UNIVERSITY OF CAMBRIDGE

Occupational Health & Safety Service

Risk Assessment Training

Andrea Eccles

Assistant Director, Safety Office

Aims of the Course

- Understand what a Risk Assessment is and where they have come from
- Understand Hazards – workshop
- Evaluate & Control Hazards
- Write a comprehensive Risk Assessment – workshop

Risk Assessments…….

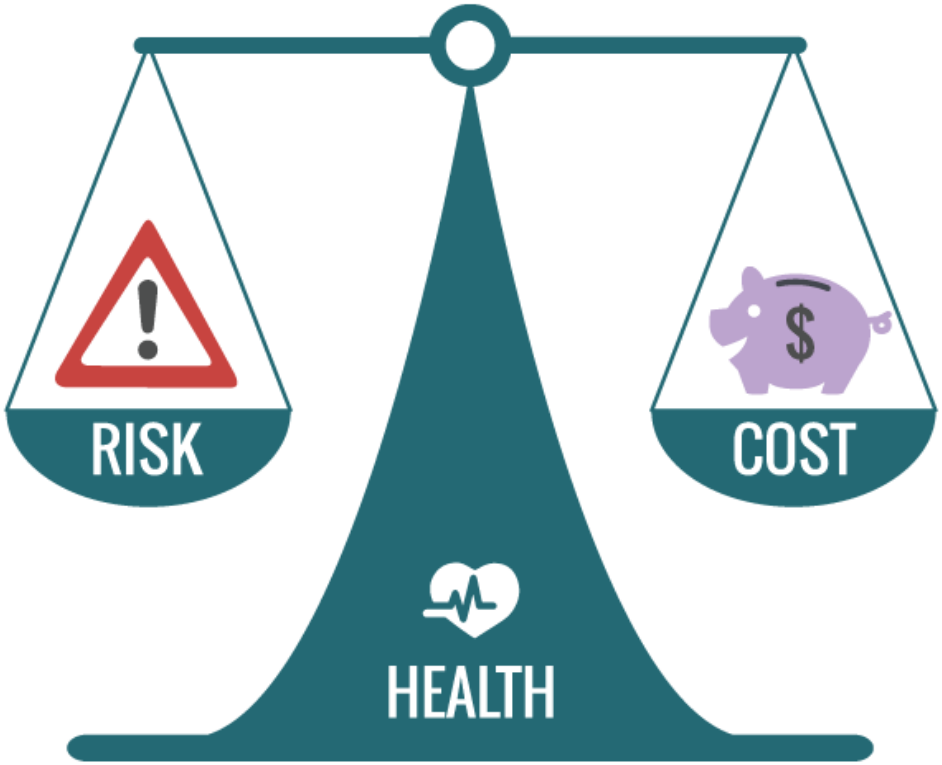
- What are they?

Definition of a risk assessment……

‘A structured and systematic procedure for **identifying hazards, evaluating risks and implementing control measures** to reduce risks to a tolerable level…..’

‘……..as far as reasonably practicable’

‘as far as reasonably practicable’



Risk Assessments

- Why do we need them in the work place?
- Where does the requirement come from?

Legislation

- **The Health and Safety at Work Act 1974**
  - Reasonably foreseeable risks, must be managed ‘so far as is reasonably practicable’
  - Balance the time, cost and trouble of control against the risk
  - But the risk should be properly controlled

Legislation

- **The Management of Health and Safety at Work Regs 1996**
  - 3.—(1) Every employer shall make a suitable and sufficient assessment of—
  - (a)the risks to the health and safety of his employees to which they are exposed whilst they are at work; and
  - (b)the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking,

Legislation

It is also a duty in other Regulations:

Manual Handling

Noise

COSHH

Asbestos

Confined Spaces

It applies to **all** activities


RISK
ASSESSMENT

Risk assessments about…

- Identifying sensib asures to control risks in t kplace
- Worki toge protect our c es
- Al continue SAFELY

Who should complete Risk Assessments?

