

STOP AND THINK TALK

A briefing tool for managers

RISK ASSESSMENT & HAZARD IDENTIFICATION

Hazard identification and Risk Assessment are the basis of health and safety management. A risk assessment is simply a careful examination of what could cause harm to people, so that the organisation can weigh up whether it has taken enough precautions or should do more to prevent harm. Risk Assessment can be applied to cover the general workplace and specific tasks.

The 5 steps to Risk Assessment are:

- 1) Identify the hazards
- 2) Decide who might be harmed and how
- 3) Evaluate the risks and decide on precautions
- 4) Record your findings, communicate them as appropriate and implement them
- 5) Review your assessment and update if necessary

EMPLOYEE SUFFERS SEVERE INJURY

A team of maintenance personnel were involved in retrieving redundant cabling from a structure that was to be demolished. The structure had been disused for some time and was cordoned off to prevent access. The team were on a walkway when a section of flooring collapsed and an employee fell 30 feet, suffering a severe fracture to his leg. By luck a pile of dust recently deposited below the structure broke his fall preventing a far more serious outcome.

A risk assessment of the task would have identified the poor state of the structure and the necessary additional control measures required. (Photos show the structure and failed section)

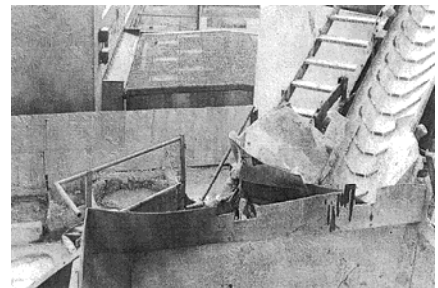


PIPER ALPHA DISASTER

Piper Alpha was a North Sea oil production platform. An explosion and resulting fire destroyed it on July 6, 1988, killing 167 men, with only 59 survivors. Total insured loss was about £1.7 billion (US\$ 3.4 billion). To date it is the world's worst offshore oil disaster in terms both of lives lost and impact to industry. The inquiry set up to establish the cause concluded that the initial condensate leak was the result of maintenance work being carried out simultaneously on a pump and related safety valve. There was inadequate risk assessment relating to the design of the platform and control of the maintenance work. Information was also poorly communicated during shift changes.

LUCKY ESCAPE

A trapdoor was cut in a landing to give access to the top of tankers without having to climb the tank ladder. The possibility of someone falling through the hole, (see photo), was not considered so no hand railing was placed around the trapdoor. As a result an employee was lucky to escape with a broken shoulder when he nearly fell through the opening after the trapdoor was left open.



TRAPPED BY CONVEYOR

A contract electrician arrived on site to carry out work at the top of a feed conveyor. He was instructed to wait whilst material was fed into the storage bins but decided to proceed to the area without anyone's knowledge. As the conveyor was moved by a site operator a shout was heard and after stopping the conveyor the electrician was found lying in a storage bin. As the conveyor was moved it had forced the electrician against the bin wall which bent under the force (see photo). The electrician suffered severe internal injuries.

Risk assessment had failed to identify the possibility of someone becoming entrapped or struck on a platform at the head end. Inadequate control measures were in place to prevent access whilst machinery was operating

STOP AND THINK TALK

Risk Assessment & Hazard Identification

Preparation

This stop and think talk can be used individually or with a group of people. It could be delivered in the workplace where a practical risk assessment exercise could be conducted. Take care that the area is suitable for people to hear and see what you are doing if you are carrying out a practical demonstration. Participants should receive a copy of the talk for their CPD files as well as signing the training declaration.

Introduction (After reading out the case studies)

Hazard identification and risk assessment is the fundamental process to ensure the workplace is made as safe as is reasonably practicable and to ensure that tasks are carried out in as safe a manner as is possible. It is about stopping and thinking about what can cause harm and what can be done to eliminate or reduce any risk identified.

THE TALK

Use the questions below to open the discussion under each heading and then go through the lists explaining in detail each hazard / control and what is expected

Hazards

Question 1 – What is a Hazard?

Something that can cause harm or create the conditions for harm to occur

Examples:

Slip/trip hazard	Vehicle/Traffic hazard
Hazardous substance	Hazardous weather
Fall from height hazard	Falling objects
Manual handling	Drowning hazard
Electrical hazard	Entrapment hazard
Fire hazard	etc.

Risk

Question 2 – What is Risk?

The likelihood of a hazard causing harm

Question 3 – When assessing risk what are the factors to consider?

- Who and how many people could be affected by the hazard (consider vulnerable people such as young people, disabled, pregnant women etc.)
- How often will people be exposed to the hazard
- Potential effect of the hazard (consider whether it could kill, badly injure, cause minor injury or not cause personal harm)
- Peoples likely behaviour (consider the health and safety culture, are short cuts likely to be taken etc.)

Risk Assessment

Question 4 – What is risk assessment?

Risk assessment is identifying the hazards, assessing the risk of that hazard causing harm and deciding if it is significant or not. If it is significant then further action is required to eliminate /reduce the hazard or control the risk (See Q6 - ERIC-P).

The objective is to remove the hazard or reduce the risk as far as is reasonably practicable. It is often not possible to eliminate all risk and the assessment process has to be a judgement.

Question 5 – Who should be involved in risk assessment and who should be informed of the findings?

- Risk assessment must be a team effort
- Workplace risk assessments should involve people based at the workplace, possibly safety committee members

Continued

- Task risk assessments should involve persons who will be carrying out the task
- Significant findings of risk assessment must be communicated to everyone affected

Controls

Question 6 – What is ERIC-P?

Used when considering how a hazard, that has been identified as a risk, should be controlled in order of Preference.

E – Eliminate the hazard

R – Reduce the hazard

I – Isolate the hazard

C – Control the hazard

P – Protect the person (PPE is the last resort but often necessary in addition to other controls)

Control measures need to take into account behaviours, if safe systems of work are too complicated or time consuming people will often find ways to take short cuts or ignore rules

Question 7 – What is Worksafe?

A pre task risk assessment to be used prior to any non routine or new task.

Question 8 – What are Permits to Work and when should they be used?

A risk assessment process and control to ensure hazards and risks are considered prior to starting certain high risk tasks. Also used to control contractor activities.

Review

Question 9 – When should risk assessments be reviewed?

General workplace risk assessments: at least annually or sooner if there is significant change in plant, processes or people
Safe Systems of Work (SSOW) or Task risk assessments: Prior to each time a task is carried out through the use of worksafe

AND FINALLY . . .

- Clarify any points as required.
- Ask if there are any other safety related issues that should be discussed.
- Get everyone to sign the training declaration.
- Thank everyone for their participation.

Continued

