

Safety Conservation

Common Hazards and Control Measures:

Work Related Violence and Lone Working

Managing Occupational Road Risk

Fire Risk Assessment

Aims of Session

To introduce the pernicious hazards of work-related violence and the risks associated with lone working, and to discuss measures that may be appropriate to reduce the risks taking into account learning from presented case studies.

To discuss Occupational Road Risk and measures that can be introduced to reduce it.

To complete a previous lecture on Fire Safety, by discussing Fire Risk Assessment.

Objectives

By the end of this session students will be able to:

- Discuss work-related violence; lone working and occupational road risk and explain why employers must prioritise these for action.
- Analyse and interpret relevant case-studies and be able to utilise the learning in risk avoidance and mitigation strategies.
- Identify the factors required to reduce work-related violence, the risks associated with lone working and occupational road risks.
- Understand how to conduct a Fire Safety Risk Assessment with reference to a worked example.

Work Related Violence

JO COX MURDER TRIAL Jo Cox was stabbed 15 times and shot three times through her hands as she tried to protect herself

The mum of two suffered knife wounds to her heart, lungs, stomach and liver before being blasted three times

Dan Sales

17:46, 14 Nov 2016 | Updated: 13:48, 15 Nov 2016



Evening Standard NEWS SPORT BUSINESS EVENTS ES MONEY CUL MORE

NEWS > CRIME

Ann Maguire stabbing: teenager charged with teacher's murder in Leeds

The healthcare sector 'must focus on NHS staff safety and security' amid rising workplace violence, says NAHS

Against a backdrop of rising security risks to healthcare staff, the National Association for Healthcare Security (NAHS) has ...

