

Introduction to Fire Safety at LHCH



Level 1 - All staff, including unpaid and voluntary staff

What you will learn in this session

1. The characteristics of fire, smoke and toxic fumes
2. Fire hazards
3. Fire prevention
4. Basic fire safety and staff responsibilities
5. Actions to take on hearing the fire alarm
6. Evacuation procedures and associated escape routes
7. Fire extinguishers

You will require further practical training to include evacuation procedures and a local induction to your place of work

Dependent on role, location and service need, the outcomes here should be supplemented by specific job and site training

Why is this so important?

Duties under the Regulatory Reform (Fire Safety) Order 2005

5. Any duty (to provide a minimum fire safety standard) imposed on the Responsible person by this Order **shall also be imposed on every person, who has to any extent, control of those premises,** as far as the requirements relate to matters within his control.

THIS MEANS YOU!

Why is this so important?

- Adequate fire safety training is essential to ensuring that fire prevention and emergency action plans can be put into practice. The safe evacuation of our patients in the event of a fire will rely on the effective action of staff in implementing the emergency plan.
- Merseyside Fire and Rescue Service attendance policy has been downgraded by 50% - It can take up to 15mins for an engine to arrive at the Trust once called.



What is fire?

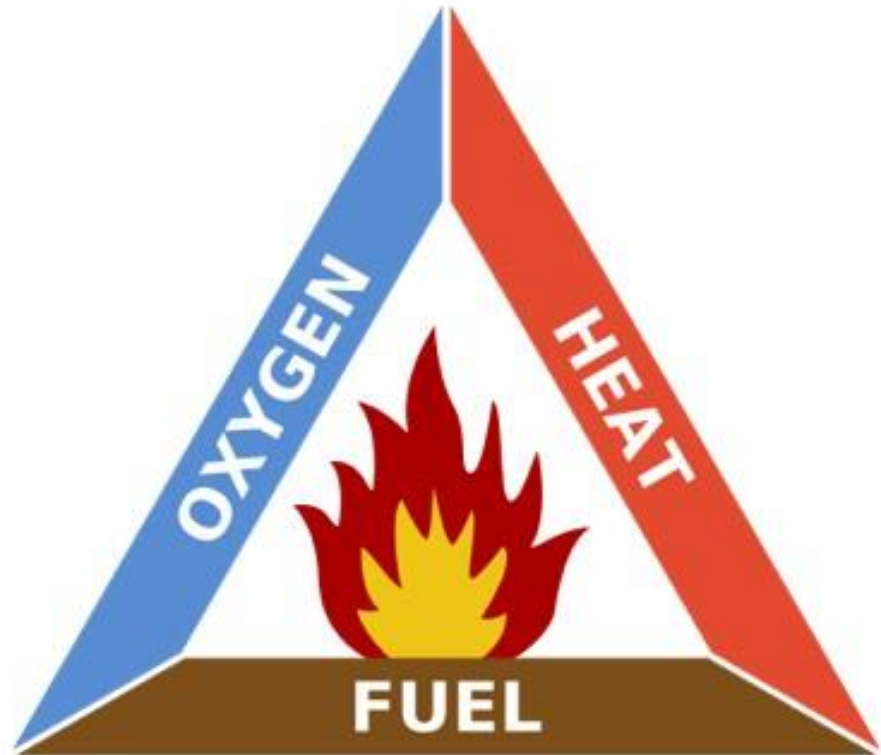
- A chemical reaction producing smoke, heat and flames
- Produces dangerous, toxic gases
- Will cause disorientation
- Will damage property
- May cause injury or death

