Introduction

Cheshire Fire and Rescue Service has a duty to promote fire safety and protect local communities, particularly those who are most vulnerable. We focus much of our resources on community safety, but we know we cannot tackle all fire safety issues alone. This leaflet aims to raise fire risk awareness amongst those in the health and care sector who provide services to people who may be at greater risk from fire. It covers the following topics:

1. High risk smokers
2. Electronic cigarettes
3. Oxygen use
4. Air, foam, fluid or gel filled mattresses
5. Emollient creams
6. General fire safety guidance
7. How to make a fire safety referral.

On the back page there are also details of how owners of care homes, private care facilities and hospitals can ensure they comply with fire safety legislation.

1. High risk smokers

If you provide services to patients or clients living either in residential care homes or their own properties, you should consider the risk posed by carelessly or accidentally discarded smoking materials, particularly if the person at risk has limited mobility. This follows advice from coroners after inquests into the deaths of high risk smokers with mobility problems from burn injuries as a result of matches or cigarettes dropping on to clothing or bedding.

2. Electronic cigarettes

There have been incidents, including a fatal fire in a Derbyshire nursing home, where e-cigarettes were found to have contributed. Not only do they have a charging pack which can overheat, they also use a heating element to vapourize the liquid content prior to inhalation. This element is an ignition source and will pose a risk near to oxygen supply. We advise that:

- e-cigarettes must be treated similarly to standard cigarettes when users are on medical oxygen or in a potentially oxygen-enriched environment
- e-cigarettes must not be left unattended while on charge and never overnight when householders are asleep
- products should be purchased from reputable sources
- owners and operators of residential care homes, sheltered housing complexes and providers of home care services should highlight the fire risks of e-cigarettes to vulnerable clients or patients.

3. Oxygen use

Although the fire risk associated with oxygen use is widely known, the Service still comes across oxygen users who smoke while using oxygen or in a potentially oxygen-enriched environment. There have been some instances of people suffering facial burns after using their oxygen while smoking.

Those who prescribe, or provide, oxygen as well as those who provide home visits, should be aware that oxygen will significantly increase the combustibility of materials near to an ignition source such as a cigarette, or e-cigarette.

While the Service offers a Home Safety Assessment (HSA) to all home oxygen users, it is the responsibility of the care provider to carry out a risk assessment and consider the associated fire risks. The risk can extend beyond the oxygen user to family members, neighbours or visiting professionals. Visiting professionals should seek further advice and guidance if they have concerns.
4. Air, foam, fluid or gel filled mattresses

Dynamic air flow pressure-relieving mattresses (and overlays placed on top of standard mattresses) are designed to prevent and help treat pressure ulcers for people who spend extended periods in bed.

They are commonly used in hospitals, hospices and residential care homes but are also provided for home use and are filled with air by a pump.

There have been several fatal fires in the North West and nationally attributed to the use of such mattresses in the home. This guidance will assist in reducing fire risk when caring for individuals who also use other air flow equipment such as cushions and foam, fluid or gel filled mattresses, as well as being relevant to the general care of those with restricted mobility.

What is the problem in relation to fire?

The most common cause of incidents involving mattresses is 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 when the mattress is punctured by the initial fire, the air released causes the fire to spread more quickly and intensely. When the 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. We advise that:

- when this equipment is provided for use in the home, the assessment undertaken must include fire safety
- differences between a home environment and that in hospital or residential care must be considered. For example, patients are not allowed to smoke in hospital but can choose to do so at home; candles or some electrical equipment with a potential fire risk would not usually be present in hospitals or residential care homes, while staff are usually on hand at these premises to provide immediate assistance if a fire occurs
- if there is a fire, and it is safe to do so, turn off the air pump.

5. Emollient creams

Emollient creams are used to treat dry skin conditions and some patients are often in bed for lengthy periods due to illness or impaired mobility. The creams can be highly flammable and we advise that:

- emollient creams should be kept away from fire or flames as dressings and clothing can be easily ignited – bedding can also become impregnated, increasing flammability
- smokers should be made aware of the added fire risk associated with using the creams as clothing is likely to be readily ignited by a dropped cigarette.

6. General fire safety guidance

All risk assessments of premises or patients MUST consider the risks posed by fire. We advise that:

- Risk assessments must consider the individual’s environment, behaviours and the risk they pose to others, not just themselves
- 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
- The difference between a hospital, residential care setting and a domestic household must be considered
- If there is heightened risk from fire, make a referral to us for a HSA as these provide advice and support to reduce risk and improve fire safety awareness in the home – see section 7
• 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.

