

# Fire Safety

*Level 1 - All staff, including unpaid and voluntary staff*

*Core Skills Reader*



## Introduction to the Core Skills

The Core Skills standardises the training for 10 subjects commonly delivered as part of statutory and mandatory training requirements for health and social care organisations.

For each subject a set of learning outcomes has been agreed nationally and is set out in the UK Core Skills Training Framework (a copy of the framework is available on the Skills for Health website: [www.skillsforhealth.org.uk/](http://www.skillsforhealth.org.uk/)).

The learning outcomes specify what needs to be covered in the training for each Core Skills subject. This ensures a quality standard is set and provides clear guidance for organisations to deliver against these requirements as well as recognise the equivalent training delivered externally. This allows for Core Skills training to be portable between organisations and prevents the needless waste and duplication of statutory and mandatory training where is not required.

To aid organisations in the delivery of the Core Skills subjects, these education resources have been developed to be aligned to the learning outcomes in the UK training framework. Organisations have the flexibility to deliver these resources in a variety of formats as well as adapting them to add localised content alongside the Core Skills Materials.

If you require any further information about the Core Skills, in the first instance please contact the Learning and Development Lead in your organisation.

In the North West the implementation and management of the Core Skills is overseen by the North West Core Skills Programme on behalf of Health Education North West. The programme can be contacted on: [CoreSkills.Programme@nhs.net](mailto:CoreSkills.Programme@nhs.net)

## Introduction to Fire Safety

This reader covers the Core Skills learning outcomes for Fire Safety. It can be used to supplement face to face training and as supporting material alongside the Fire Safety presentation or eLearning package (the relevant slide numbers and eLearning pages are given with each sub-heading). Whichever way the reader is used, it is recommended that the Fire Safety Assessment is completed afterwards to allow the learner to demonstrate they have retained the knowledge and learning required to support best practice.

This resource has been designed to cover induction level training and addresses the key principles in Fire Safety. It covers the general information about Fire Safety that all employees should be aware of. It is mapped against the learning outcomes in the UK Core Skills Training Framework.

The training covered here is likely to be a minimum requirement for all staff working in a health setting. Dependent upon role, location and service it should be supplemented by specific job and site training. This should include, for example, local fire procedures, escape routes, refuges, evacuation aids and fire alarms and any other aspects as deemed necessary based upon localised fire risk assessment, training needs analysis and policy.

It is anticipated that it will take you approximately 20-30 mins to complete this reader. Current national guidelines recommend that the subject of Fire Safety is as a minimum, delivered face-to-face every 2 years, by the recognised Competent Person in the organisation (usually the Fire Safety Adviser).

## What you will learn in this session

(Slide No 2 / e-Learning Page 1)

The objectives covered by this reader are listed below and aligned to the Learning Outcomes for Fire Safety in the UK Core Skills Training Framework.

1. The characteristics of fire, smoke and toxic fumes
2. Fire hazards involved in the working environment
3. Significant findings of relevant fire risk assessments
4. Practise and promote fire prevention
5. Basic fire safety and fire safety protocols including staff responsibilities
6. How to rise the fire alarm and actions to take on hearing the fire alarm
7. Action to take if fire breaks out or smoke is detected
8. Identify the types of fire extinguishers used in different situations
9. Evacuation procedures and associated escape routes

To be fully compliant with the requirements of your local employer you will require further practical training for example this may include evacuation procedures and use of fire fighting equipment. In addition, dependent on role, location and service need, the outcomes here should be supplemented by specific job and site training.

## Why is this so important?

(Slide No 3 / e-Learning Page 2)

Fire safety training is an essential requirement for the NHS in order to protect staff, patients, visitors or service users and to ensure the integrity of the workplace. It is also a legal obligation.

In 2012-13, Fire & Rescue services attended 154,000 fires in England which resulted in 271 deaths and 3,830 injuries. In 2011/12, there were approximately 1,500 fires were recorded on NHS premises.

*(Health and Social Care Information Centre)*

These caused serious disruption to patient care and services, people were endangered and put at risk and it also resulted in large financial costs.

## What is fire?

(Slide No 4 / e-Learning Page 3)

Fire is the visible effect of a chemical reaction known as combustion, which produces smoke, heat and flames. This reaction can produce dangerous toxic fumes. Fire will cause damage to property and it may cause injury or death.



Anyone caught in a fire will become disorientated and may suffer serious injury due to smoke inhalation even if they are not burned.

**Smoke inhalation is the number 1 cause of death in indoor fires**

## Triangle of Combustion

(Slide No 5 / e-Learning Page 4)

Combustion is when fuel reacts with oxygen to produce heat energy. Combustion requires three elements: heat, fuel, and an oxidizing agent, usually oxygen. When they are brought together and there is sufficient heat, ignition takes place. A simple representation of this is the "Fire Triangle" which shows the components required for fire to occur.