- A ‘competent person’. Someone who understands the task and is aware of the hazards
- Head of department?
- Organiser of the activity/area of work/field trip etc.
- Safety Officer can advise, assist, help and co-ordinate
- **Those who create the risks must manage them**

When should Risk Assessments be completed?

- Before the task begins or at the planning stage

- Insurance claims for injuries can be significantly affected if no assessment has been carried out.

5 Steps to Risk Assessment

- Identify the hazards
- Decide who might be harmed
- Evaluate the risks
- Record you significant findings
- Review your assessments

Step 1.
Identify the Hazards

What is a Hazard?

‘Anything with the potential to cause harm’

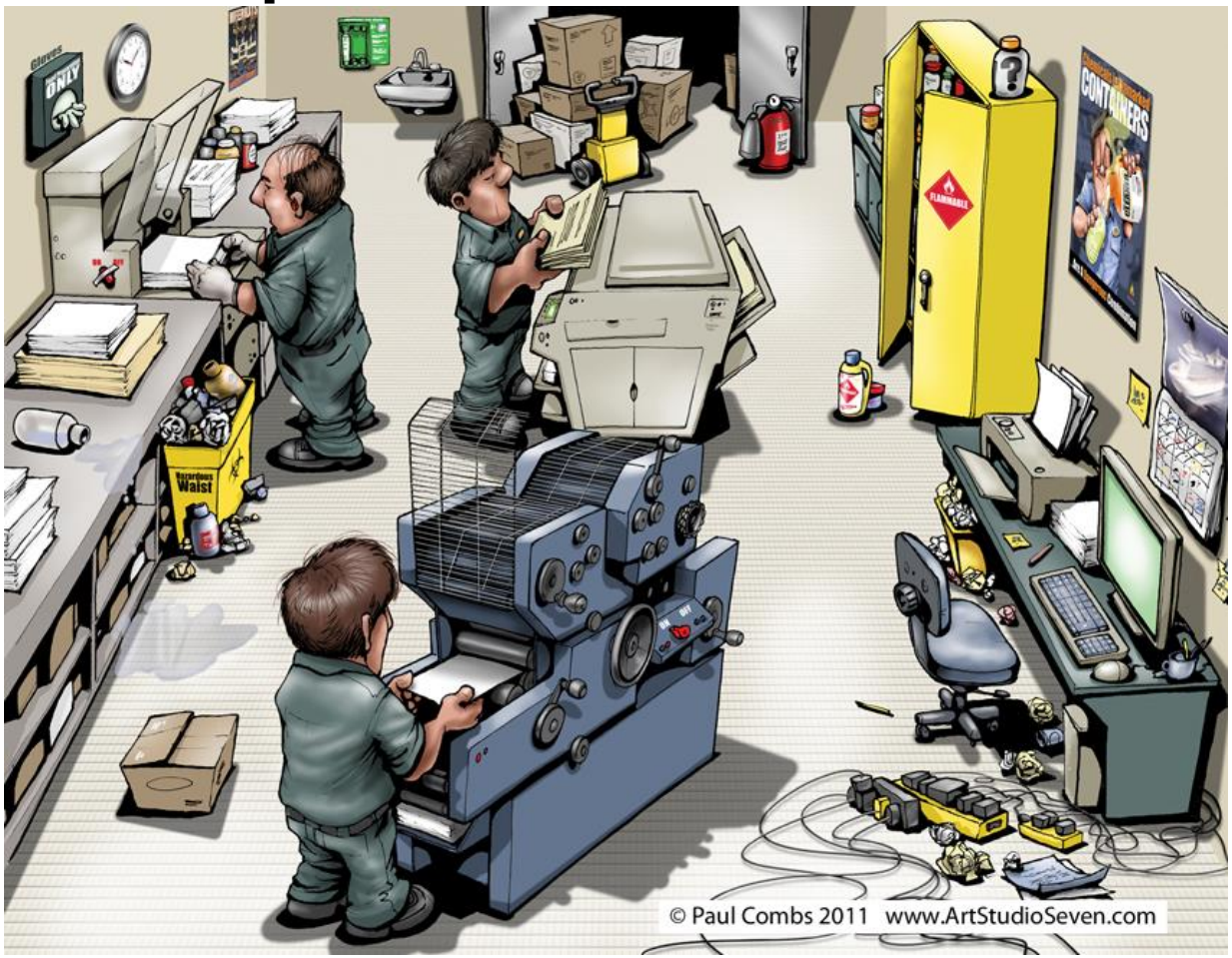
Step 1.
Identify the Hazards

Group Exercise

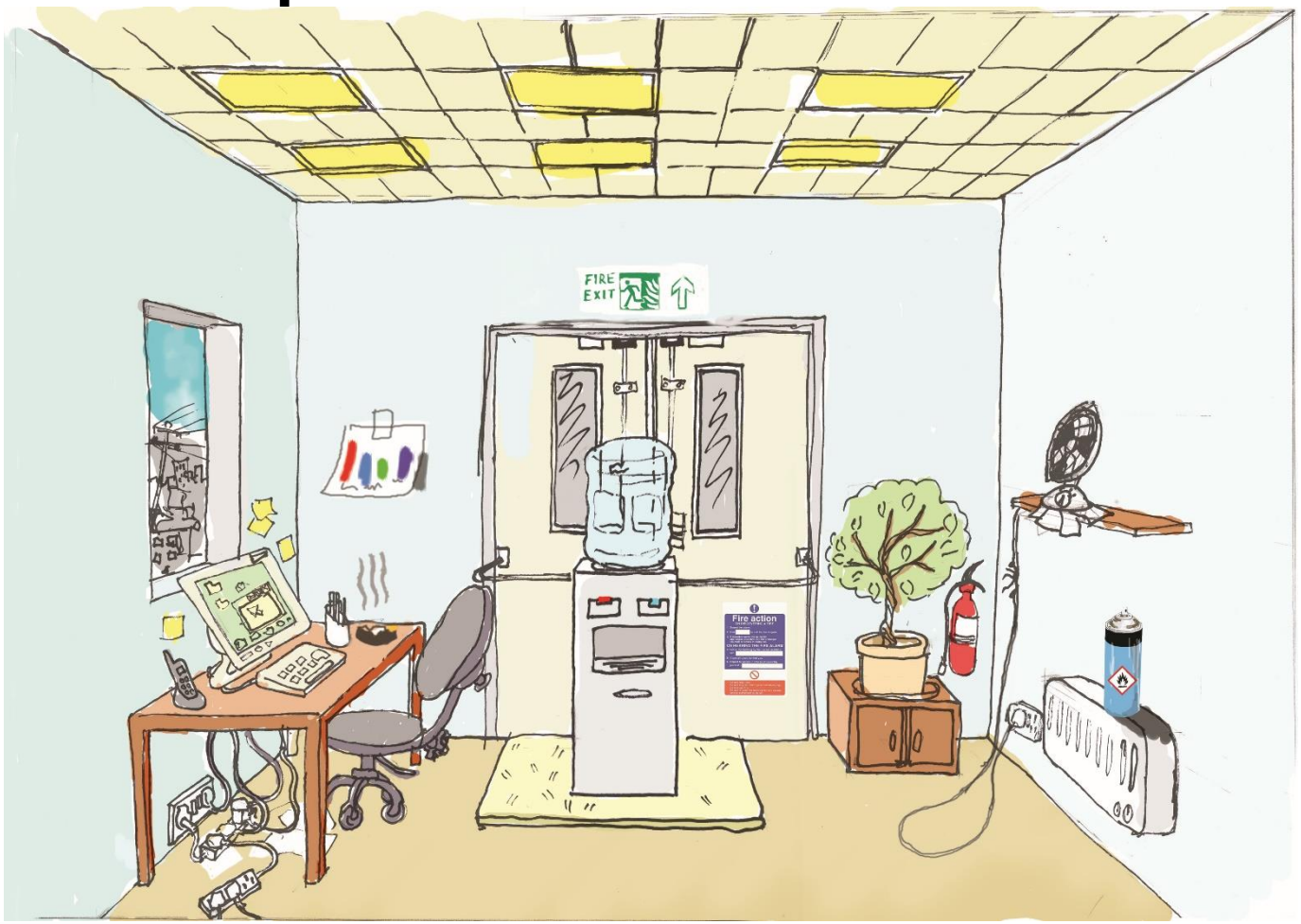
Group 1

Group 2

Group 3


Gloves
ONLY
Hazardous Waist
FLAMMABLE
CONTAINERS
© Paul Combs 2011 www.ArtStudioSeven.com

Group 4



Step 2.
Who might be harmed?

- Operator
- Others in area
- Students
- Visitors
- Workers with particular requirements
  - New/young workers
  - New/expectant mothers
  - People with disabilities

Step 2.
Who might be harmed?

Step 3.
Evaluate the risk

What is the Risk?

‘The likelihood that the hazard will cause harm’

Step 3.
Evaluate the risk

Risk = Likelihood x Severity

Likelihood of a hazardous event occurring and the consequence of the event

Step 3.
