

Student Name: Tony Davison

Date:

Student Signature:

Tutor:



**The Law – HASWA 1974**​

**Health and Safety at Work etc. Act 1974**

**Answer the questions below as we go through the video.**

**🛠️ Workplace Safety & Good Housekeeping**

1. **What are some key practices of good housekeeping that help prevent workplace accidents?**
* All spillages are cleaned up correctly and as quick as possible.
* Correct bins are used throughout the day.
* Staff are aware of what necessitates trip hazards throughout the day.
* Tools are cleaned and returned when a job is completed.
* Staff are given training on “Good Housekeeping”
1. **List five actions an engineer should take at the end of their shift to uphold good housekeeping standards.**
* Bins are emptied at regular intervals.
* Cleaning products are assessed to ensure they are in supply for the next day.
* Any issues are passed on to a supervisor at the end of a day.
* Equipment is cleaned and returned to the correct storage area.
* Staff should ensure the workshop is safe and ready for the next working day.
1. **How might poor housekeeping contribute to larger safety risks in an engineering workshop?**
* Greater risk of trips and falls, if spillages are not cleaned up, and items are left on the floor, air lines, trolley jack handles left down etc.
* Poor housekeeping could result in “clutter” covering up important signs, vital to health and safety.
* Poor Impression to customers
* Substances not correctly stored in relation to COSHH guidelines. This could result higher risks of accidents.

**📚 Training & Maintenance**

1. **Why is regular training essential in motor vehicle?**
* Reduces risk of accidents.
* Risk assessments and their content can be discussed.
* Can provide a list of who has received training.
* Can improve productivity due to less absence.
1. **How would you design a simple training checklist for a new learner in a motor vehicle workshop?**
* Collate a list of topics or areas you want t o cover in staff induction or periodical training.
* Ensure all risk assessments are completed and up to date.
* Ensure clear “signposts” are in place to ensure staff know where relevant items (first aid kit, vital signage is positioned etc are kept)
* Have staff to sign to state relevant training has been delivered, and they were present.
1. **Discuss the relationship between equipment maintenance and injury prevention. Cn lack of maintenance lead to systemic safety failures?**
* Without regular servicing, cars break down. So does equipment used in engineering. Tools and equipment not inspected can cause injury, and in some cases severe and life threatening.

**⚠️ Hazards, Risks & Safety Signs**

1. **What is the difference between a hazard and a risk. Give examples from a motor vehicle environment.**

A ***hazard*** is something that exists an example of this could be the sparks that come of a grindstone when in use. Whilst we cannot stop this aspect, we can look to minimise the ***risk*** is something we must look at. The risk is the likelihood of the hazard causing injury.

1. **Describe a scenario where ignoring a safety sign could lead to injury?**

Ignoring mandatory signs can at worse lead to death. An air fed mask is mandatory when spraying vehicles. The some paint contains cyanide and this can be fatal if breathed in.

1. **Should safety signage be standardised across all industries, or adapted for specific environments? Justify your view.**
* In most cases, signage does follow a common colour and diagram design. This increases familiarisation of signs, and as such can contribute to lowering risk of accidents.

**🧑‍🏭 Reporting**

1. **What is the correct procedure for reporting a safety hazard in college?**
* All safety concerns should be reported as soon as possible to an authorised member of staff. In most cases, this will initially be a course tutor or instructor.
1. **If you noticed a damaged tool or equipment —what steps would you take to ensure this is addressed?**
* Firstly you should never use tools and equipment if you feel they are damaged or not fit for purpose. You concerns should be passed on to your course tutor or instructor.

**🏋️ Manual Handling & Fire Safety**

1. **What are the basic principles of safe manual handling?**
* Assess the following :- approx. weight, shape in relation to lifting it safely. Ensure you get a good open stance keeping your back as straight as possible and lift using you leg muscles. If in any doubt do not attempt to lift it on your own.
1. **Why is assessing the load so important?**
* If it is dropped, and opens what you are carrying is vital to know in regards to cleaning it up. It may be chemicals which need special precautions etc. Vital to know this before anything goes wrong.
1. **Explain the importance of fire drills. How could they be improved to ensure real preparedness?**
* Fire drills will improve the efficiency of evacuation in the case of fire. It will also familiarise people with procedure to follow in regards to a role call etc and when it is safe to re-enter a building.