• Fire retardant covers, bedding or clothing for at-risk smokers must always be considered, particularly if they are confined by immobility. 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 enough protective bedding to allow items to be washed.

• Keep all ignition sources away from bedding and dynamic air flow mattresses and don’t use them with electric blankets.

• Don’t burn candles in the room of a person at heightened risk from fire.

• Don’t overload plug sockets and ensure electrical items are maintained, switched off and unplugged when not in use.

7. How to make a fire safety referral

Whether you’re a professional working with a vulnerable client, a landlord with tenants who could be at risk or you look after a friend or family member in their home, Cheshire Fire and Rescue Service can help. These are just some potential fire risks - contact us for further advice and support:

• Targeted arson attack, or threat of arson

• Fire-setting activity in the home

• Lack of working smoke alarms

• Unsafe home oxygen use

• Burns to the person, clothing, bedding, carpets or furniture

• Overflowing ashtrays or discarded cigarettes

• Immobility affecting the ability to escape in a fire

• The use of air-filled pressure relieving mattresses or emollient cream

• Unsafe cooking practices such as pans or grill being left on when not in use

• Candle use for economic reasons

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 us for a Home Safety Assessment (HSA)

• Call 0800 389 0053 - this is the Message Pad service which handles our HSA requests

• Request a HSA referral but DO NOT discuss sensitive information or vulnerabilities.

When making the referral you need to provide your name and your agency, confirmation of the householder’s consent and their name, address, post code and contact number as well as your contact details so someone can confirm the appointment.

Message Pad will pass the details to us and we will make an appointment with the householder. Call 01606 868490 if you want to discuss a specific referral or arrange a joint visit.

For further information and details about our Data Privacy Statement visit our website – www.cheshirefire.gov.uk
If you own or manage any premises that provide health care, e.g. care homes (including private care homes) and hospitals you must comply with fire legislation set out in the Regulatory Reform (Fire Safety) Order 2005.

Anyone who has some level of responsibility or control in such premises must carry out a fire risk assessment, taking reasonable steps to reduce the risk from fire and making sure people can escape safely if a fire occurs. The Order applies to virtually all non-domestic premises, but not to people’s private homes nor individual flats in a block or house.

Your fire risk assessment should identify any possible dangers and risks and consider who may be especially at risk e.g. oxygen users. You need to reduce the risk as far as is reasonably possible and provide general fire precautions, e.g. fire detectors and extinguishers, to deal with any remaining risks. If you handle and store flammable materials you should consider these in your risk assessment to help determine the precautions needed to minimise the likelihood of them being involved in fire.

There are five key steps to carrying out your fire safety risk assessment:

1. Identify fire hazards – sources of ignition such as naked flames, heaters or e-cigarettes/chargers; sources of fuel e.g. waste, textiles or mattresses; and sources of oxygen such medicinal oxygen cylinders. Please inform us if oxygen is used and stored on the premises

2. Identify people at risk – including those who may be especially at risk such as older people or those with mobility problems or use oxygen

3. Evaluate, remove, reduce and protect from risk – remove or reduce fire hazards where possible and reduce any risks you have identified. Oxygen and other medicinal gas cylinders should be:
   - preferably stored outside, in a safe and secure location. If spare cylinders have to be stored indoors, keep numbers to a minimum and put in well ventilated areas but not in passageways, stairwells or near emergency exits
   - ideally located in designated cupboards or rooms provided with permanent ventilation
   - kept away from heat sources, fires and naked flames (smoking should be prohibited in the vicinity) and away from areas where there is a possibility of contamination from oils or greases, e.g. kitchen and garage areas
   - secured to prevent them falling over and full and empty cylinders should be separated to avoid confusion.

4. Record, plan, instruct, inform and train – record the dangers and people you have previously identified as being at risk in steps 1 and 2 and any actions you took in step 3. You will also need to make an emergency plan, tailored to your premises. This should include the action that you need to take in the event of a fire and instructions for staff, volunteers and visitors. All employees need guidance about the risks in your premises, some such as fire marshals will need more specific training.

5. Review – make sure your risk assessment is up to date - re-examine it each time there is a significant change to the level of risk in your premises. This may include a change in the number of oxygen dependent patients or a new night shift pattern.

Further sources of advice and guidance about medical gases:
- Health Technical Memorandum 02-01: Medical gas pipeline systems. Part A: Design, installation, validation and verification, 2006 (Department of Health)
- the Medical and Healthcare Products Regulatory Agency website www.mhra.gov.uk
- the European Industrial Gases Association website www.eiga.eu