Evaluate the risk

You need to consider three things:

1. Who is at risk
2. How likely it is that something could go wrong
3. How serious the outcome could be

Likelihood

‘*Small local Window Cleaning firm, cleaning a three-storey block of flats*’.

How likely is it they would fall?

Things to Consider:

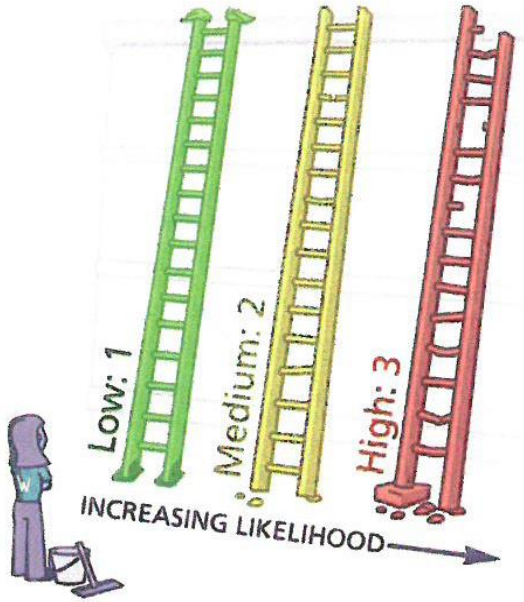
- The stability of the ladder
- The condition of the rungs
- The type of footwear

Likelihood

Low (1): if it's unlikely that the event will happen

Medium (2): if it's fairly likely that the event may happen

High (3): if it's likely that the event will happen.



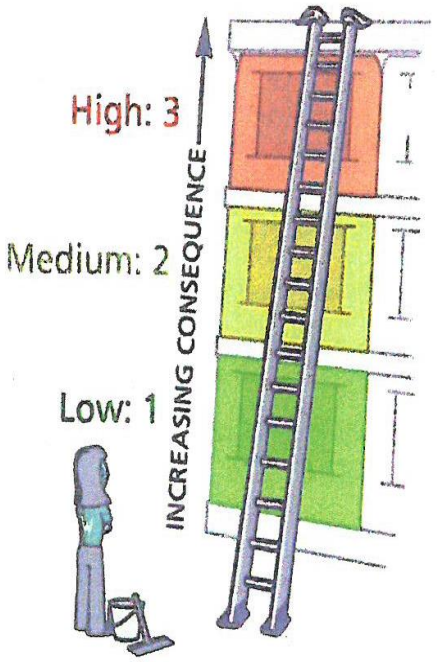
Severity

If the cleaner were to fall, what would be the outcome?

