Basic Fire Safety Awareness Training

Last reviewed: September 2022

Education Authority

Learning Outcomes

At the end of this session staff should be able to:

- Identify the components needed for a fire to start
- Identify the most common causes of fire in the workplace
- Outline the main consequences of fire in the workplace
- Identify ways you can contribute to fire prevention and protection
- Identify the structural features of a safe escape and how to ensure that they are maintained and available
- Gain an understanding of the actions that must be taken in the event of a fire
- Gain knowledge of fire fighting equipment

Introduction

- The **Fire Service (Northern Ireland) Order** came into effect in 2006 & the **Fire Safety Regulations (Northern Ireland)** came into effect in 2010.
- Education Authority (EA) has a statutory obligation to provide all employees with this training. This training will help minimise the risk of fire and protect staff from harm.
    - **Health and Safety at Work (NI) Order 1978**
    - **Management of Health and Safety at Work Regulations (NI) 2000**
- Every year there are approximately 650 workplace fires in Northern Ireland. Many of these fires could have been avoided if fire hazards were properly controlled.

Fires develop with frightening speed!

The Fire Triangle

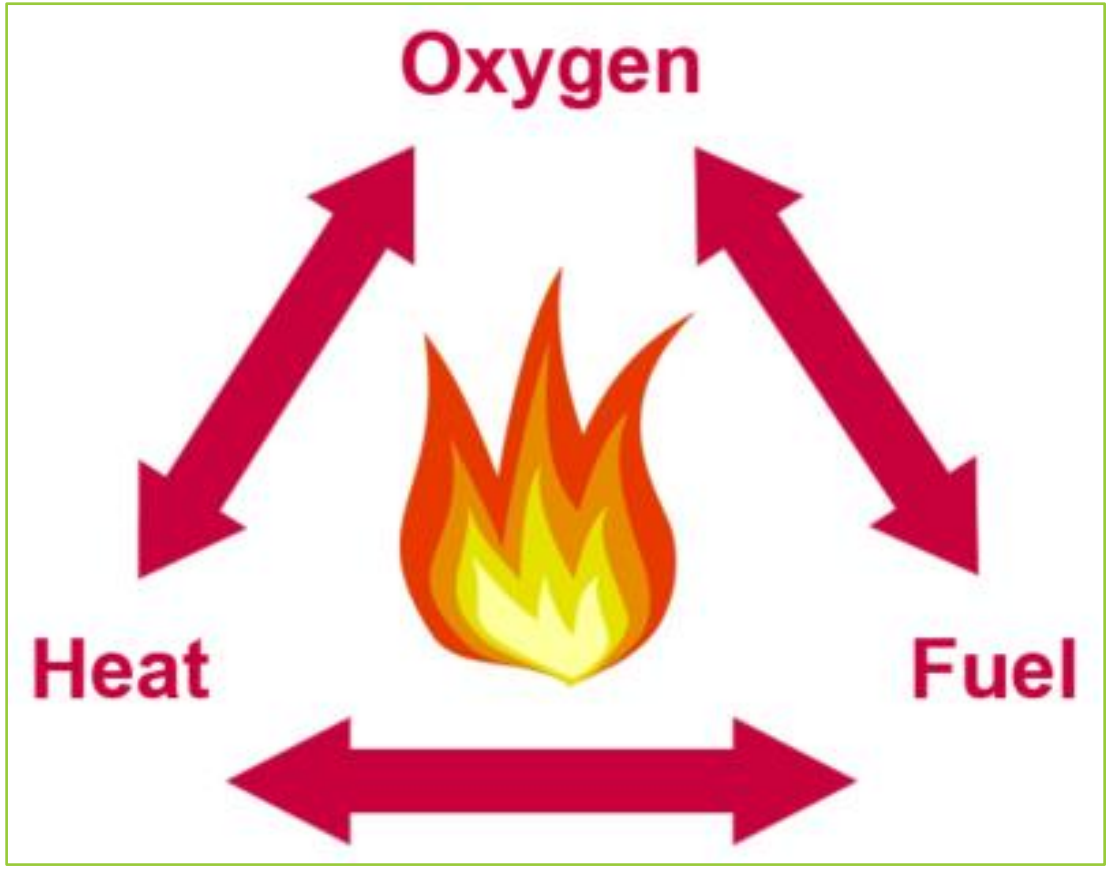
Fire is a chemical reaction involving three components:

- **Oxygen**
- **Heat**
- **Fuel**

All three of these elements must be present at the same time for a fire to start.

Taking steps to avoid these three elements from mixing will significantly reduce the chances of a fire occurring.

