# Safety in the Workplace



# Peter Hart ARTSA Guide to Conducting a Hazard and Risk Assessment







### Hazard and Risk Assessment

A process to help identify the Safety Hazards and give each a severity ranking (Risk level)





#### Hazard

# A plausible adverse safety outcome due to activity in the workplace

- Workshop Examples:
- Electric shocks
- •Falls into pits and off vehicles
- •Cuts from sharp tools
- •Respiratory problems from gas exposure
- •Trips .....





## Risk

A ranking of each identified Hazard

The ranking is important to give each Hazard a priority and an appropriate response





### Risk Assessment

Three questions are relevant:

What injury level might reasonably occur? Severity:

10.....0

Frequency: Is the exposure continuous...infrequent?

10.....0

Vulnerably: What is the likely effectiveness of the

existing

10.....0 protections?



#### **Risk Calculation & Classification**

Multiply the three values and classify according to the following table:

Risk score = Severity x Frequency x Vulnerability

(0...1000)





Score out of	Risk Level	Action Indicated
1000		
		Immediate action needed to reduce the risk. Stop this
		activity.
501 - 1000		Elimination / Engineering / Administrative controls are
	EXTREME	needed. It is unacceptable to rely upon training education
		and PPE alone.
		Alert the workforce to the risk
	***	Urgent action needed to reduce the risk.
151 - 500		Elimination / Engineering /Administrative controls are
	HIGH	needed. It is unacceptable to rely upon training, education
		and PPE alone.
		Alert the workforce to the risk
		An action plan should be made to reduce the risk in the
		medium term.
51 - 150		Training, notices and education may be necessary.
	MODERATE	
		Tolerable level
21 - 51	LOW	Improvements should still be sought over time
	LOW	
		Desirable level.
0 - 20	ALEDNA LOW	Desirable rever
0 - 20	VERY LOW	



#### Rules

- •Aim is to reduce all risks to Low (tolerable) or Very Low (desirable)
- •Extreme or High risks need immediate / urgent attention
- Moderate risks need prompt attention
- •Extreme or High risks cannot be dealt with by Training & Education alone.
- •Set-up a Safety Group to periodically conduct a H & R assessment.
- •Establish a Close-Call reporting procedure.
- •Document the risk assessment and have the Safety Group repeat it periodically.

### In summary

- •Safety in the workplace is not just the bosses responsibility
- •Setting up a Safety Group gets the staff involved
- •Close-call reporting and investigation provides the feedback
- •Documenting the *Hazard & Risk* assessment provides a record of consideration and action and a starting point for the next one
- The worst situation is when an identified unacceptable Risk was not acted upon!