Smoke inhalation
Number 1 cause of death
in indoor fires



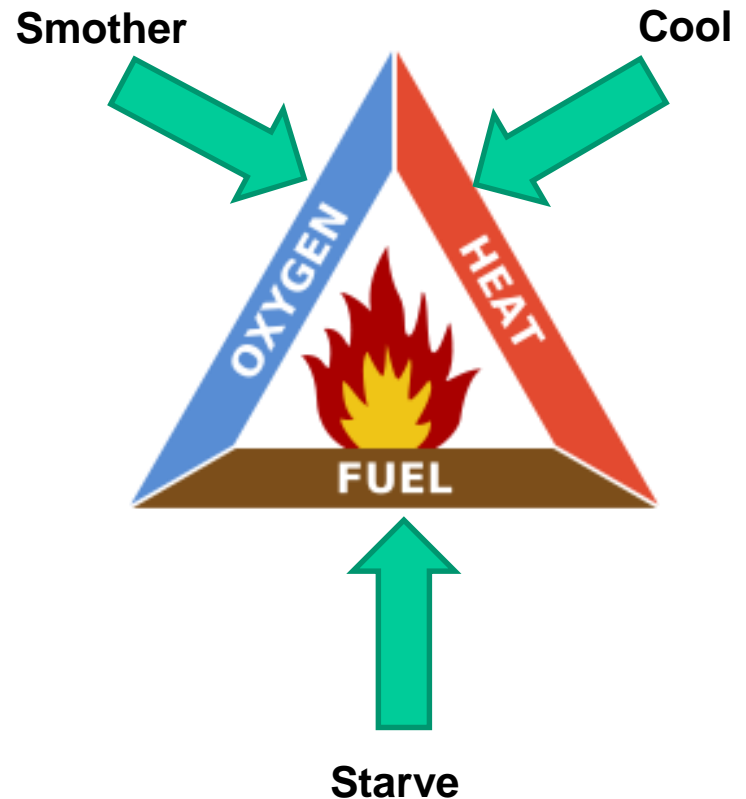
Triangle of Combustion

- A fire needs 3 elements:
- **Oxygen**, **Heat(Ignition source)** and **Fuel**
- Take 1 of these elements away and the fire will die



Methods of extinction

- **Cooling** – Removing the source of heat
- **Starvation** - Limiting or removing the source of fuel
- **Smothering** – Removing the source of air or providing a barrier between the fire and the oxygen



Fire hazards

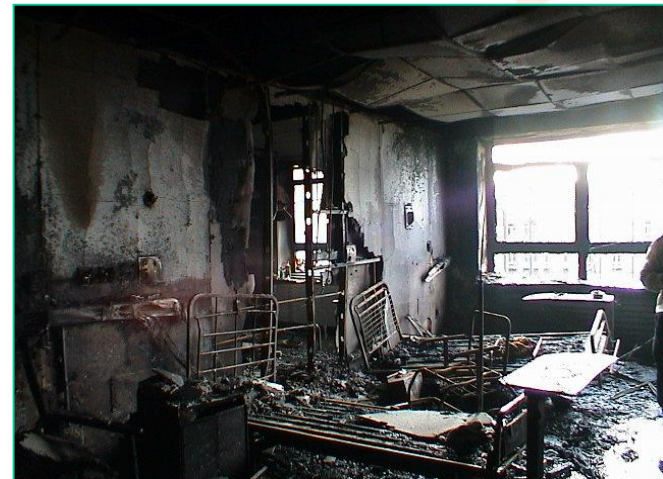
- Smoking
- Electrical items
- Medical oxygen
- Flammable liquids, gases and chemicals
- Clutter/fire loading
- Arson
- Staff kitchens/cooking equipment

Smoking

- All staff, patients and visitors are to adhere to the Trust's No-Smoking anywhere on site Policy



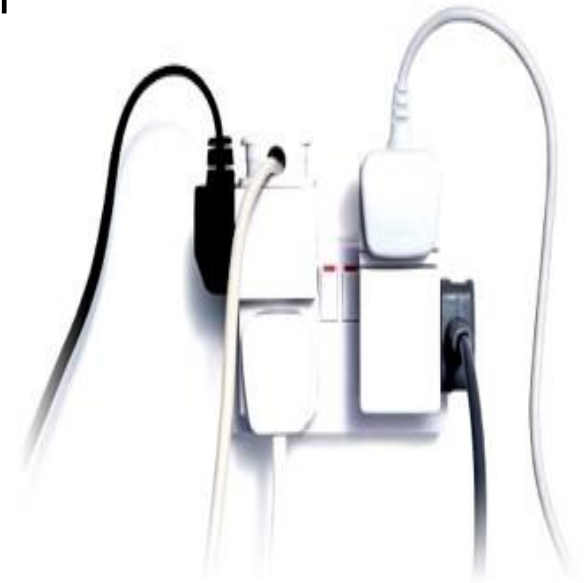
This is a 6 Bed Ward at Warrington General hospital