If you remove any of these components a <u>fire will go out.</u>



Breaking the Fire Triangle

Remove the Oxygen

Oxygen is required for a fire to burn. Oxygen is all around us.

In order to remove the oxygen:

- Cover with foam or a fire blanket
- Use a CO_2 Extinguisher.

Remove the Heat

Removing the ignition source - flames, electrical sparks etc. can help to put a fire out.

Remove the Fuel

Fuel is anything that will burn - most things that you will find at work.

Remove combustibles from the area of the fire or turn off gas.

Common Causes of Fire at Work

Arson

66% of fires in Northern Ireland are classified as malicious.

- Make sure buildings are secure when you leave
- Keep bins away from buildings
- Report suspicious activity

Smoking

Smoking related fires are on the decline.

At work, you must only smoke in designated smoking areas and never inside any EA buildings.

Kitchen Fires

When cooking, never leave appliances unattended. This includes **toasters.**

Electrical Faults

Due to:

- Overloaded sockets
- Misuse of adaptors
- Faulty wiring / frayed cables
- Misuse of extension leads
- Damaged plugs
- Incorrect fuses
- Overheating

Human Behaviour

Human behaviour is a common reason why workplace fires start. This may be through negligent actions, carelessness, ignorance and vandalism.

Negligent actions such as stacking combustible materials on heated equipment.

Reckless behaviour during a fire evacuation:

- Using a familiar route even though it is not the fastest nor the safest.
- Reacting slowly or not at all. Perhaps assuming a fire alarm is a fault or drill.
- Instinctively, looking to others to take the lead.
- 2 ½ minutes is the accepted time to evacuate an entire building of its occupants

YOU NEED TO ACT <u>QUICKLY AND SAFELY</u> IN THE EVENT OF A FIRE!

Consequences of Fire at Work

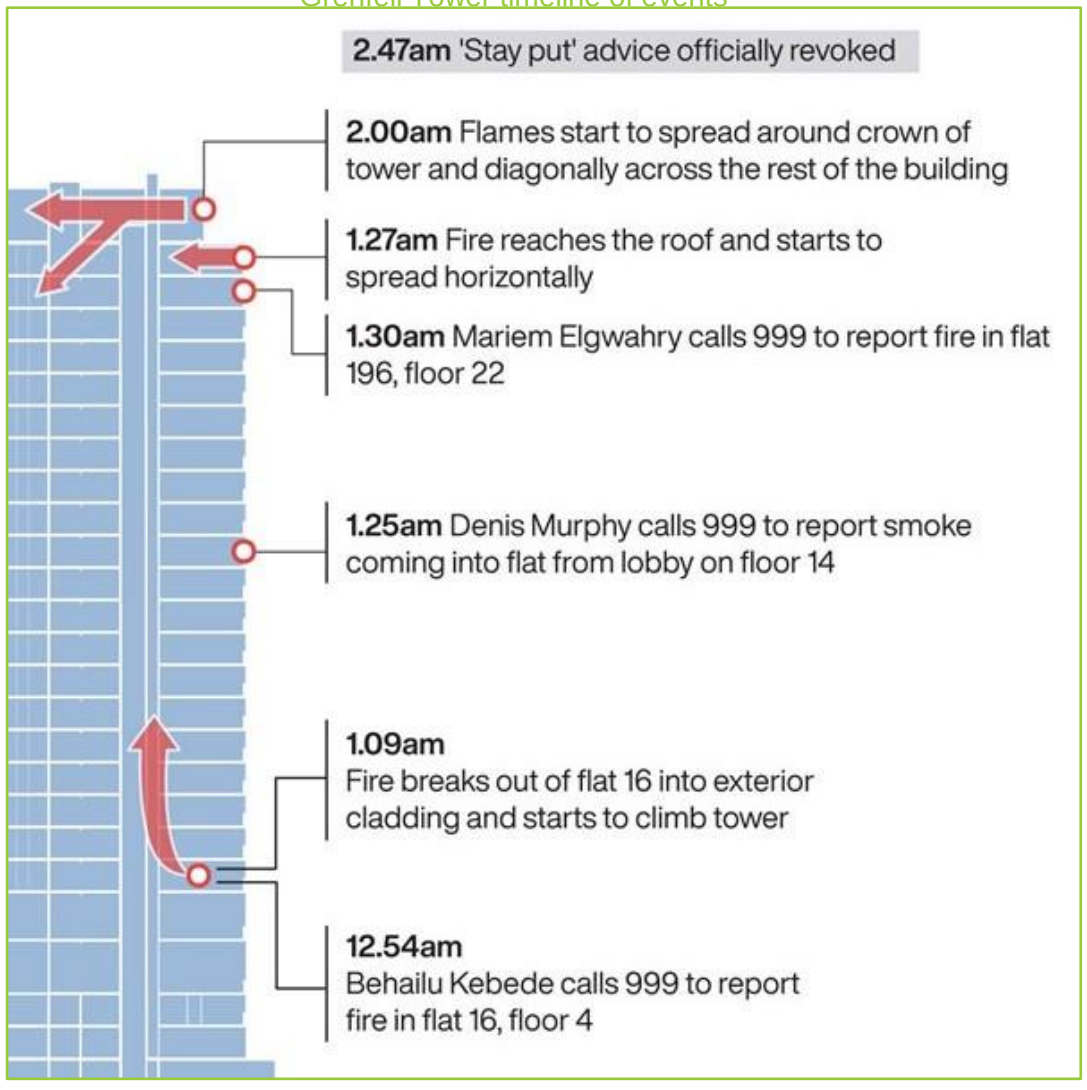
Fire can cause:

- **Death** or **serious injury** either by smoke inhalation or through burns
- Physical and mental trauma to employees
- Expensive damage to buildings
    - £100m cost to Primark in wake of 2018 store fire in Belfast.
- Damage to the environment.

Grenfell Tower Fire

- On 14 June 2017 fire broke out in the kitchen of a flat on the 4th floor of the Grenfell Tower block in London.
- The fire was started by an electrical fault in a fridge freezer.
- The exterior cladding was wrongly specified and had a flammable core, the regulations for this application specify non-combustible.
- The fire caused 72 deaths, many injuries and left hundreds homeless.

Grenfell Tower timeline of events



Grenfell Tower Fire – What went wrong?

- High priority recommendations from the fire risk assessment were not implemented
- The refurbished exterior design didn't comply with Building Regulations
- Maintenance work carried out over decades had compromised fire compartment separation

- Consequently the 'Stay Put' policy **failed**

What is a 'Stay Put' policy?

A 'Stay Put' Policy is used in high rise and some low rise residential buildings. Buildings are sub-divided into fire protected compartments (individual apartments and floors). If there's a fire in the building it's safe to stay within the compartment for a specified time, while the Fire and Rescue Service deal with the situation.

All 24 floors affected by the fire

Fire Prevention

Control measures that prevent a fire from occurring.

- Maintain good housekeeping & do not wedge open fire doors
- Visual checks of electrical equipment - if you notice any damage, do not use. Mark it unsafe and report!
- Safe use of portable heaters - do not place anything on top of a heater or place it near a fuel source
- Safe smoking practices (if a smoker)
- Vigilance towards the risk of deliberate firesetting
- Reporting unsafe behaviour and potential fire hazards
- Undertake training
- Comply with measures in the Fire Risk Assessment
- Keep ignition sources away from combustible material or flammable liquids and gases
- Keep flammable liquids to a minimum and close containers when not in use

Fire Protection

Control measures that will save lives and minimise structural damage in the event of a fire.

- Carry out and regularly review the Fire Risk Assessment
- Be familiar with emergency arrangements
- Be familiar with your means of escape
- Maintain fire door integrity
- Follow good housekeeping practices
- Be familiar with the location of fire safety items
- Make your whereabouts known

If you are unsure about any of the above, please discuss it with your line manager or contact the **QSHE - Environmental and Fire Risk Compliance Service** on 028 9041 8066 or email at EAEnvironmentalCompliance@eani.org.uk

Typical Fire Safety Problems

Poor Storage

Combustible material and ignition sources should not block escape routes.

Bin Fires

Bin fires can spread into structures quickly and should be stored securely away from buildings.

Wedged Fire Doors

Wedging fire doors open allows smoke and fire to enter escape routes. A wedged fire door is not a fire door!

Blocked Fire Escapes

External fire escape stairs must be kept clear of obstructions and their structural integrity should be checked annually.

Fire Door Integrity

FIRE DOORS ARE CRITICAL FOR SAFETY

Fire Doors are:

- Designed to stop the spread of smoke, heat and flames for at least 30 minutes to allow a safe exit in the event of a fire.
- Placed on higher risk rooms (kitchens, switch rooms etc.) and within corridors to shorten and protect the route to a safe area, providing an escape route free from smoke.
- Often fitted with self closing or hold-open devices to ensure that doors are in the correct position.
- One of the most important fire protection provisions - they help prevent fire and smoke from spreading.
- Only effective if they can close!

