

## Fire Risk Information Bulletin

Information and guidance to the health sector, care providers and carers (residential and domiciliary).

### SAFETY AT HOME



## Introduction

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This document intends to raise fire risk awareness amongst those in the health and care sector who provide services to those that might be at risk from fire. It covers the following topics:

1. Dynamic air flow pressure relieving mattresses, other air flow equipment and foam, fluid or gel filled mattresses
2. Emollient creams
3. Electronic cigarettes
4. Oxygen use
5. High risk smokers in residential or domiciliary care settings
6. Removal of assistive technology
7. General guidance and recommendations
8. Home fire safety referral procedures

### 1. Dynamic air flow pressure relieving mattresses

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Dynamic air flow pressure relieving mattresses (and *overlays* placed on top of standard mattresses) are for the prevention and treatment of pressure ulcers for those people who spend extended periods of time in bed. They are commonly used in hospitals, hospices and residential care homes but are also provided for use at home. They are filled with air by a pump and use pressure cells to adjust positioning according to the patient's needs.

**There have been several fatal fire incidents in the North West and nationally which are attributable to the use of dynamic air flow pressure relieving mattresses in the home.**

This guidance will assist with reducing fire risk when caring for individuals who also use other air flow equipment such as; cushions and foam, fluid or gel filled mattresses. It is also relevant to the care of those with restricted mobility, regardless of whether they use dynamic air flow pressure relieving devices.

#### **What is the problem in relation to fire?**

The most common cause of incidents involving mattresses was smoking in bed. Others have included a hot hairdryer placed on the bed and a television which caught fire resulting in melted plastic falling onto the bed.

It is believed that air released, when the mattress was punctured by the ignition source, caused the fire to spread more quickly and intensely. When a mattress is punctured, the pump reacts by working harder to replace lost air, further fuelling the fire. This is compounded by a battery back-up, so if the electricity supply fails the pump continues.

As this equipment is generally provided to people with restricted mobility, they will be unlikely to escape without assistance. Being alone in the property is a risk that must be considered and providing automatic fire detection and suppression as part of a care plan may be appropriate.

#### **Cheshire Fire and Rescue Service advises that:**

- when this equipment is provided for use in the home, the assessment undertaken must include fire safety.

- any difference between a home environment and a hospital or residential care environment must be considered. For example, an individual will not be permitted to smoke in hospital but may choose to smoke in bed at home.
- household items which could start a fire such as candles or some electrical equipment would not usually be present in a hospital or residential care setting.
- in the event of a fire in a hospital or residential care setting, members of staff are usually summoned by a fire alarm to render immediate assistance.
- if a fire should occur and it is safe to do so, turn off the air pump.

## 2. Emollient creams

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Emollient creams are used to treat dry skin conditions such as eczema. They reduce water loss from skin by covering it with a protective film. The use of emollient creams is common amongst people who spend extended periods of time in bed due to illness or impaired mobility.

### **Cheshire Fire and Rescue Service advises that:**

- those using emollient creams must keep away from fire or flames as dressings and clothing can be easily ignited. Bedding, including bottom sheets, can become impregnated increasing flammability.
- individuals who smoke should be made aware of the added fire risk associated with smoking and using emollient creams, clothing is likely to be readily ignited by a dropped cigarette.

More information can be found on the [National Patient Safety Agency \(NPSA\) website](#).

## 3. Electronic cigarettes

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Derbyshire Fire & Rescue Service attended a fire at a residential nursing home. The fire involved a bedroom from which firefighters rescued an elderly resident who was treated at the scene and transported to hospital for treatment, she subsequently died of her injuries.

The investigation concluded that the e-cigarette battery pack overheated while on charge, exploded and then projected hot battery components onto combustible materials in the bedroom. The fire developed to involve an aerosol container which then exploded.

There is also evidence to support the fire risk categorisation of e-cigarettes on a par with standard cigarettes. One incident in Syracuse (NY) involved a patient on oxygen puffing on an e-cigarette when there was an eruption of flame causing burns to the face of the patient. It must be borne in mind that e-cigarettes use a heating element to vapourize the liquid content prior to inhalation. This heating element is an ignition source and will pose a risk in proximity to oxygen.

### **Cheshire Fire and Rescue Service advises that:**

- e-cigarettes must not be left unattended while on charge and never overnight while householders are asleep.
- products should be purchased from reputable sources, if anyone wishes detailed product information they should contact the retailer or manufacturer.
- owners and operators of residential care homes, sheltered housing arrangements and providers of domiciliary care services should take this information under consideration with

regard to the care and support offered to those that might be particularly vulnerable and who use e-cigarettes.