SHP Online · 7d

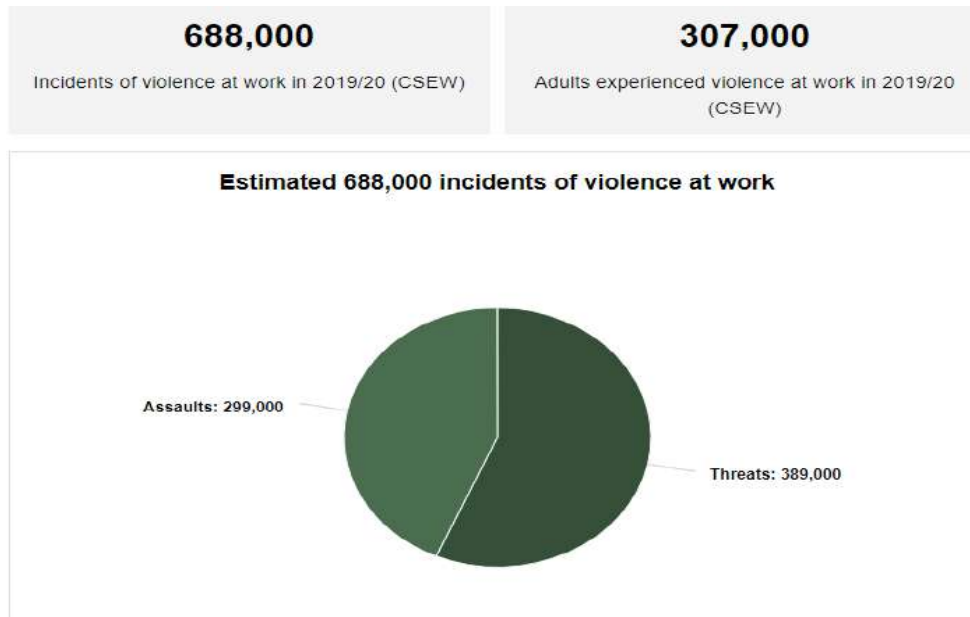


Work Related Violence

HSE defines work related violence as

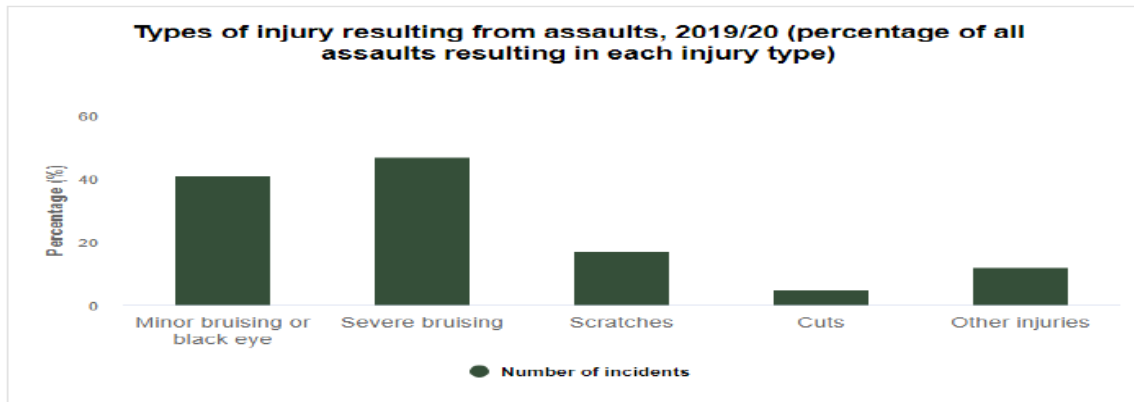
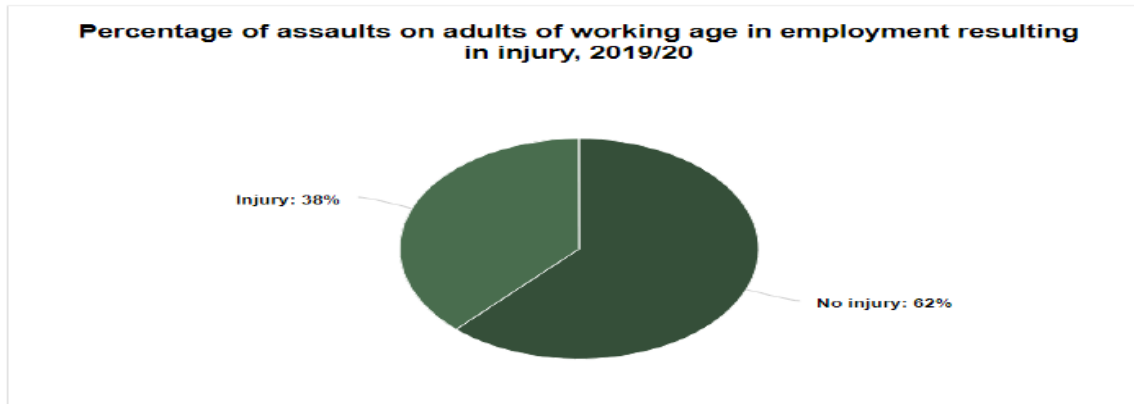
‘Any incident in which a person is abused, threatened or assaulted in circumstances relating to their work’.

This can include verbal abuse or threats as well as physical attacks.



Source: HSE and Crime Survey for England and Wales (CSEW)

Work Related Violence (2)



'Other' includes puncture/stab wounds, broken bones, nose bleeds, broken nose, broken, lost or chipped teeth, dislocation, concussion or loss of consciousness, internal injuries, facial or head injuries or other injuries.

Work Related Violence (2)

Statistics don't record the impact on the person assaulted in terms of stress, mental health and other effects on their normal daily life.

Discuss how this may manifest itself.

What can employers do after an incident to support staff?

Case Studies

Duty to conduct suitable and sufficient risk assessment:

- Ealing Council v KFC (2002)
- Collins v First Quench Retail Ltd (2003)

Provision of health risk information:

- Waugh v London Borough of Newham Council (2002)
- Millward v Oxfordshire County Council (2004)
- Healthcare Assistant v Dorset Healthcare Trust (2007)
- Adams v London Borough of Newham Council (2008)

Case Studies (2)

Providing a Safe System of Working

- Cook v Bradford Community Healthcare Trust (2002)

Inadequate Training

- Harvey v Northumberland County Council (2003)
- Out of Court settlement – Darlington and Manchester University (2007)

Case Studies (3)

Protective Screens

- Ealing Council v KFC (2002)
- Yorkshire Traction Co. Limited V Searby (2003)

Personal protective Equipment

- Henser-Leather v Securicor Cash Services Limited (2002)
- Out of Court settlement – Darlington and Manchester University (2007)

Lone Working

Lone Working

May increase the likelihood of employees facing work-related violence.