You must play your part in ensuring that fire doors are **kept shut** at all times.
Wedging fire doors open is **illegal, unsafe and against EA policy**.

Fire Door Integrity

Stop the Spread

Doors should not be propped open with bags, wedges, fire extinguishers etc.

Good Condition

Door Release Device

Doors can be held open by a door release mechanism linked to the fire alarm system.

Fire Safety Management – The Fire Alarm

The weekly fire alarm test is **essential**:

- To ensure the system is functional
- To ensure people know what it sounds like
- To comply with legislation

Testing must be recorded in the fire safety log book for inspection by the Fire & Rescue Service. **The Fire Safety Log Book should contain records of:**

- Weekly Fire Alarm test
- Monthly Emergency Lighting test
- Fire Safety training
- Fire Evacuation drills
- False Alarms

Where a fire alarm is also used to signal class changes, people must clearly understand the difference.

A continuous sound means evacuate immediately.

Fire Safety Management – Manual Call Point

If there is no automatic fire detection staff must understand the purpose and use of manual call points.

Purpose of a Manual Call Point:

- Allows for the manual activation of the fire alarm system in the event of an emergency

How to use:

- Break the plastic and press the button to activate the fire alarm system

A manual call point

This notice should be located beside manual call points

Fire Safety Management – Safe Escapes

Don’t obstruct escape routes or exits

- Familiarise yourself with the:
  - Location of fire exits throughout the building you are working within
  - Make sure you know where your Assembly Point is
  - Location of important fire safety items (fire blankets etc.)

- Fire exits **must be checked daily** when opening and locking the building to ensure that:
  - They can be reached easily
  - They can be opened easily
  - There are no obstructions inside or outside

IF YOU ARE UNSURE OF ANY OF THE ABOVE, SPEAK TO YOUR LINE MANAGER <u>IMMEDIATELY</u>

Fire Safety Management – Emergency Lights

Emergency lights will help to guide people from the building and indicate exits in the event of a power failure.

Emergency lights are **checked periodically** however, should you notice a fault, please log a call on the maintenance helpdesk.

Fire Essentials

If you <u>discover</u> a fire

1. Sound the alarm by breaking the nearest manual call point.
2. Call 999 and request the Fire Service.
3. Staff are to evacuate the premises, closing doors behind them and assist disabled users to evacuate the building.
4. Do not try to use lifts
5. If you are a Fire Warden, carry out any assigned duties, otherwise go straight to the assembly point, don't delay to collect belongings
6. Only tackle a fire if you have been trained and it is safe to do so.
7. **GET OUT and STAY OUT and await the arrival of the Fire Service.**
8. Complete a staff roll call.
9. The responsible person (this should be a member of the Premises Fire Safety Management Team) is to brief the Fire Service on arrival.

Fire Essentials

If you <u>hear</u> the fire alarm

1. Evacuate the premises, closing doors behind you and assist disabled users to evacuate the building.
2. Do not try to use lifts
3. If you are a Fire Warden, carry out any assigned duties, otherwise go straight to the assembly point, don't delay to collect belongings
4. Only tackle a fire if you have been trained and it is safe to do so.
5. **GET OUT and STAY OUT and await the arrival of the Fire Service.**
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Fire Fighting Equipment

Water

Used on fires involving paper, wood, textiles etc. Water should **not** be used on flammable liquids or electrical equipment.

CO2

Used on live electrical fires and flammable liquids. CO2 may **not** be effective on oil or fat fires in pans.

Foam

Used as water but can also be used on flammable liquids. Foam should **not** be used on electrical equipment.

Fire Blanket

Used to smother small fires in pans or involving a person's clothing etc.

What you need to know

- How to raise the alarm
- The nearest exit route from your location
- Location of Fire Alarm Call Points & Fire Extinguishers
- Your Evacuation Procedure and Assembly Point
- Your Fire Marshals or Wardens
- Emergency telephone numbers

If you are unsure about any of the above, please discuss it with your line manager or contact the **QSHE - Environmental and Fire Risk Compliance Service** on 028 9041 8066 or email at EAEnvironmentalCompliance@eani.org.uk

Thank you for taking the time to complete this training

Please note that in order to register as having successfully completed this training, you **MUST** fill out and submit the ‘Confirmation of Training Completion – Basic Fire Safety Awareness Training Form’. Please click here.

If you have any queries, please contact the **QSHE - Environmental and Fire Risk Compliance Service** on 028 9041 8066 or email at EAEnvironmentalCompliance@eani.org.uk