

Understanding Construction Risk Assessment

A basic guide



A short guide to risk assessments

The following pages include examples of dangerous situations on site and how you can manage similar situations to protect the health and safety of your employees.

Undertaking risk assessments is not difficult! In essence it requires you to look at your workplace and identify where people can be harmed. Then you need to do something to prevent that harm from happening. Take these simple steps and you will be providing a safer workplace for you; your employees; and other people close by.

2

Next look at the level of risk. Some hazards will be high risk, e.g. working at height. Other hazards will be a lower risk, because the harm may be less severe.

“What is the chance people will be harmed and how serious could the injury be?”

1

Start by looking at “hazards” that are at your site. A hazard is simply anything that can cause harm to you or your employees.

“Where can people come to harm?”



3

Decide what you are going to do to make the site safer for you; your employees and other people around you.

Then tell your employees!

“Ladder bay is there, use it!”

HERE ARE SOME EXAMPLES!

Guided example: Blocklaying at first floor level

1 How can I be hurt? (e.g. hazards)



Start here

2 Can I access work safely?



3 Look at the consequences?



5 Simple steps that you can follow!

- Look at your workplace, what can harm me or other workers on site.
- As an employer, you should ask yourself:
 - "Can I get to my workplace safely?"
 - "Can I work there safely?"
 - "What is the level of risk?"
 - "Who is exposed to the hazards?"
 - "What can I do to make it safer for me and others around me?"
- Keep the workplace clean and safe!

4 Make it safe!



Guided example: Steel erection

1 How can I be hurt? (e.g. hazards)



Start here

2 Can I access work safely?



4 Make it safe!



5 Look - Act!

Different trades will be undertaking different construction activities on site.

As an employer, you must look at the tasks that your employees are carrying out and work out what the level of risk is to their safety.

This is part of the risk assessment process.

Here we are looking at steel erection, which is a high risk activity.

You must act to minimise the risks.

3 Look at the consequences?



Guided example: Hand injuries

1 How can I be hurt? (eg hazards)



Start here

2 Look at the consequences?



Crush injuries



Burns



3 Protection



4 Preventing injury

Typically 15% of non-fatal injuries in the construction sector involve injuries to the fingers. A further 8% of non-fatal injuries involve injuries to the hand.

You need to consider all levels of risk of harm; not just the high risk activities. Non-fatal injuries can have a lifelong debilitating effect - protect your employees!

Guided example: Driving a site dumper

1 How can I be hurt? (e.g. hazards)



Start here



2 Can I operate it safely?



3 Look at the consequences?



5 Simple steps that you can follow!

- Read the instructions for the particular dumper you have;
- Drive within safe limits across sloped ground/banks;
- Check tyres and brakes;
- Always use the seat belt when roll over protection systems (ROPS) are fitted. Check that ROPS is certified and has CE Marking plate attached;
- Check that nobody is at risk of injury before moving off, particularly in the area obscured by the skip when going forward, and behind the vehicle when reversing;

4 Make it safe!



Guided example: Using a quick hitch device

1 How can I be hurt? (e.g. hazards)



Start here

2 Can I operate it safely?



4 Make it safe!



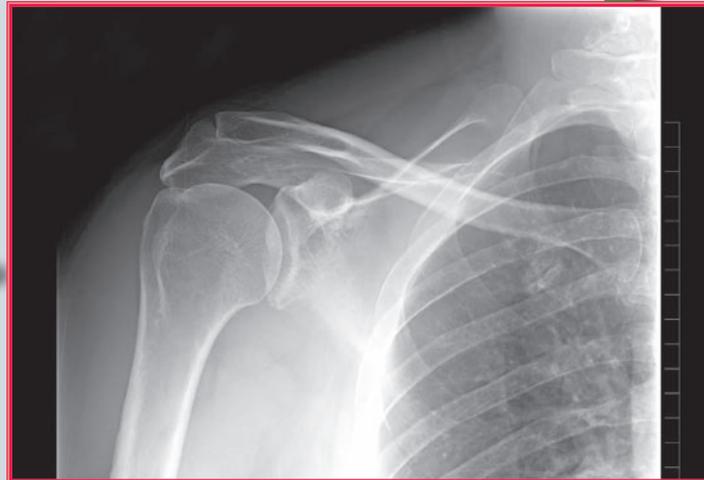
5 Quick and Easy!

If you are operating a machine (e.g. a 360° excavator) then you are responsible for the safe use of the machine, including the correct use of the quick hitch.

Make sure that the safety pin is fully inserted into the quick hitch. The attachment must be properly attached before you use it. Always check!