HSE defines lone workers as 'those who work by themselves without close or direct supervision, for example:

- ❖ as delivery drivers, health workers or engineers
- ❖ as security staff or cleaners
- ❖ in warehouses or petrol stations
- ❖ at home'.

Discuss why these workers may be at a greater risk and what the hazards are.

Lone Working – what to consider

[HSE LW Video 1](#)

Case Studies (4)

Lone Working

- Collins v First Quench Retailing Limited (2003)
- Humphrey v Tote Bookmakers Limited (2003)

Risk Reduction

- Management commitment and employee cooperation in equal measure.
- Clear, unambiguous policy on violence, bullying, harassment and lone working – developed with employees and their representatives e.g. Trade Unions.
- Training and awareness.

Risk Reduction (2)

- Risk Assessment – nature, frequency and contributory factors.
- Factors which an employer could influence include:
 - ✓ Pre-employment screening;
 - ✓ the level of training and information provided;
 - ✓ the environment;
 - ✓ Physical access controls;;
 - ✓ the design of the job;
 - ✓ Communication;
 - ✓ Screens/barriers;
 - ✓ Video/CCTV – premises and individual;
 - ✓ Alarms – premises and individual;
 - ✓ Body armour;
 - ✓ Security guards.

Risk reduction (3) – some examples:



Probably not proportionate!!



Summary

- Incidences of work-related violence continue to be significant
- In some sectors it is rising e.g. in healthcare.
- It is not hard to attribute this to the changing societal factors in the past decade.
- It is at once both a pernicious and a wicked problem.
- Reduction of risk depends on complete collaboration between the employer and employee.
- A risk assessment will indicate a range of design, physical and technological measures to reduce the risk.
- Awareness, training, commitment, collaboration and safe systems of work are always required.
- Support must be readily available for those either directly or indirectly affected.
- How well these are working must be regularly reviewed.



University of
Salford
MANCHESTER

Managing Occupational Road Risk





The lorry mounted the kerb before coming to a stop at the Millennium Hotel



Work experience student fatally crushed by vehicle, court hears

A motor vehicle repair company has been fined £33,000 after a 27-year-old man, who was gaining work experience at the garage, was crushed to death by a vehicle that had been left in gear.



**Driver Crushed By Vehicle
At Work Suffers Severe
Damage To Arm**



Discuss the ways in which employees could be injured whilst working in or around vehicles.

Discuss the ways in which others might be injured by a vehicle being used for work purposes.

What are the hazards?

- Road traffic collisions (Every year, about 50 people are killed and more than 5000 people are injured in accidents involving workplace transport (www.hse.gov.uk/statistics)).
- Struck by a moving vehicle.
- Contact with moving parts.
- Vehicle maintenance and repair.
- Falling from a vehicle.
- Hit by an object falling from a vehicle.
- Overloaded vehicles.
- Overturning vehicles.
- Poor ergonomics.
- Working along a highway e.g. road maintenance, lamppost repairs etc.
- Pedestrians and cyclists.
- Unfit driver – e.g. health, driving offences endorsement, influence of drugs or alcohol.

How employers can put their drivers at risk:

Selection of Vehicles

- Employers must select the most appropriate job for the task in hand and for the operatives who may use them.

Maintenance of Vehicles

- Not ensuring that motor vehicles are maintained and safe to drive.
- Not championing and embedding a culture of pre-use checks and incident/defect reporting.

Policy and Procedures

- Ineffective route planning e.g. traffic levels, road conditions, overhead restrictions, road width, route safety.
- Hiring people for driving jobs when they don't have the correct qualifications, or not providing the correct training.
- Requiring staff drive when they are not physically fit to.
- Not adhering to EU drivers hours rules.
- Not providing training or information on ergonomic driving.
- Putting drivers in a situation where they are encouraged to answer the phone – even if hands-free.

How employers put their drivers at risk (cont'd):

Poor Management Practice/Culture

- Put pressure on drivers e.g. to drive when conditions are unsafe for that vehicle, or to undertake their duties more quickly than it is safe to do so or expect too many jobs to be completed.
- Not allow rest periods or overnight stops.
- Not making allowances for young or inexperienced drivers.

