most people seem to recover following chronic low level CO exposure when the source is removed, it can lead to anoxic brain injury.</td>
</tr>
<tr>
<td>Fire alarm</td>
<td>An alarm that is activated when fire is detected. These can be manual or automatic. There are eight categories of fire alarm, with the range intended to cover all building and use types</td>
</tr>
<tr>
<td>Hard-wired</td>
<td>Carbon monoxide, smoke and other alarms can be connected to the main electricity supply (hard-wired). However, they still require a battery back-up. These can be alkaline batteries (which need annual changing) or the alarm can be supplied with rechargeable lithium batteries, which will last the lifetime of the alarm, or alarms fitted with sealed 10 year batteries. Mains alarms need to be installed by a qualified electrician.</td>
</tr>
<tr>
<td>Heat alarm</td>
<td>Carbon monoxide (CO), smoke and other alarms/detectors that are run from batteries and not hard wired to an electric power source</td>
</tr>
<tr>
<td>Smart alarms</td>
<td>Smart alarms, including smoke and CO alarms, perform additional functions to the detection and alerts performed by traditional devices, often through a connection such as Wi-Fi, GSM (Global System for Mobile communication). In everyday terms it’s used for sending text messages, ultra-narrow band, etc. For instance, a smart CO device may communicate data about the extent of CO levels and specific location of an incident in a property to a portal and mobile phone through the GSM network, in addition to standard audible and visual alerts. These smart devices are also capable of reporting faults with the batteries and sensors or that they have been tampered with</td>
</tr>
<tr>
<td>Smoke alarm</td>
<td>An alarm that activates automatically when it detects smoke</td>
</tr>
</tbody>
</table>
Appendix 3

HCA Consumer Standards

A possible breach of Consumer Standards mentions the following:

2.33 Where we become aware of an issue which is indicative of a possible consumer standards breach, the matter is referred to our Consumer Regulation Panel. Information we receive in the form of a statutory referral will always be considered by the panel. This panel will determine whether and how the issue should be followed up. In most cases that we investigate, we are likely to seek further information from the provider.

Footnote 4 here mentions: A statutory referral is a referral from an authority, representative body, or individual specified in the Housing and Regeneration Act 2008 (as amended). These include: the housing ombudsman, tenant representative bodies, MPs, a councillor of the local housing authority for the district in which the property concerned is located, the Health and Safety Executive and fire and rescue authorities.

Also at item 8 of said document - If we are satisfied that there could be serious detriment or that there are reasonable grounds to suspect this, we then seek to determine whether this is the case through examining the evidence and the nature and extent of the impact or potential impact on tenants. In reaching this assessment, the regulator will require evidence of harm or potential harm, in particular but not exclusively in relation to: • health and safety • loss of home • unlawful discrimination • loss of legal rights • financial loss


About the authors

Stuart Macdonald is an award-winning journalist and former editor of Inside Housing magazine. He is the founding director of communications consultancy See Media, which works with landlords and their suppliers in the UK affordable housing sector. At Inside Housing, Stuart launched the successful ‘Safe as Houses’ campaign aimed at raising awareness of fire and gas safety issues among social landlords.

Denise Chevin is a writer, researcher and award-winning editor in the built environment. She edited Building Magazine and its web site Building.co.uk and prior to that revamped and edited the social housing magazine, Housing Today. Denise is also research fellow of the Smith Institute and has written a number of parliamentary reports including No More Lost Generations, looking at youth unemployment.
The authors are very grateful to all the individuals and organisations that contributed to this research. We have listed everyone below. We have made every effort to ensure the report is accurate and, to this end have worked with Sharon Fleming and Ross Fraser at HouseMark to review the contents.

- Andy Frankum, Health and Safety Business Partner at Midland Heart and vice chair National Social Housing Fire Strategy Group
- Barry Turner, director of technical policy, Local Authority Building Control
- Brian Castle, assistant director, Richmond Council and chair of the London Councils Fire Safety Group
- Cathy Walsh, director of property services, Ark Housing
- David Fletcher, director of regeneration, Wheatley Group
- Donald Gray, housing and technical resources, South Lanarkshire Council
- Donald Heaney, head of governance and inspection, Department for Social Development (Northern Ireland)
- Gordon McNair, health and safety adviser, Housing Development Team, Renfrewshire Council
- Gordon McNeill, senior officer for health and safety compliance, River Clyde Homes
- Graeme Binning, group manager and head of prevention and protection for South Lanarkshire, Scottish Fire and Rescue Service
- Harry Dornan, assistant director of asset management, Northern Ireland Housing Executive
- Housing Directorate, Welsh Government
- Iain Murray, senior surveyor, Housing Asset Management, The City of Edinburgh Council
- Jim Hayton, policy manager, Association of Local Authority Chief Housing Officers
- Jim Snoddy, specialist services manager, River Clyde Homes
- Kevin Bowring, investment manager, Lincoln City Council
- Martin Miller, area manager for prevention and protection, Scottish Fire and Rescue Service
- Mike Owen, chief executive, Merthyr Valleys Homes
- Nick Cross, head of housing services, Southampton City Council
- Paul Goodwin, gas and electric team manager, Kirklees Neighbourhood Homes
- Paul Ryrie, interim central services director, First Wessex
- Rachel Bancroft, health and safety manager, Southern Housing Group
- Robert Groom, fire risk manager, Peabody
- Scott Wallace, director, Smart Compliance
- Sylvia Ward, governance and performance officer, Scottish Housing Regulator
- The Homes and Communities Agency