**🧪⚡ COSHH, PPE & Electrical Safety**

1. **What does COSHH stand for, and why is it relevant to engineering workspaces?**
* **C**ontrol **O**f **S**ubstances **H**azardous to **H**ealth
1. **You’ve been assigned to handle a solvent with a COSHH label. Describe how you would safely manage it, also consider storage.**
* It is vital to understand the safety precautions relevant to what you are using. If and when something did go wrong, time is off the essence in regard to administrating first aid.
1. **What type of PPE will you need in the workshops.**
* Overall, safety boots as a minimum
1. **PPE is often the last line of defence. In what situations might PPE be insufficient on its own?**
* PPE would have limited affect in the case of a big fire or explosion.
* If PPE get contaminated by chemicals or fuel, they would need to be removed quickly in case a fire did break out.
* In a garage environment, PPE would count for very little if a vehicle fall off a 2-post lift. Training on this task is vital.
1. **Electricity is invisible yet dangerous. What can you do to reduce the risk of electric shock?**
* Have portable appliances PAT tested on regular intervals.
* Make visually inspection of electrical plugs and cable part of a working day and a good habit to cascade through the garage.
* Never touch or use electrical equipment

**Hazards and Risk**

Task 2. Complete a risk assessment on the Engineering workshop.

**NPTC SHE-FOR-013**

**RISK ASSESSMENT FORM**

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|  |  |  |  |
| --- | --- | --- | --- |
| **Department / School:** | Motor Vehicle - MV | **Risk Register No** *(if applicable)*: | MV1234 |
| **Activity:** | Lifting a vehicle on a 2 post lift | **Date of Activity:** | 1/9/25 |
| **Location:** | Pontardawe |
| **Risk Assessment Completed By:** |  | **Signature:** |  |
| **Date of Completion:** |  | **Date of Review:** |  |

***Please refer to the risk assessment matrix at the beginning of this document to indicate how likelihood and severity combine to produce a final risk score. Likelihood X Severity = Risk Score (= Low, Medium or High risk)***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hazard & how harm might occur** | **People at risk** | **Existing Controls** | **Risk Rating** | **L****M****H** | **Any Further Control Measures Needed** |
| **L** | **S** | **R** |
| *A vehicle could fall off the ramp if not positioned safely* | *Operator & Anyone near the car*  |  *Anyone who uses the vehicle lifts should be trained on how to safely do so before using the equipment.*  | *2* | *3* | *6* | *M* | *Visual inspection of vehicle and equipment. Any faults MUST be reported immediately**All operators of the lift must have a clear understanding of a vehicle load bearing members.* |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

**Quantitative Risk Rating**

This example is known as a 3 x 3 matrix where scores from 1 to 3 are given to the likelihood and the severity of each hazard.

These are then multiplied to give the hazard’s overall risk rating, whilst taking into account the controls in place.

|  |  |  |  |
| --- | --- | --- | --- |
| **Likelihood** | **Score** | **Severity** | **Risk** |
| Very Unlikely*(difficult to see how this can occur)* | 1 | Minor Injury*(no treatment or absence from work)* | 1 |
| Likely*(could happen at some stage)* | 2 | Injury*(requiring over three days absence)* | 2 |
| Very Likely*(may occur on a regular basis)* | 3 | *Major Injury**(RIDDOR reportable injury / Death/ long term absence / health effect)* | 3 |

**Risk Matrix**

The table below indicates how likelihood and severity combine to produce a total risk rating. Ratings are assigned as follows:

|  |  |
| --- | --- |
| 1 – 3 | Low risk green: risk is being controlled |
| 4 – 6 | Medium risk orange: risk is controlled but needs further controls to reduce further risk |
| 7 – 9 | High risk red: risk is high and should stop or immediate controls implemented |

Risk Matrix



**Manual Handling**

|  |  |
| --- | --- |
| **Type of Manual Handling** | **Description of how you carried out the task** |
| **Lone lift** | \*\*\* Assess the load to be lifted…….discuss what you need to assess.Open stance Legs bentBack straightLift by straightening legs |
| **Team lift** | If manually lifting the object, consider and follow criteria above.  |
| **Using a lifting aid****Optional**  | Visually assess the lifting aid e.g. trolley jack Has it been tested and certificated as safeHave you received adequate training to operate the equipment. |

**Please insert an image of the answers and results of your Manual**

**Handling Quiz here.**

**Basic first aid training and incident response**

1. **How to treat severe Bleeding:**

Apply a wound dressing and keep pressure on the wound to limit bleeding.