This is the same Ward, Fire caused by patient Smoking at their Bed

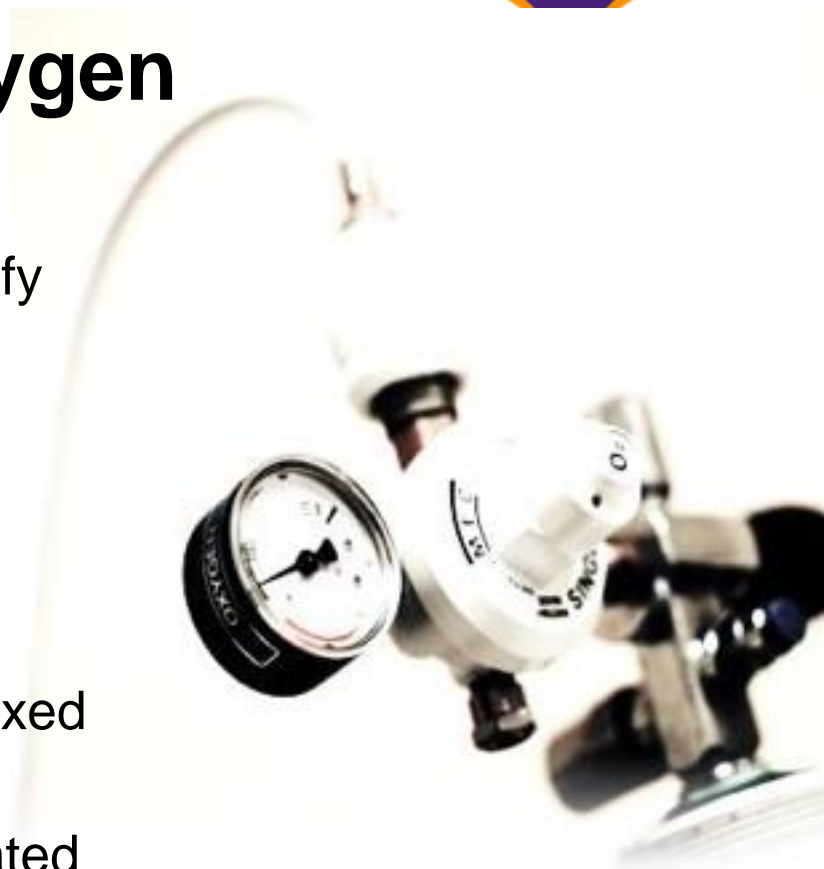
Electrical equipment

- Can be a **FIRE HAZARD** if in poor condition or used incorrectly
- Look for signs of damage, overheating or not working properly
- Make sure equipment is PAT tested
- If in any doubt:
SWITCH OFF, REPORT AND LABEL
- Let others in the area know about the fault
- Call Maintenance of the Fire safety advisor to report



Medical oxygen

- The introduction of Oxygen will intensify any fire situation and make conditions **WORSE**
- Always report leaks
 - Be familiar with how oxygen is supplied and managed
 - Know how to turn off cylinders or fixed oxygen supply
 - Store cylinders properly in designated storage areas
 - Don't smoke near oxygen!



Flammable liquids, gases & chemicals

- Everyday cleaning products
- Chemicals and gases
- Take care with gas cylinders, they must always be stored upright and securely fastened
- Control of Substances Hazardous to Health (**COSHH**)

Flammables should be:

- Stored in designated areas such as COSHH lockers
- Clearly labelled
- Stored securely away from heat



Clutter / Fire Loading

- Act as additional fuel source for any fires and feed the fire
- Blocks exits and escape routes
- Increases risk of trips and falls
- Disrupts access for fire fighters



**Always keep fire escape routes clear
It's your way out!**

Arson

- Health care premises are an easy target
- Most likely cause of fire in the NHS
- Be on your guard
- Report any suspicions (Security EXT 1999)
- Consider contacting the police
- Keep Waste Materials to minimum and in secure containers



Fire Risk Assessment

- The Regulatory Reform (Fire Safety) Order 2005 demands that all organisations carry out regular and timely Fire Risk Assessments
- Become accustomed with the location of fire equipment, fire exits and the evacuation protocol for your working area
- You must familiarise yourself with your organisation's Fire Safety Policy and Local / Departmental Fire Risk Assessment
- Take note of any significant findings in the Fire Risk Assessment

Protective measures

- Structural fire separation (Compartmentation)
- Fire doors (30 minute minimum protection)
- Fire alarms
- Fire signage
- Emergency lighting
- Fire fighting equipment
- Evacuation procedures
- Refuges

