Home alone

The vulnerable and elderly are at a greater risk from fire in the home, especially if living on their own. And it may take more than a smoke alarm to avert a tragedy, warns Nigel Firkins.

Welfare delivery is inevitably changing, as we support an ageing population and growing numbers of vulnerable people with care packages in their homes. It means that domestic settings must also adapt to the increased fire risks associated with sufferers from physical and mental health problems, including dementia.

As part of the social services network that has many of these people on its radar, social housing providers are at the frontline of ensuring adequate fire protection is in place to protect them.

Statistics in a new report* by London Fire Brigade show that a high proportion of people who die in accidental dwelling fires share a number of common characteristics. Among them are age (being over 60), lack of mobility, living alone, and vulnerability due to illness, alcohol or drug use (including prescription).

Many of the victims were known to a housing provider and/or partner agency. More worrying still, some displayed what are described as ‘easily recognised signs’ of near misses with fire, such as burn marks to clothing or furnishings, from smoking, or unsafe use of candles or heaters.

London Fire Brigade cautions: “Home fire safety visits including fire prevention advice and the fitting of smoke detection have been proven to reduce fire risk. But some people will continue to undertake behaviours that put them at high fire risk.”

In response, London Fire Brigade and BRE have published new guidance for assessing and identifying ‘priority’ people whose level of fire risk warrants additional measures such as a PPS (Personal Protection System). PPS are an automatic fire suppression device, designed to protect against specific fire risks in a domestic environment. It automatically activates over a bed or chair that is the seat of a fire, safeguarding the occupant who may be unable to escape without assistance due to physical or mental incapacity.

Drawing on the industry’s latest findings, the guidance includes tools for identifying likely candidates for a PPS. They include a flowchart to guide risk assessment and actions, a checklist for spotting those with a risk profile for PPS, as well as appropriate fire protection measures.

At the same time, BRE Global has developed a rigorous, independent certification standard (LPS1655 “Requirements and test methods for the LPCB approval and listing of Personal Protection Watermist Systems”) to evaluate the performance and effectiveness of PPS and give confidence in their reliability, in the absence of a standard for this equipment. It incorporates feedback from fire and rescue services, fire safety consultants, PPS manufacturers and housing associations.

Together, the documents offer a reference for PPS recommendation and specification to assist social housing providers in fire risk management strategies for vulnerable clients.
PPS are an expedient solution where the fire risk is localised to a particular part of a home such as a bed or chair. They are portable and simple to procure, and can be installed and operational within hours, effecting prompt mitigation of a priority risk. But they are not a panacea for all risks as they are designed for local area application rather than covering all parts of a home.

Dementia sufferers, for example, are often mobile and moving between rooms. Fires frequently start in the kitchen, and not necessarily in the room installed with the PPS. In some instances, a PPS can be deployed as a temporary measure while alternative arrangements are made for a resident, such as placement in a managed care setting or the installation of a suppression system that covers the entire home.

Modern fire safety thinking recommends a ‘toolbox’ approach. This involves robust assessment of the individual’s personal fire risk profile to identify a combination of fire protection measures, with a PPS potentially playing a central role.

Fire is a small but significant risk, and should be rigorously assessed by environmental health officers and housing associations, alongside risks such as slips, trips and falls, in complying with housing standards.

Supported or social housing providers should embed thorough fire risk assessment and referral processes in their risk management systems, so that control measures can be swiftly implemented that could prevent that fatal fire.

Inevitably, fire events take housing units out of stock, involving often lengthy procedures with insurers and draining budgets unexpectedly for repairs and refurbishment. Social housing providers can achieve a far greater return from every £1 invested in fire risk management by ensuring they have effective systems that accurately profile the personal fire risk of vulnerable people.

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Documents available online:

“Guidance on the use, deployment and limitations of Personal Protection Watermist Systems in the homes of vulnerable people” published by LFB in association with BRE.