Things to consider:

- The height of the fall
- Is there anything to help stop the fall
- What are they going to fall on

Severity



Low (1): minor injuries requiring first aid – for example, grazes or minor cuts

Medium (2): an injury requiring further medical assistance – for example, cuts needing stitches or broken bones

High (3): major injuries, such as amputations, dislocation of bones, or death.

Likelihood x Severity

Although it is neither a legal nor University requirement, you can use a risk rating matrix such as this one provided on the HSE website, if this helps you determine the broad level of risk:

Risk Matrix		Potential SEVERITY of Harm		
		Slightly Harmful 1	Harmful 2	Extremely Harmful 3
LIKELIHOOD of Harm Occurring	Highly unlikely 1	Trivial 1	Tolerable 2	Moderate 3
	Unlikely 2	Tolerable 2	Moderate 4	Substantial 6
	Likely 3	Moderate 3	Substantial 6	Intolerable 9

Likelihood x Severity

HIGH	STOP and take immediate action
MEDIUM	ACTION look to improve
LOW	NO ACTION ensure control measures are maintained and reviewed

Step 3.
Evaluate the risk

- '***Foreseeable Risks***'
- '***Significant Risks***' need to be managed
- Need to do everything '***Reasonably Practicable***' to protect people from harm

Example

A bottle of bleach is a chemical hazard

- Locked in a cleaners cupboard it is a low risk.
- Used by a cleaner wearing appropriate gloves and eye protection it is a managed medium risk.
- Decanted into a lemonade bottle and left out on a sink during a visit of under 10 year old children, it is a high uncontrolled risk.

