Level 2 Award in Health and Safety in the Workplace

Student notes (sample)
Fire

Fire is a constant hazard both at home and in the workplace. It starts when three things come together in the right amount at the same time. These three things are:

- A source of fuel (something that will burn)
- A source of heat (or ignition)
- Oxygen (present in the air around us)

These three things are known as the ‘fire triangle’.

Sources of fuel include:
- Paper and wrappings
- Accumulated rubbish
- Solvents and paints
- Plastics

Sources of heat include:
- Matches and lighters
- Sparks from faulty equipment
- Heaters and cookers
- Overheated machinery

The important thing is to identify sources of fuel and heat and keep them apart.

Electricity

Because electricity is used in almost every workplace it is easy to forget how potentially dangerous it is. Exposure to electricity can lead to electric shock and burns, and is often the cause of fires.

Electric shocks are caused by touching either a live conductor or something that has become live due to a fault. Electric shocks can be fatal.

Examples of where a live conductor might be touched include:

- Bare wires on an electric drill that is being used
- Damaged plugs exposing the internal wires
- Poorly maintained cables
Part of the risk management process involves introducing control measures (or precautions) to reduce the risk from hazards.

Wherever possible, control measures should be ‘collective’ rather than ‘individual’. In other words, they should reduce the risk to all those who may be affected by the hazard.

There is a strategy for control that looks at:

**Safe Place v Safe Person**

If we make the workplace safer (by improving lighting, for example) then everybody in the workplace will be protected. If we just concentrate on one individual (by giving them PPE for example) then the workplace is no safer and anybody without PPE is not protected.

We should do everything we can to make the workplace safe for all employees, then concentrate on specific individuals for the remaining (residual) risk.

A hierarchy of controls is used to reduce risks and can be described as ‘a set of measures designed to reduce risks in order of effectiveness’.

A typical hierarchy (with examples) might be:

- **Eliminate** the hazard – trip hazards from trailing cables eliminated by using cordless tools
- **Substitute** the hazard – for something less dangerous such as water based paint instead of solvent based paint
- **Isolate** the hazard – put a guard around a moving part of machinery to prevent anybody coming into contact with it
- **Reduce** the risk from the hazard – by limiting the amount of exposure such as reducing the load that is being handled
- **Safe systems** – make sure that there are procedures in place to deal with hazardous situations such as working at height
- **Personal protective equipment (PPE)** – normally considered as a ‘last resort’, but important to protect against any remaining risk

Did you know?

Workplace injury and illness costs the UK an estimated £13.8 billion each year.

Remember

The best way to reduce the risk is to eliminate the hazard.
### Accident

An accident is an unplanned event which results in loss. This loss may be damage to property or equipment or injury or ill-health to person(s).

A typical accident is tripping on the stairs, falling and suffering injury.

### Near miss

A near miss is an unplanned event that had the potential to cause loss but didn’t. Using the stairs as the example, the worker trips but does not fall. This time there is no loss.

### What causes accidents and near misses?

Most accidents are a result of human error. These are often referred to as unsafe acts. Examples include:

- Not following procedures
- Removing safeguards
- Messing around

The state of the workplace and equipment can also lead to accidents. These are referred to as unsafe conditions. Examples include:

- Uneven flooring
- Poorly maintained machinery
- Noisy workplaces

When unsafe acts are carried out in a workplace with unsafe conditions the chances of an accident greatly increase.

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**Did you know**

In September 2013, the Health and Safety Executive visited 2,607 construction sites where refurbishment or repair work was taking place.

Inspectors found basic safety standards were not being met on 1,105 sites.

On 644 sites, practices were so poor that enforcement action was necessary to protect workers – with 539 prohibition notices served ordering dangerous activities to stop immediately and 414 improvement notices issued requiring standards to improve.