Never swing the attachment over other workers or allow them to work directly under the attachment.

3 Look at the consequences?



Risk assessment: What is “likelihood”?

The first thing to think about when doing a risk assessment is **“How likely is it that someone can be harmed by this hazard?”**

The likelihood of someone being harmed varies depending on the environment, the work activities and how often someone is going to be exposed to the hazard.

Using your experience and knowledge, you should be able to work out the likelihood quickly and easily.



Safe scaffolding



Unsafe scaffolding



Increasing LIKELIHOOD that someone will be hurt

Risk assessment: What is “consequence”?

Minor injuries



Major injuries



Minor injuries

Major injuries, ranging from permanent disability to death

Increasing SEVERITY of injury

The next issue to consider is the consequence (or severity) of the hazard; “**How serious could the injury be?**”

The severity can be influenced by the environment and the provision of a safe place of work and a safe system of work.

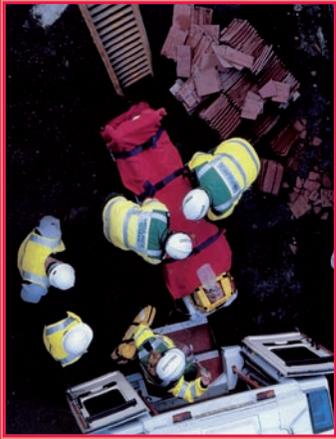
Using your experience and knowledge, you should be able to work out the severity quickly and easily.



You must put appropriate control measures in place, for all levels of risk, including low risk.

Controlling the risks: SSWP can help you

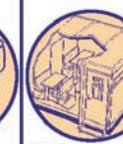
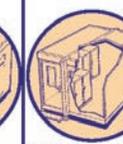
Where it went wrong



We have looked at three examples where it has gone wrong on construction sites. As an employer, you need to make sure it does not go wrong on your site. To help you, the Health and Safety Authority has produced the Safe System of Work Plans (SSWP). The primary objective of the SSWP is to identify the major hazards associated with your work activities and to ensure that appropriate controls are in place before work commences. The SSWP is a three-part process:

- Part 1: Planning the activity;
- Part 2: Hazard Identification, and Control Identification;
- Part 3: Sign off.

There are currently six SSWP Construction Forms available, including forms for House Building; Ground Works; Demolition; Civil Engineering; New Commercial Building; and Working on Roads.

 SAFE SYSTEM OF WORK PLAN (SSWP) CONSTRUCTION FORM 2 (HOUSE BUILDING)		Plan No. <input type="text"/>
Job Details	Resources Required	Emergency Details
Employer Name: _____ Supervisor/Lead Person: _____ Number of Workers: _____ Specific Location: _____ Description of Works: _____ _____ _____ Start Date: _____ <i>NOTE: A new SSWP must be completed when the task or the environment changes.</i>	Worker Skills: _____ _____ _____ Plant/Equipment: _____ _____ _____ Hazardous Materials: _____ _____ _____	Contact Names & Tel No. 1. _____ 2. _____ 3. _____ First Aider: _____ _____ Location of First Aid Box: _____ _____ WORK PERMITS REQUIRED Hot <input type="checkbox"/> Electricity <input type="checkbox"/> Excavation <input type="checkbox"/> Confined Space <input type="checkbox"/> Other <input type="checkbox"/> Method Statement Yes <input type="checkbox"/> No <input type="checkbox"/>
Before Works Starts the following <u>MUST</u> be in place		
		
Supervision	Safe Pass	Plant/Equip. Cert.
		
CSCS	Induction	Communication
		
WC & Washing	Canteen	Drying/Changing
		
Drinking Water	Smoking Control	

Risk assessments: Summary of key components

You must carry out risk assessments, as part of your Safety Statement. Write these down and show them to your employees.

Here are the three key components of a risk assessment.

1

Take a good look at the construction site and the work that you are doing there. What you are looking for are the situations where people can be harmed (e.g. hazards). This can include people other than your employees. Look at how you get to your work area on site, is there safe access? Look at how you carry out the work, how can you be harmed?

2

When you know each of the hazards that are there on site, you need to assess the level of risk that you and your employees are exposed to. This is a simple step to take, just think about how likely it is that you could be harmed by each hazard and then how seriously you could be hurt. This will help you to rank the hazards. Some will be high risk, others medium risk or low risk hazards.

3

At this stage you should have a written list of hazards and the level of risk for each of these. You now need to decide what you are going to do about each hazard. Talk to your employees about the hazards. Write down the control measures and show these to your employees. Using the SSWP that is best suited to your work, will help you carry out risk assessments.

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