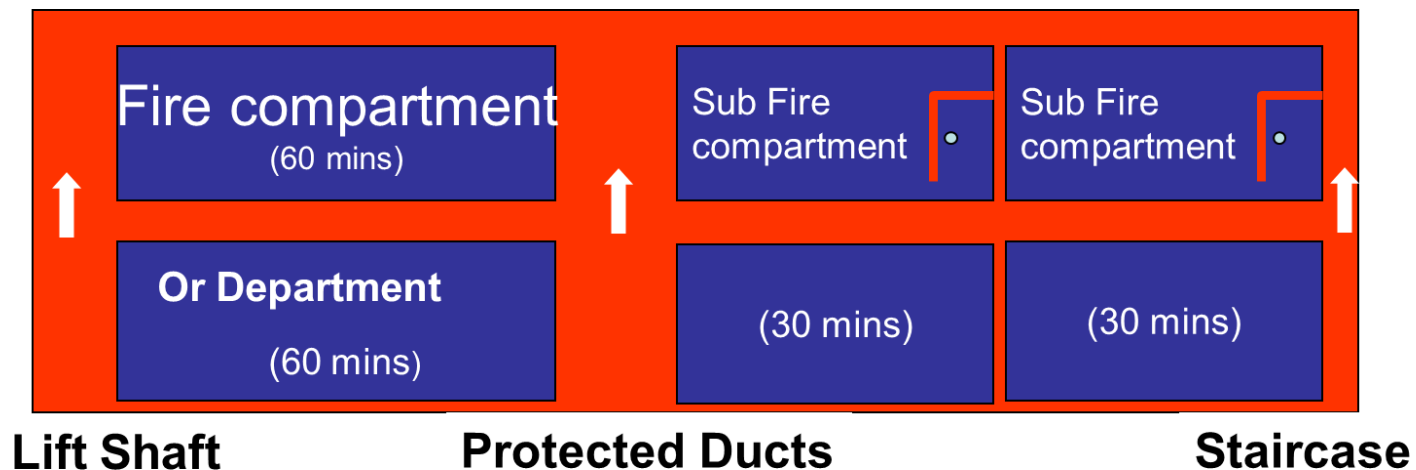


Protective measures

Compartmentation

This is dividing a building into fire resisting boxes which contain a fire for a certain amount of time.

- First we divide all the departments and wards into a space which is protected from fire spreading for 60 minutes
- Next we protect all the areas which may have a fire, like kitchens or store rooms, by providing 30 minutes protection from a fire spread



Fire Warning Systems at LHCH



Manual call points



Automatic Smoke / Heat Detection system

Fire Alarm Soundings at LHCH

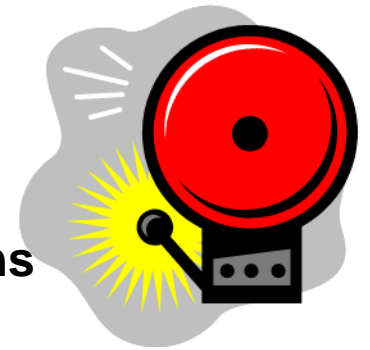
Continuous ringing;

Means you are in the affected zone and there is a possible fire, await further instruction from local fire wardens and management

Intermittent ringing;

Means activation/fire is in adjacent department from the one you are in, be prepared to accept patients from affected areas.

The fire alarm system is tested once per week by Law (Friday Mornings)



Actions in the event of fire

- Raise the alarm (Red Break Glass)
- Call switchboard emergency number on **Ext. 2222** informing of the situation
- Tackle the fire if you are trained **AND ONLY** if it's safe to do so
- Evacuate patients to a safe area and ensure their health needs are met
- Close doors and windows if it's safe to do so
- Await further information from attending fire team



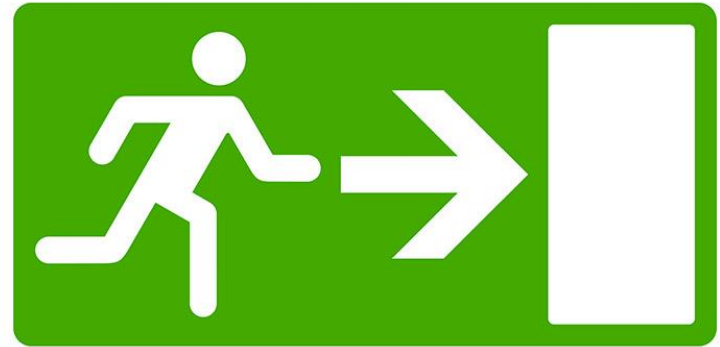
If you hear the fire alarm (Non Clinical)