Reducing the Risk

Safe site – design

- Traffic routes
- Segregation – staff and public
- Pedestrian crossings
- Visibility
- Speed
- Lighting
- Easy access control points
- Ventilation
- Signs, signals and marking
- Care with: soft ground, weighbridges, slopes, disabled people.

Reducing the Risk (2)

Safe vehicle

- Driver restraints and protection.
- Ergonomics.
- Vehicle visibility and reversing aids.
- Maintenance and repair.
- Thorough examination of lifting equipment.

Safe driver

- Competence.
- Vehicle specific training.
- Monitoring and refresher training.
- Health.

The Operators Licence ('O' Licence)

- An operator's licence (or O licence) is the legal authority needed to operate goods vehicles in Great Britain.
- A licence is issued by the Traffic Commissioner – the independent regulator of the commercial road transport industry;
- a Traffic Commissioner also has powers to take regulatory action against a licence holder where they fail to meet the expected standards of operation. This action includes:
 - curtailment (limiting or reducing the number of vehicles an operator is able to operate),
 - suspension (temporarily stopping operations) or
 - revocation (permanently removing an operator's licence to operate commercial vehicles).

Operators Licence – interesting facts

- Required when operating vehicles above 3.5 tonnes gross vehicle weight (GVW) that are used to carry on public roads for trade or business purposes. This includes short-term rental vehicles hired for as little as one day
- The operator's licence must be held by the competent person – whether an individual or a company – who ‘uses’ the vehicle and this may or may not be the owner of the vehicle. The user of the vehicle can be:
 - the driver, if they own it or if they are leasing etc (e.g. a typical owner-driver operation)
 - the person whose agent the driver is – i.e. whoever employs or controls the driver
- Licence specifies the Operating Base i.e. where vehicles are normally kept.
- 3 types of licence:
 - Restricted.
 - Standard national.
 - Standard international.

Operators Licences - enforcement

The Driver and Vehicle Standards Agency carries out regular roadside vehicle checks and checks on operating centres. They then submit information to the independent traffic commissioners.

A vehicle may be prohibited or immobilised if a DVSA roadside check finds that:

- it's been overloaded
- it's unroadworthy
- it breaks the rules on the transport of dangerous goods
- a driver has broken drivers' hours regulations

The licence could be taken away, suspended or restricted by the traffic commissioner

Managing Occupational Road Risk – some final thoughts

- Health Declaration processes.
- Drug and Alcohol Testing.
- The use of Telematics.

Fire Safety Risk Assessment

Control Measures



Control sources of ignition:

- Intrinsically safe electrical equipment
- Controlled use of mobile phones
- Electrical installation and PAT
- Separation and shielding
- Designated smoking areas/fire proof cigarette bins.

Control sources of fuel:

- Hierarchy of control – substitution, ventilation, containment, separation
- Safe storage
- Safe disposal
- Inspection and maintenance of plant, equipment and pipework

Control sources of Oxygen:

- Safe use and storage of oxidising materials
- Ability to restrict natural and forced ventilation

Fire Protection and Prevention- Passive Measures



University of
Salford
MANCHESTER

Preventing Internal Fire and Smoke Spread:

- Compartmentation
- Protection of openings
- Fire-Stopping
- Fire-Resisting Ductwork and linked alarms
- Fire-Resisting Dampers
- Internal lining materials (incl over-painting)
- Fixtures, fittings and contents.

Preventing External Fire Spread

Means of Escape:

- Place of safety
- Alternative escape routes
- Travel distances
- Protection of escape route
- Fire Exit doors
- Emergency escape lighting

Fire Protection and Prevention- Active Measures



University of
Salford
MANCHESTER

Automatic Detection:

Heat – fusion or expansion

Smoke – Ionisation or Optical

Radiation emitted by the fire

Carbon Monoxide

Others e.g. Laser or Photo-Thermal

Systems divided into categories relating to the objective of the system:

Category L (Life Protection) – objective of protecting people from loss of life or injury. Further divided into L1,L2,L3,L4,L5 depending on where installed.

Category M (Manual Alarm System) – reliant on people discovering the fire and manually using break glass or sounders to raise the alarm

Category P (Property Protection) – objective of limiting potential fire damage to a building and its contents. Can be P1 or P2.