You can put out a fire by removing any one of the components. Take away air and the fire will go out, remove the fuel and it will have nothing to consume.

## Fire hazards

(Slide No 6 / e-Learning Page 5)

Anything that burns can be a source of fuel. Items that burn easily are more dangerous than those which resist ignition. In a health setting the following can be key fire hazards:

- Smoking
- Flammable liquids, gases and chemicals
- Medical oxygen
- Electrical items
- Clutter
- Arson
- Staff Kitchens/Cooking Equipment



## Smoking

(Slide No 7 / e-Learning Page 6)



Even though smoking is prohibited in all public buildings and this has reduced the risk of fire caused by smoking you should know and adhere to your Organisation's Smoking Policy.

If smoking is permitted, use smoking areas and dispose of smoking products safely. Use ashtrays and empty these into metal bins, take care that discarded smoking materials are extinguished properly.

## Flammable liquids, gases & chemicals

(Slide No 8 / e-Learning Page 7)

You should know and understand the risks involved with using and storing everyday cleaning products, chemicals and gases in a health care setting. The **Control of Substances Hazardous to Health Regulations (2002)** (COSHH) incorporates the use and storage of these materials. The regulations insist that flammables should be clearly labelled and stored securely away from heat.



If you are not sure of the risks associated with any liquids, gases or chemical, you need to refer to your organisation's risk assessment and discuss it with your health and safety representative. For more information on COSHH you can visit the health and Safety Executive (HSE) website: [www.hse.gov.uk/coshh/](http://www.hse.gov.uk/coshh/)

## Medical oxygen

(Slide No 9 / e-Learning Page 8)

Oxygen is one of the three things needed to start combustion. Materials burn much faster in oxygen than in air alone, making any fire worse.



To prevent the risk of fire you should be familiar with how oxygen is supplied and managed. When working with oxygen always refer to the safety advice provided by the supplier and that of your organisation. If part of your job involves using oxygen you should receive training in its use and how to store it, which should always be in designated storage areas.

Always report leaks and make sure you know how to turn off cylinders or fixed oxygen supplies and never smoke near oxygen.

**NEVER** smoke or let anyone else smoke near you while you are using medical oxygen equipment. **NEVER** use medical oxygen equipment near open fires or naked flames.

## Electrical equipment

(Slide No 10 / e-Learning Page 9)

Electrical equipment can be a fire hazard if it's in a poor condition or used incorrectly. All portable electrical equipment should be regularly PAT tested for safety.



Equipment that has been tested and passed will be suitably labelled. On a regular basis, you should visually inspect cables for wear, ensuring they are securely fixed to plugs and equipment. Visually check the plugs for signs of damage or overheating. This is particularly important for portable appliances. Do not attempt any repair yourself, no matter how minor, to any cables or equipment.

Before you use any piece of electrical equipment check it for signs of damage, overheating or it not working properly.

In the event of an electrical fault, you should not touch the equipment but, if safe to do so, isolate it from the mains by switching off and unplugging the item. The fault should be reported through your organisation's fault logging procedure.



If in doubt, **SWITCH OFF, REPORT AND LABEL**

## Clutter

(Slide No 11 / e-Learning Page 10)

An untidy workplace is a risk on many levels. Clutter is a hazard as it can lead to trips and falls, but it can also be a major fire hazard because it can act as fuel for a fire. If there is a fire, it can prevent the quick evacuation of a building by providing obstacles and blocking exits.



Clutter is also an additional danger to fire fighters and may prolong a fire and increase the damage it causes.

Good housekeeping in the workplace improves the health and safety of all and reduces the risk of a fire.

Make sure that all emergency exits are clear and that fire safety equipment is easily accessible and in good working order. Fire equipment should be regularly inspected.



## Arson

(Slide No 12 / e-Learning Page 11)

Arson is a significant cause of fire in NHS premises. Many fires in healthcare premises start in parts of the building where the materials or commodities stored provide a ready source of fuel. Typically, vacant premises or those that are only occupied during the daytime are more vulnerable and present an attractive target to arsonists.

You should always be on your guard, especially where there are fewer people about. Storage and quieter areas are more vulnerable because they have ample fuel and allow the deliberate fire-starter to set a fire undisturbed, undetected and with an escape route available.



**Arson is now the most likely cause of fire in the NHS**

## Fire risk assessment and significant findings

(Slide No 13 & 14 / e-Learning Page 12 & 13)

The Regulatory Reform (Fire Safety) Order 2005 covers general fire safety in England and Wales. In the majority of premises, local fire and rescue authorities are responsible for enforcing this fire safety legislation. The order can be viewed online:

[www.legislation.gov.uk/ukxi/2005/1541/contents/made](http://www.legislation.gov.uk/ukxi/2005/1541/contents/made)

The Regulatory Reform (Fire Safety) Order 2005 demands that all organisations carry out regular and timely fire risk assessments.