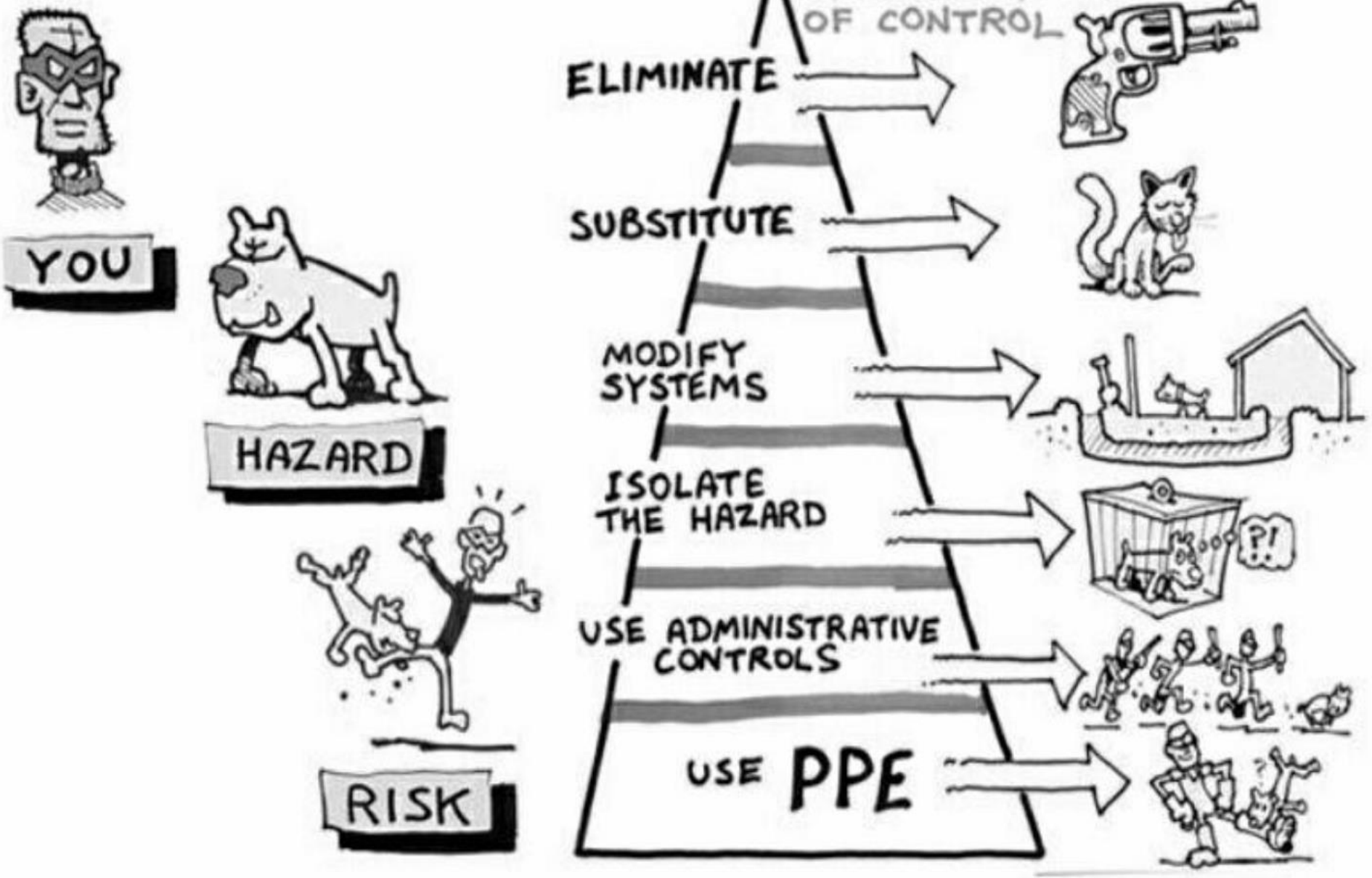
Managing the Risks

What is already being done, what else needs to be done?

Can the hazard be eliminated?

If not use the '**Hierarchy of Control**'

RISK CONTROL



Managing risks in practice

- Avoid the risk (not always practical)
- Substitute for a less hazardous method or process
- Limit the number of people exposed
- Use engineering controls
- Separate the process from personnel
- Written procedures and Permits to operate

Step 4.
Record your findings

- A legal requirement
- It's helpful to record;
  - Details of people carrying it out
  - Date of the assessment
  - Details of activity being assessed
  - Hazards identified and risk level
  - Existing control measures used
  - The date for review.

Step 4.
Record your findings

Remember…..

- '***Foreseeable Risks***'
- '***Significant Risks***' need to be managed
- Need to do everything '***Reasonably Practicable***' to protect people from harm

Step 4.
Record your findings

- The assessment must be Suitable and Sufficient for the activity.

- The greater the hazard the more robust and reliable the control measures need to be.