Extinguishing Media and Portable Fire Fighting Equipment



University of
Salford
MANCHESTER

Operate mainly by removing heat (cooling) or excluding Oxygen (Smothering)

Extinguishing agents include:

- Water
- Foam
- Dry Powder
- Special Powders
- Vaporising Liquids
- Carbon Dioxide
- Wet Chemical
- Fire Blankets

Extinguishing Media and Portable/ Permanent Fire Fighting Equipment



University of
Salford
MANCHESTER

Portable Fire Extinguishers – selected as to classification of fire:

Class A – fires involving organic solids (e.g. wood, paper, plastics etc)

Class B – fires involving flammable liquids (e.g. petrol or paint) or liquefiable solids (e.g. fats, greases – NOT cooking oils/fats)

Class C – Fires involving gases (e.g. butane or propane)

Class D – Fire involving certain metals (e.g. sodium, magnesium)

Class F – Fires involving commercial deep fat/oil fryers.

Fixed Extinguishing Installations – a permanent means of extinguishing fires in high-risk situations:

- Sprinklers – in wet riser and dry rises systems
- Gas Flooding Systems
- Drencher Systems
- Hose Reels

Safety of People in a Fire



University of
Salford
MANCHESTER

Fire Evacuation:

- **Evacuation Procedures**
 - How are people warned
 - How an evacuation should proceed
 - Arrangements for especially vulnerable people
 - Arrangements for special groups of people – e.g. contractors, cleaners, public
 - Arrangements where shared occupancy
 - Assembly after evacuation
 - Has everyone been evacuated
 - Information, training and retraining
 - Allocation of responsibilities

Safety of People in the Event of a Fire



University of
Salford
MANCHESTER

Types of Evacuation:

- **Simultaneous Evacuation** – ‘normal’ type, alarm heard, everyone leaves at same time and assembles in safe place.
- **Phased Evacuation** – allows a controlled evacuation with selected persons first, and further evacuation later if necessary.
- **Phased** evacuation can be ‘**Vertical**’ or ‘**Horizontal**’
- Phased may need other fire precautions such as sprinklers, voice alarm systems, fire control points.
- **Staged Evacuation** – a type of Phased Evacuation with a Staged Fire Alarm System.

Fire Safety Risk Assessment



University of
Salford
MANCHESTER

In UK it is required by the Regulatory Reform (Fire Safety) Order 2005

Step 1 – identify Fire Hazards i.e. sources of fuel, ignition or Oxygen

Step 2 – identify who is at risk

Step 3 – Evaluate, Remove, Reduce, and Protect from Risk

Step 4 – Record, Plan, Inform, and Train

Step 5 - Review

Management of Fire Safety



University of
Salford
MANCHESTER

Fire Risk Assessment must be a working document e.g.

- Fire Safety Plan (including Evacuation Plan)
- Arrangements for Emergency Services – to facilitate attendance and efficiency
- Allocation of Responsibilities
- Signs and Notices
- Training
- Drills
- Maintenance and Testing of fire prevention and detection equipment
- Planned preventive maintenance and testing of electrical installations and equipment
- Fire safety inspections
- Review effectiveness.

An example of a Fire Risk Assessment

Name of Fire Risk Assessor	Chris Ingham MSc MBA CMIOSH CEnvP
Date of Fire Risk Assessment	13/5/22

Responsible person	[REDACTED]
What is the building used for?	[REDACTED]
Maximum occupancy	The premises could probably accommodate between 50-100, but occupancy is nowhere near that number.
Hours of occupancy	08:00 – 18:00
Number of floors	2
Approximate floor area per floor	Ground floor approx.. 1,470m; First floor approx.. 490m = total floor area = 1960 m sq
The construction and layout	<p>Solid plinth floors, brick walls and flat roof with what appear to be plastic skylights.</p> <p>There is an 'atrium' area running vertically from ground floor to ceiling without interruption in the centre of the premises with a galleried walkway and offices at first floor level.</p> <p>The ground floor is mainly dedicated to animal care and animal accommodation.</p> <p>There is a flat roof above some ground floor rooms with what appear to be plastic skylights.</p> <p>The building has a 'tower' which the assessor is informed is now filled with concrete.</p> <p>Air and heat conditioning is by a forced system of ductwork. Water heating appears to be by Heat Pump with large cylinder storage, expansion vessels and water pressure equipment.</p> <p>The premises were subject to a major refurbishment in 2017 in order to meet the requirements of the current occupants. It complied with Building Regulations at this time and the assessor was informed that there has been no further refurbishment or significant changes since.</p> <p>The assessor was informed that there was Asbestos in the building, but it was removed during the refurbishment in 2017.</p> <p>The premises stands in its own grounds with a locked parking area for company vehicles. There is also a large car park for staff and visitors.</p> <p>There is a water treatment plant to the side of the premises.</p> <p>There is a large Academy School at the end of a single vehicle width lane. It is this lane that would have to be used for emergency vehicles.</p>