- Follow The Trust evacuation plan and procedure

The General principles are:

- Exit the compartment you are in 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 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 instructions to ensure their safety

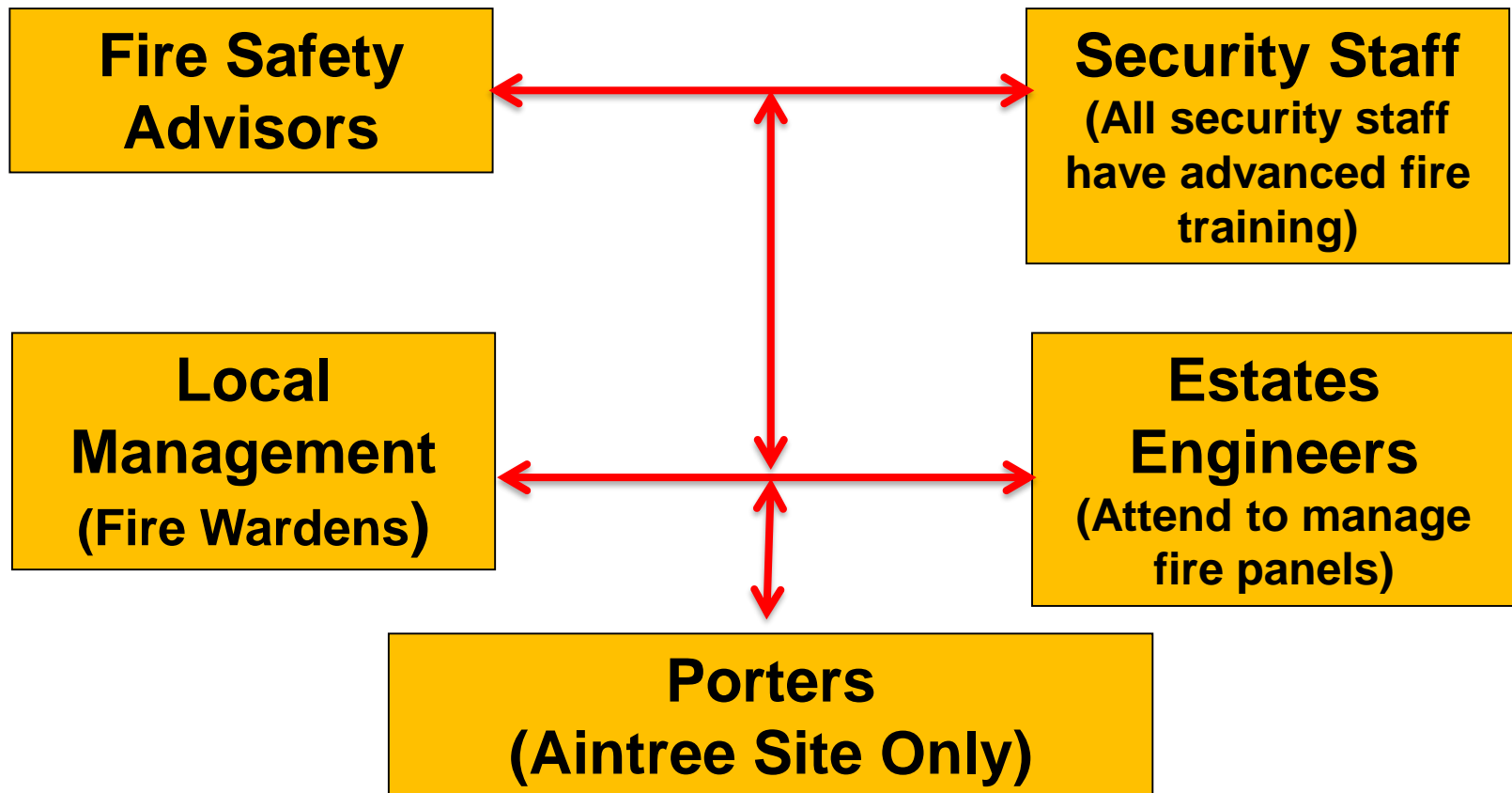
Evacuation



- Clinical departments with bed bound patients must Progressively move from the area where the fire is to an adjacent safe area on the same level.
- Move from an area where the fire alarm is continuous to the next safe area which is intermittent
- In the event of a serious fire, consider your continuity plan which may involve moving to a different part of the hospital.