Request someone call 999 if in doubt

1. **How to treat Shock:**

Lay the person down and elevate their legs slightly if not injured. Loosen tight clothing. Give reassurance to limit the shock.

Request someone call 999 if in doubt

1. **How to spot a head injury:**

Patient falling or unsteady on their feet, bleeding, or swelling evident. Lack of or irrational response to oral questioning can also identify HIA

Head

Injury

Assessment

Request someone call 999 if in doubt

1. **How to treat an eye injury:**

Was out the injured eye with saline eye wash (ensure the words safe to use of eyes is clearly labelled on the wash)

If transporting a patient with an object in their eye cover the eye with a cone dressing to minimise the patient blinking, which can cause greater discomfort.

1. **What to do if someone has received an electric shock:**

Risk assess the area before administering any 1st aid.

Ensure all relevant equipment is electrically isolated.

If electrical isolation cannot be carried out quickly, ensure if possible, the electrical item being used is remove from the patient with an object that cannot conduct electricity e.g. (wooden broom)

1. **Complete the acronym for the primary survey.**

**D:** Danger

**R:** Response

**A:** Airway

**B:** Breathing

**C:** Circulation

1. **When would you put someone in the recovery position?**

When an injury as put them in an unconscious state, butr breathing is found to be present.

Request someone call 999 if in doubt

1. **What depth do you push down during CPR?**

5 to 6 cm use your body weight to ensure adequate pressure is used to make CPR effective.

1. **How many chest compressions should you do?**

30 chest compressions to 2 air breaths.

1. **At how many beats per minute?**

100 to 120 beats per minute

1. **What are the steps to giving rescue breaths?**

Check airway is clear and no threat of choking, before CPR is carried out

1. **How many Rescue breaths are needed?**

2 breaths are need followed by 30 compressions

1. **Where is our closest AED?**

Neath Port Talbot Hospital for minor injuries no life threatening

Morriston Hospital for all other injuries

If in doubt travel to Morriston Hospitall OR call 999

1. **Who are the first aiders in college?**

There is one nominated 1st aider on the Pontardawe Campus. Callum Cronin

1. **Where is your first aid station.**

Staffroom and Motor Vehicle workshop storeroom.

1. **What first aid supplies do you think will be available?**

Sterile gloves, sterile wipes and dressings of various sizes. Triangle bandage and safety pins. Foil wrap in case the accident is outside.

scissors

An eye wash & ice packs are recommended but not mandatory

1. **What would you do if yourself or someone was injured?**

Seek a first aider if in doubt ring 999

**Fire Safety**

**🔥 Fire safety in College**

1. **What are the three elements of the fire triangle, and why are they important in fire prevention?**

 Ignition Fuel Oxygen

1. **How can some fires be prevented?**

Follow all COSHH data sheets in relation to using and storing flammable liquids.

Have a cross section of fire extinguishers to hand to minimise damage of fire spreading.

1. **Name two types of fire extinguishers and explain what types of fires they are used for.**

Water – Class A fires paper, fabrics wood etc

Co2 - Class B flammable liquids & electrical appliances

1. **What steps should be taken during a fire evacuation?**

Alarm raised - Safety lights come on - Fire doors should open

Staff and students should leave the building in an orderly manner and report to designated safe area.

1. **Why is it important to understand the different classes of fire and their corresponding extinguishers?**

Using the wrong extinguisher on a fire, can accelerate or make the fire worse and help it spread.

1. **What should you do if you discover a fire in the College?**

Report it to a member of staff ASAP.

1. **Why should you stay at the fire assembly point?**

To help account for everybody who should have evacuated, is out of the building.