- e-cigarettes must be treated similarly to standard cigarettes for those circumstances where users are on medical oxygen or in a potentially oxygen enriched environment.

#### **4. Oxygen users**

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Although the fire risk associated with oxygen use is widely known, the Service still comes across oxygen users who smoke whilst using oxygen or whilst in a potentially oxygen enriched environment.

The Service was recently called to an incident where a householder sustained facial burns whilst simultaneously using their oxygen and smoking.

Those that prescribe, or provide, oxygen as well as those that provide home visits must be aware that oxygen is a supporter of combustion which will significantly increase the combustibility of materials in proximity to an ignition source such as a cigarette, or e-cigarette.

Whilst the Service offers a Home (Fire) Safety Assessment to all home oxygen users it remains the responsibility of the provider to carry out a risk assessment and to consider the fire risks associated with the provision of oxygen to the householder. The risk may be presented not only to the oxygen user but to other persons such as family members, neighbours or visiting professionals. Visiting professionals, particularly those providing domiciliary care, should be attentive to the ongoing risk and seek further advice and guidance if there are concerns regarding heightened risk from fire.

#### **5. High risk smokers in residential and domiciliary care**

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Those providing care in residential care homes and domiciliary settings should give consideration to the risk posed by carelessly or accidentally discarded smoking materials, particularly where the person at risk has restricted mobility. This advice follows a report by the Assistant Coroner for Surrey on August 13th 2013, under Regulation 28 of The Coroners (Investigations) Regulations 2013. The death leading to the issue of the report involved an 81-year-old woman who died from burn injuries while in residential care.

The resident was taken onto the garden terrace of the nursing home for a cigarette. She was still in her night attire with a blanket over her legs when she asked for a glass of brandy. While the carer was gone, the deceased attempted to light a cigarette using a match, the match dropped into her lap causing a fire resulting in severe burns. Despite treatment she died that evening.

The Assistant Coroner stated that: *"...it is now possible to obtain a fire protective apron or smock that could be worn or draped over the smoker so that any such incident would result in the match (or a lit cigarette) burning out without any damage to the clothing or smoker...this sort of pro-active clothing could be more widely available and those places (such as care homes) whose residents may include smokers should be encouraged to provide access to these protective measures."*

#### **6. Removal of assistive technologies**

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Cheshire Fire & Rescue Service recently attended a house fire where there were no smoke alarms fitted. The property had previously been provided with smoke detectors because the householder's spouse met the criteria for installation of a community alarm including smoke detection. When the qualifying householder was taken into care the community alarm and smoke detection were removed leaving the remaining householder without smoke detection.

Should agencies provide assistive technology, due to the circumstances of a specified member of a household, it is advisable to also consider the risk to the other members of the household if the equipment is then removed and no suitable alternative is provided. The risk may be further increased where the remaining householder has a degree of vulnerability.

## **7. Further guidance and recommendations**

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- The risk from fire must be a feature of all premises and patient centered risk assessments.
- Risk assessments must consider the individual's environment, behaviours and the risk they pose to others, not just themselves. The difference between a hospital, residential care setting and a domestic household must be taken into account.
- Where there is heightened risk from fire, make a referral for a Home [Fire] Safety Assessment (HSA). HSAs provide advice and support to reduce risk and improve fire safety awareness in the home. The guidance for making a referral, together with the Service's data privacy statement is provided on pages 6 and 7.
- Fire retardant protection such as bedding or clothing for at-risk smokers must always be a consideration, more so if they are bed-bound, a dynamic air flow mattress or emollient cream user. This is the responsibility of any agency owing a duty of care for the health, safety and well-being of someone who may be likely to be at heightened risk. Provide adequate bedding to account for a change of bedding during laundry.
- Keep ignition sources away from bedding and dynamic air flow mattresses or any bedding or clothing likely to be impregnated with emollient cream.
- Discourage smoking in, or on any bed. If an individual is insistent on smoking they should smoke away from their bed and mattress and only when a capable person is with them to offer immediate assistance if required. Smoking when wearing clothing impregnated with emollient cream must not be undertaken.
- Don't burn candles in the room of a person at heightened risk from fire.
- Don't have electrical equipment in the vicinity of the bed, dynamic air flow mattress or any bedding or clothing likely to be impregnated with emollient cream.
- Don't use electric blankets in combination with a dynamic air flow mattress or any bedding or clothing likely to be impregnated with emollient cream.
- Don't overload plug sockets.
- Ensure electrical items are maintained, switched off and unplugged when not in use
- Don't have fires and heaters in the vicinity of a dynamic air flow mattress or any bedding or clothing likely to be impregnated with emollient cream.
- Don't place hot items such as hairdryers or other heated hairstyling appliances, onto a dynamic air flow mattress or any bedding or clothing likely to be impregnated with emollient cream.
- If someone you care for uses a mobility aid, ensure it is within their reach.
- When caring for householders with limited mobility consider the provision of inter-linked smoke alarms connected into a tele-care, care-call or life-line type system.