Emergency Fire Team

The emergency fire team is made up of various personnel and will respond to a fire alarm call, tackle a fire if possible and initiate the call the fire brigade if necessary



Fire Doors

Keep fire doors closed unless they are kept open automatically.

Do not wedge open fire doors!

If the fire alarm is sounding be aware of:

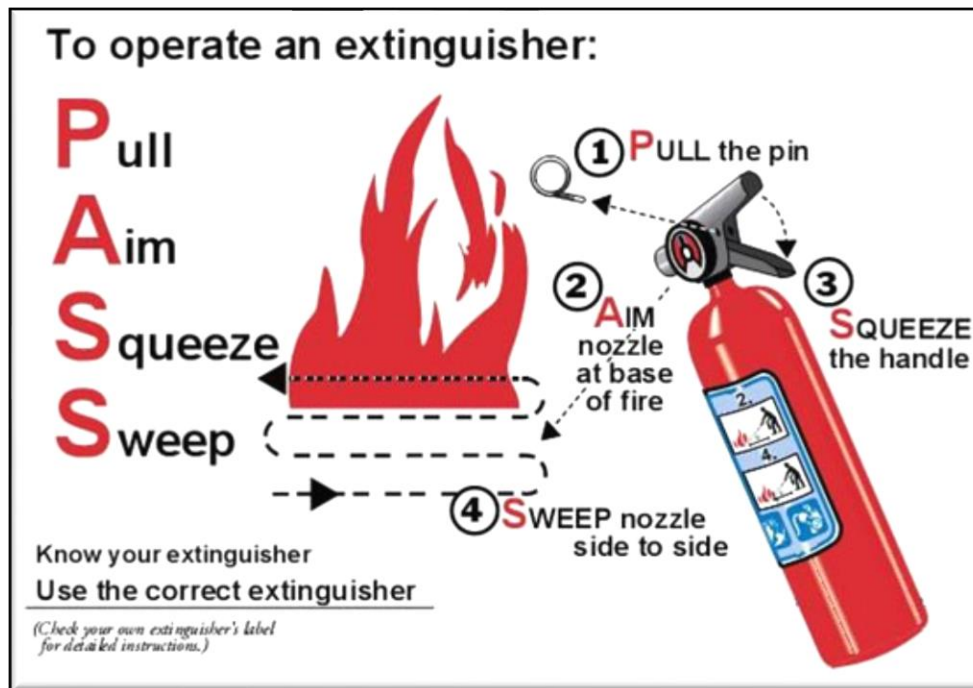
- Smoke - Through the windows or around the door edges
- Scorch Marks on door and near handles

If either are present DO NOT open the door



Fire Extinguishers

- Fire extinguishers come in different shapes, sizes and colours
- Each fire extinguisher is specifically designed to tackle a certain type of fire



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

Fire Extinguishers at LHCH

- **CO2 (Carbon dioxide)** denoted by a **Black** band

We use this type of fire extinguisher on electrical fires only



- **FOAM** denoted by a **Cream** band
- We use this fire extinguisher on Class A and Class B Fires, such as Paper and cardboard, Fabrics and textiles plus Flammable liquids, like paint and petrol.



Remember We only use CO2 for electrical fires

Fire fighting Equipment in Kitchen Areas at LHCH

Wet Chemical – Denoted by a **yellow** band

This fire extinguisher is to combat cooking fat fires, they are installed in industrial kitchens on site



Fire Blanket

Predominately used on fires within the kitchen. Ensure hands are covered, Do not remove until completely cooled



Fire Extinguishers Summary

- Portable Extinguishers are designed for fighting small fires only (no larger than an office bin fire).
- Always be aware of the situation to ensure you have an escape route and have another person with you in case things go wrong.
- When using CO2 extinguishers NEVER hold the horn, this could cause frost burn.
- Only fight fires if you are trained and feel confident, never put yourself at harm

You must know...

- Where are the fire alarm call points?
- What the emergency number is?
- Where the escape routes are?
- Where is the safe refuge?
- How will the patients be moved?
- What are the security arrangements?
- Each type of alarm signal?
- When are alarm test days?



Remember to...

- Report hazards
- Raise the alarm
- Know your means of escape
- Keep escape routes clear
- Ensure personal safety
- Use designated COSHH Lockers



Need advice?

Helpdesk: 0151 529 6597

HealthandSafety@liverpoolft.nhs.uk

LHCH Fire Safety Officer: 0151 600 1568

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