Step 4.
Record your findings

Group Exercise

Group 1

Group 2

Group 3

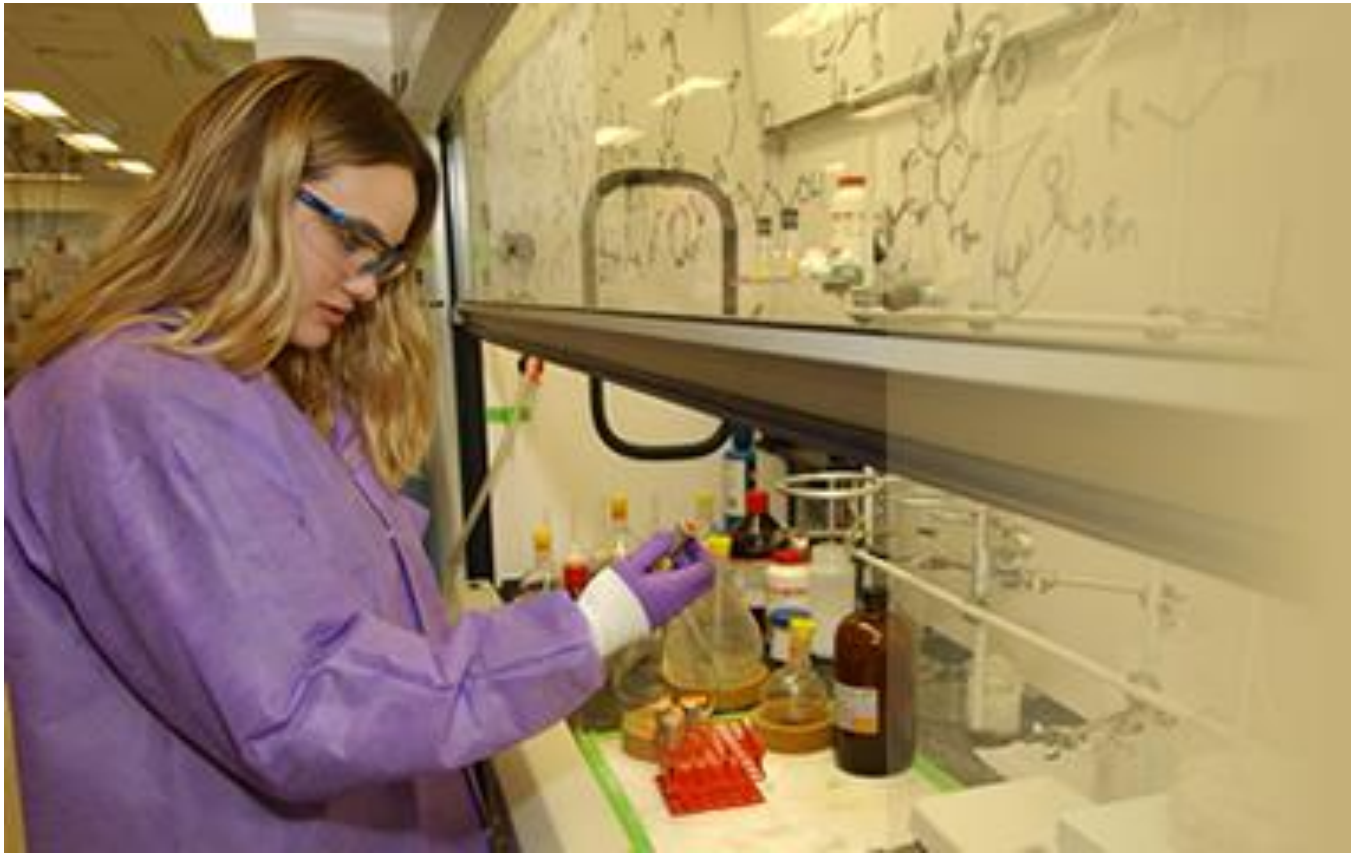
Group 4

Group 5

Group 6

Group 7

Group 8



Step 4.
Record your findings

What happens to completed forms?

Who completes the actions?

Who should see them?

Who ensures the control measures are used?

Step 5.
Review your assessments

When should an assessment be reviewed?

- Significant changes to the activity
- Actions still need to be completed
- Operators have identified a problem
- Following an incident/accident
- Periodically to ensure risks stay low

Getting it Right

- Suitable and sufficient Assessment.
  - Have you got the right information?
  - Are you using the right people and techniques?
  - Seek expert advice if required

Getting it Right

- Make an informed judgment about the risk.
  - Not an exact science
  - Using quality information to estimate likelihood and consequences reduces the subjectivity. i.e relevant accident data

Getting it Right

- Involve the people whose activity you are assessing.
  - You think you know their job
  - They really know their job

Getting it Right

- Make sure it is relevant to the local area of the site.
  - Always do the assessment where the activity occurs.
  - Different equipment maybe used to complete the same job in different areas, this could affect the risk
  - Beware of ‘Generic’ risk assessments

Conclusion

Risk is part of everyday day life, it can't be avoided.

We are not about stopping work, just ensuring it is done SAFELY.

Assessment Paper

Questions??