Along with your organisation's fire safety policy, you need to be familiar with the organisation's fire risk assessment and any significant findings within it. If you are not sure where to find a copy, contact your local fire safety lead or warden.



Significant findings in the fire risk assessment will cover the following:

- What fire hazards have been identified (**preventive measures**)
- The actions taken to remove or reduce the chance of fire occurring
- Which people are at risk, particularly those at greatest risk
- The actions taken / will take to reduce the risk to people (**protective measures**)
- The actions people need to take in case of fire (**emergency plan**)
- The information, instruction and training needed and how it will be given

### Protective measures

(Slide No 15 / e-Learning Page 14)

Under the law employers have a duty to make sure that the workplace is a safe environment. This means that the building and its fixtures must be fit for purpose. Buildings are designed to reduce risk and many have built in safety features. In regards to fire safety there are structural features that separate areas and prevent fire spreading.



The most visible of these are fire doors. Fire doors perform a vital and specific task by burning at a particular rate to hold back and prevent the spread of fire and smoke. Fire doors in the NHS will hold back the spread of a fire for a minimum of 30 minutes. Other structural features such as refuges are designed to protect life. Evacuation from a building is supported by emergency lighting and complimented by fire signage, to guide people to safety. Fire alarms signal danger and fire fighting equipment is there to be used to tackle fires.

## Fire Extinguishers

(Slides No 16-18 / e-Learning Page 15-17)

Fire extinguishers come in different shapes, sizes and colours. Each type of fire extinguisher is specifically designed to tackle a certain type of fire. The main types of fire extinguishers are described below.

**Only use fire extinguishers and any other firefighting equipment if you're trained to do so**



- **Red**      **Water Fire Extinguishers**

They are suitable for solid fires and safe for use on paper, wood and textiles. Ordinary water fire extinguishers should not be used on fires with electrical equipment.



- **Blue**      **Dry Powder Fire Extinguishers**

They are suitable for small fires and fires involving electrical equipment. However they should not be used on sensitive electrical equipment, for example a computer.



- **Cream**      **Foam Fire Extinguishers**

They are suitable for fires involving flammable liquids such as petrol and effective in preventing re-ignition.



- **Black**      **CO2 or Carbon Dioxide Fire Extinguishers**

They are very effective on fires involving computer equipment and various other electrical appliances.



- **Yellow**      **Wet Chemical Fire Extinguishers**

They are developed specifically to deal with deep fat cooking fires so suitable for fires in kitchens and in food processing plants.

**Please note, the body of all new / replacement extinguishers will now be red, with a small area on the front showing the colour code for the extinguisher.**

## Actions in the event of fire

(Slide No 19 / e-Learning Page 18)

It is important you know the correct actions to take in the event of fire. These will be covered by the local procedures in your organisation, but the general advice given below will suit most eventualities.



- Alert others by raising the alarm, activate the nearest fire alarm point
- Only attempt to tackle the fire if you have been trained and it is safe to do so
- Evacuate to a safe area using the safest and most direct route
- Your personal responsibility is to your patients, colleagues and yourself
- Fire-fighters are the experts; direct them to the fire as quickly as possible
- You can attempt to close doors and windows, to slow down the spread of smoke and fire, but only if it is safe to do so
- Once evacuated go to the fire assembly point and await further information before re-entering the building

## If you hear the fire alarm

(Slides No 20 / e-Learning Page 19)

Upon hearing the fire alarm, as above, you should follow your organisation's evacuation plan and procedures, but the general principles to follow are:

- Exit the building as quickly as possible
- Do not stop to collect personal belongings
- Do not use lifts
- Meet well away from the building at the agreed assembly point
- Do not return to / re-enter the building unless told it is safe to do so
- Follow any instructions from Fire Marshalls / Wardens and the emergency services

**If you are responsible for patients or other people you will need to follow separate specific instructions based on their ability, your location and circumstances to ensure their safety.**

**You must know.....**

(Slide No 21 / e-Learning Page 20)

Bring your knowledge up to date. Answer the questions below using your knowledge of where you work or are based. If you don't know the answers find out now. Preparation and planning may save your life and the lives of others.

Where are the escape routes?
Where is the safe refuge?
How will the patients be moved?
What are the security arrangements?
Where are the fire alarm call points?
The type of alarm signals a fire?

### Don't forget about...

(Slide No 21 / e-Learning Page 20)

In your responses to the form on the previous page, you need to try and cover every possibility. Don't forget to include in your plans the following considerations:

- Disabled colleagues
- Patients and visitors
- Alternative ways out
- Switching equipment off if necessary and safe
- Closing windows and doors



### Remember to...

(Slide No 22 / e-Learning Page 21)

Finally, to summarise, ensure you remember to:

- Always report hazards by following your organisation's policies and procedures
- Raise the alarm when you notice or suspect there is a fire
- Know your means of escape
- Always keep escape routes clear
- Ensure personal safety
- Look after colleagues and patients



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