Are there any of the following building occupants?	Yes	No	Comments (only required for types of occupant likely to be present)
Sleeping		X	There is a 'flat' onsite with sleeping provisions as this used to be required. It is not utilised currently but may again in the future if dogs are taken in once again.
Disabled People (workers and others)	X		There are no employees or volunteers currently with any mobility impairment. However, some work placement students from a local college are neurodiverse.
Lone or isolated workers	X		Employees and/or volunteers may work on their own in the cattery or isolation block. Two-way radios are provided.
Young persons	X		There are work placement students from a local college and Duke of Edinburg Award students. All students are supervised by their own college/school. Students tend to be 16-18 years old.
Others including visitors	X		Volunteers are engaged to work in the premises. Veterinary Surgeons also visit to run clinics and perform minor operations. Members of the public can visit the premises by appointment only – except for the retail shop, which can be visited any time.

Fire Safety Audit – Hazards

Electrical Appliances and installations	Yes	No	Additional comments
Does regular inspection and testing take place for electrical equipment (portable and fixed)?	X		There is a good system for the testing and inspection of electrical equipment. Staff are training in-house to do this for portable appliances. There was evidence of regular testing and all test labels for equipment were 'in date'. Fixed electrical equipment and the electrical installation is inspected regularly by a competent electrician. The fixed installation is tested every 5 years – as there are animal pens which are cleaned regularly with water and cleaning chemicals – so there is a potentially corrosive environment. N.B. There is a recommendation for a readily accessible list of all equipment, inspection dates, condition comments etc. Currently this is haphazard and stored away from other health and safety records.
Is there suitable management of trailing leads and adaptors?	X		Only one extension lead was seen at the time of inspection, and this did not have any equipment plugged into it. There is a policy requiring prior approval for the use of electrical extension leads.
Is there a suitable policy in place for use of personal electrical appliances (workers and visitors)?	X		There are strict rules prohibiting people from bringing their own electrical appliances into work. N.B. This happened previously with the Maintenance Operative but has now been stopped. This is an area, however, for constant vigilance and reminding staff.
Is the area surrounding the main electrical intake clear of combustible materials?	X		There is a locked shut electrical plant room.

Smoking	Yes	No	Additional Comments
Is smoking prohibited in the building?	X		It is prohibited and there was no evidence of smoking at the time of inspection.
Are there designated areas where smoking is permitted?	X		Are external area to the rear of the premises has been designated, but there was no signage.
Are there suitable arrangements for the extinguishing and disposal of cigarettes?		X	There was no evidence of these at the time of inspection.

Fire Hazards

Arson	Yes	No	
Are there basic security measures in place to protect against arson?	X		<p>Metal bins, locked and stored away from main building. Hazardous waste stored in a locked shed, behind a locked gate. There has been a recent siting of a charity Clothes Bank near to the Assembly Point. Whilst this is of metal construction and locked, it may pose a combustion hazard if clothes are allowed to accumulate outside the Clothes Bank if it is full.</p> <p>There is a wooden post box right outside the entrance door, which could pose a risk of Arson.</p> <p>CCTV and Security Lights are installed.</p>
Are there any potential fire load/combustibles near to the premises/boundary that are accessible to outsiders or other persons?	X		<p>Lockable metal bins are sited near the site boundary, but because of the location (remote at end of long single-track lane) and the fact that all waste is stored within them and removed regularly, it is not believed to be an Arson risk.</p>

Similar exercises for:

Cooking

Lightning

Housekeeping

Construction and Maintenance Work

Flammable and Explosive Substances

Combustible Materials as a source of fuel

Sources of Oxygen

Fire Protection

Measures to prevent smoke and spread	Yes	No	Additional Comments
<p>Is compartmentation of a reasonable standard eg, are any holes or gaps in walls, ceilings and floors from ventilation ducts, electrical cabling appropriately sealed?</p>		<p>X</p>	<p>Compartmentation is generally thought to be of a good standard. However, there are some matters that should be checked;</p> <ul style="list-style-type: none"> • There is what looks to be fire stopping filling where pipes/ductwork etc breach walls. Some gap were also evidence, especially around the wall/ceiling interface. These areas should be checked to ensure smoke cannot readily pass from one area to another and fire stopped if it can. It is also recommended that a checklist of all areas that have been fire stopped so these can be checked regularly for their integrity, as natural movement of the premises may affect it. • In some room there are ventilation grills which breach either a wall or fire door. These are required for the forced ventilation/air conditioning system. The original building file should be consulted to ensure that these are, as far as is necessary, of such a construction that they reduce the spread of smoke in the event of a fire e.g. made with intumescent material.
<p>As far as can be ascertained, are fire dampers provided to protect critical means of escape against heat, fire and smoke spread?</p>	<p>X</p>		<p>There is an extensive network of ducting within the premises for the heating/cooling forced air system. This ducting will contain fire dampers, which are inspected at the same time as the general maintenance where appropriate.</p>

Fire Protection - also consider:

Emergency lighting;

Means of escape;

Fire safety signs and notices;

Fire detection and warning systems;

Portable fire extinguishers;

Automatic fire extinguishing;

Procedures and arrangements;

Training and drills;

Inspection, testing and maintenance;

Recording and reporting.

Summary and Action Plan

Significant issue identified	Justification for selection	Current fire prevention and precaution measures	Additional actions/controls required	Responsible person	Completion dates(s)
Fire doors wedged open (not with an approved 'hold-back' device).	The building has been carefully designed and 'zoned' to protect escape routes and to provide adequate smoke and fire resistance. Wedging open key Fire Doors compromises this and, in the case of the first floor Staff Room, poses a real risk of the fast spread of fire and smoke as there are sources of fuel and ignition – and oxygen from a forced air system.	<p>Provision of the Fire Doors with self-closing devices and intumescent seals.</p> <p>Zoning of the premises into 6 compartments.</p> <p>Automatic Fire detection and Warning System.</p> <p>Emergency Lighting.</p> <p>Fire extinguishing equipment.</p> <p>Staff training.</p> <p>Periodic monitoring, inspection, testing, and maintenance.</p>	<p>Staff need to be told to cease this practice immediately. It needs to be explained why it is important.</p> <p>The reason why they are being wedged open should be investigated and address e.g., is it because it is too hot in the room.</p> <p>Management needs to regular monitor and enforce this rule and not allow for it to become the 'norm' again.</p> <p>Non-compliance should be reported as a 'hazard' and investigated and lessons learned.</p>	Chief Executive (VCB) and Manager (VW)	Immediate.

Review

When will the risk be reviewed?	12/5/23
Why have you chosen this date?	Although there were several issues to resolve, the premises were well managed and the risk to life or property in the event of fire is low. However, some of the issues raised could be significant and so a formal review will hopefully incorporate the better practice into the new Fire Risk Assessment.
How will you ensure all actions are completed?	Key dates and personnel have been identified. Further visits will be undertaken on or around these dates. Documentation will also be reviewed e.g., manufacturers information, improved approach to COSHH etc.

Summary

- Previously looked at risk, risk assessment, and risk management.
- Today's session was part of a series of lectures considering some of the most common and significant hazards.
- Work related violence is all too common place and affects teachers, public figures, retail assistants, emergency services and council workers. The impact goes beyond the physical wounds as victims often suffer from post-traumatic stress. The impact and prevalence can sometimes be related to lone working. These hazards must be controlled like any other.
- Occupational Road Risk is an issue whether someone is driving for work or works in an area where there is vehicle movement. Sadly when accidents do occur they can be fatal and so an organisation must have a policy to manage these risks.
- Finally, this session completed an earlier session on Fire Safety by looking at how to conduct a Fire Safety Risk Assessment.