## 8. Referral procedures for carers and professionals

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Whether you're a professional working with a vulnerable client, a landlord with tenants who could be at risk or look after a friend or family member in their home, Cheshire Fire and Rescue Service can help.

The following are some risk factors that may be apparent:

- Targeted arson attack, or threat of arson
- Fire-setting activity within the household
- Unsafe home oxygen use
- Lack of working smoke detection in the property
- Burns to the person, clothing, bedding, carpets or furniture
- Overflowing ashtrays or cigarettes lying discarded around the property.
- Immobility affecting the ability to escape in a fire
- Air-filled pressure relieving mattress user
- Emollient cream user
- Unsafe cooking practices such as pans or grill being left on when not in use.
- Candle use for economic reasons
- Hoarding

This is not an exhaustive list - contact the Service for further advice and support.

**What you should do:**

- Explain the risk to the person and take any immediate steps to reduce the risk.
- Obtain consent for you to contact Cheshire Fire and Rescue Service for a Home (Fire) Safety Assessment (HSA).
- Contact **0800 389 0053**. This is the number of a service called Message Pad who handle and pass on requests for HSAs.
- Explain to the person receiving the call that you wish to make a **HSA referral**.
- **DO NOT discuss sensitive information or vulnerabilities while making the referral.**

**When making a HSA referral you must provide the following:**

- Your name and your agency.
- Confirmation of householder consent.
- Householder details; their name, address, post code and a contact number.
- The post code is essential so that the request can be assigned for completion.
- Your contact details so that someone can contact you to confirm the appointment.

**What happens next?**

- Message Pad will pass the details to Cheshire Fire & Rescue Service who will make an appointment with the householder.
- If you wish to discuss the circumstances of the referral or arrange a joint visit with a member of the fire and rescue service contact **01606 868490**.

## **Cheshire Fire and Rescue Service Community Safety Data Privacy Statement**

Cheshire Fire and Rescue Service works to keep people safe at home, on the roads and in the community. In order to do this work we will often need the name and address of our service users.

To ensure people get the right services we may ask for further information such as age and any health requirements. This helps us to understand what peoples needs are and who else may be able to help.

We work closely with other agencies, and may offer assistance from other agencies such as councils, health services, adult and children's services or Age UK. We will usually explain if we want to share personal information with other agencies and allow people to **say no** if they prefer. This may mean that people will not get all the help they may need.

There are some circumstances where we will not be able to ask for agreement. This is where the law requires us to contact other agencies, usually relating to crime or where there is a serious risk to personal safety.

### **Want to know more?**

We recognise that people trust us to handle information correctly and keep it safe. We will not use information for marketing, and we will only use it for the purpose we collected it.

If you want to know more details about how we use personal information, or if you would like to opt out of any of our services, please either:

- visit [www.cheshirefire.gov.uk](http://www.cheshirefire.gov.uk) or
- contact Community Safety on 01606 868490

### **Further information**

**Home Safety Assessments** – we record name, and address and any details about risks in the home, such as smoking, use of oxygen or disabilities. We may share information with other agencies that can provide more help, and we will usually give the house holder the chance to **say no** if they don't want us to share information. If householders don't want to give us information we may be unable to fully assist.

**Fire-Safe** – we work with children and young people who may be at risk of causing fires to try and change their behaviour. These individuals may have been referred for our Fire-Safe work by the parent/guardian, school, police or children's services, or because we are concerned about a fire incident. We only provide Fire-Safe work with parent/guardian agreement and we aim to include parents or guardians in our work.

We recognise the privacy rights of those aged under 18. We must retain records of any work with children or young people in case of future queries. We may have to share Fire-Safe information with other agencies if there is a significant risk or if we are required by law. Where possible we will advise before we share information but there may be exceptions to this.

**Assisting Support** – with householder consent we will provide person-specific information to Age UK to offer assistance to people over 65.

**Safeguarding Referrals** – in cases of abuse or neglect or where we feel the making of a safeguarding referral is appropriate we will refer matters to the local authority in accordance with adult or children's services referral procedures.