1. **Where is the closest fire exit and assembly point to you now?**

Classroom doors and corridors will sign post you out of the nearest fire exit. Follow these signs in a safe manner.

1. **Describe the signs to be followed during an emergency.**

Green background white writing

**🛠️ PUWER – Provision and Use of Work Equipment Regulations**

1. **What is the purpose of PUWER, and how does it apply to equipment used in engineering workplaces?**

The main objective of PUWER is to reinforce safety measures in the Engineering environment. All equipment must be fitted correctly and maintenance plans in place

1. **Who holds the primary responsibility for ensuring that work equipment complies with PUWER regulations?**

The College or employer

1. **You’re tasked with using a new power tool for the first time. List five PUWER-related checks you must make before use.**

1 Equipment fitter correctly and commissioned correctly.

2 PAT tested and connected to the correct supply carried out

3 All guards are fitted to manufactures specification for the equipment.

4 Training given on its operation,

5 Maintenace and safety plans and risk assessments are carried out on the equipment.

1. **A new piece of equipment is delivered to the workshop. What steps should be taken to ensure it meets PUWER standards?**

Certificates of compliance are presented with the equipment.

All guards and safety measure isolator switch etc are fitted from new.

Evidence of the equipment has been commissioned for use by the correct body.

1. **PUWER requires employers to provide adequate training on equipment use. How might poor training affect both safety and productivity?**

Lack of training can result in injury, leading to staff sickness, and heavy fines is employer is found negligent.

Inadequate training could result in damage to both equipment and products.

Lack of quality will result in low customer satisfaction and confidence.

**⚠️ RIDDOR – Reporting of Injuries, Diseases and Dangerous Occurrences Regulations**

1. **What does RIDDOR stand for?**

 Reporting of Injuries, Diseases and Dangerous Occurrences Regulations

1. **Who do you report a RIDDOR incident to?**

If a student, you should report any dangerous occurrence to a member of staff asap. The college must report the occurrence to the HSE Health & Safety Executive.

1. **What types of workplace incidents must be reported under RIDDOR?**

Any happening resulting in the near miss or possibility of injury to a person or persons.

1. **What constitutes a dangerous occurrence?**

An occurrence is a particular time when a near miss that could have caused an injury to have taken place.

1. **What is a hazardous malfunction?**

Failure of a system or equipment, that could have resulted in the injury or death of a person or persons

1. **How can regular analysis of RIDDOR reports improve safety planning in an engineering department?**

Collection of dangerous occurrences reports, will when analysed show fundamental shortfalls in a safety policy. This will identify more stringent risk assessments are needed etc to reduce or take away the risk of an accident occurring.

**🛠️ Student Health & Safety Induction Checklist Engineering**

**Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Course/Programme: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Campus/Workshop: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Date of Induction: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**✅ Key Health & Safety Topics Covered**

**Please tick each box to confirm you have received information and training on the following:**

|  |  |  |
| --- | --- | --- |
| **#** | **Induction Topic** | **✓** |
| **1** | **Overview of the Health and Safety at Work etc. Act 1974 (HASWA)** |  |
| **2** | **Your duties and responsibilities as a student under health and safety law** |  |
| **3** | **The college’s safe working practices** |  |
| **4** | **Location and use of First Aid kits and First Aiders** |  |
| **5** | **Location of fire exits, evacuation points, and fire drill procedures** |  |
| **6** | **Understanding and use of Personal Protective Equipment (PPE)** |  |
| **7** | **Safe use of tools, machinery, and workshop equipment** |  |
| **8** | **Safe handling and storage of hazardous substances (COSHH)** |  |
| **9** | **Accident, incident and near-miss reporting procedures** |  |
| **10** | **Manual handling awareness and lifting techniques** |  |
| **11** | **Electrical safety** |  |
| **12** | **Housekeeping and keeping your work area clean and safe** |  |
| **13** | **Risk assessment awareness (how risks are identified and controlled)** |  |
| **14** | **Emergency contacts and how to summon help** |  |

**🔐 Student Declaration**

**I confirm that I have received the health and safety induction outlined above. I understand my responsibilities to follow all safety rules and procedures, wear PPE when required, and report any hazards, unsafe behaviours, or incidents immediately.**

**Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Instructor/Assessor Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Instructor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**