

# MACHINERY SAFETY WEBINAR SERIES

Module 7: Undertaking a meaningful risk assessment with workers



## Welcome and background

- Presenter: Brent Sutton

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# Module Overview

Building your knowledge and understanding in managing the risk of machinery across 9 key areas including;

1. Trends and duty holder responsibilities
2. AS/NZS4024 standards in managing machinery risk
3. How machine risk is reduced
4. Understanding physical risks of machinery
5. Understanding common health risks of machinery
6. Common types of machinery risk controls
7. Undertaking a meaningful risk assessment with workers
8. Common safe systems of work and lock out-tag out

# Module 7

In this module we will explore:

1. Why is hazard identification difficult
2. Three method approach
3. Using a learning team
4. Reflecting on your risk analysis



Why is hazard  
identification difficult?

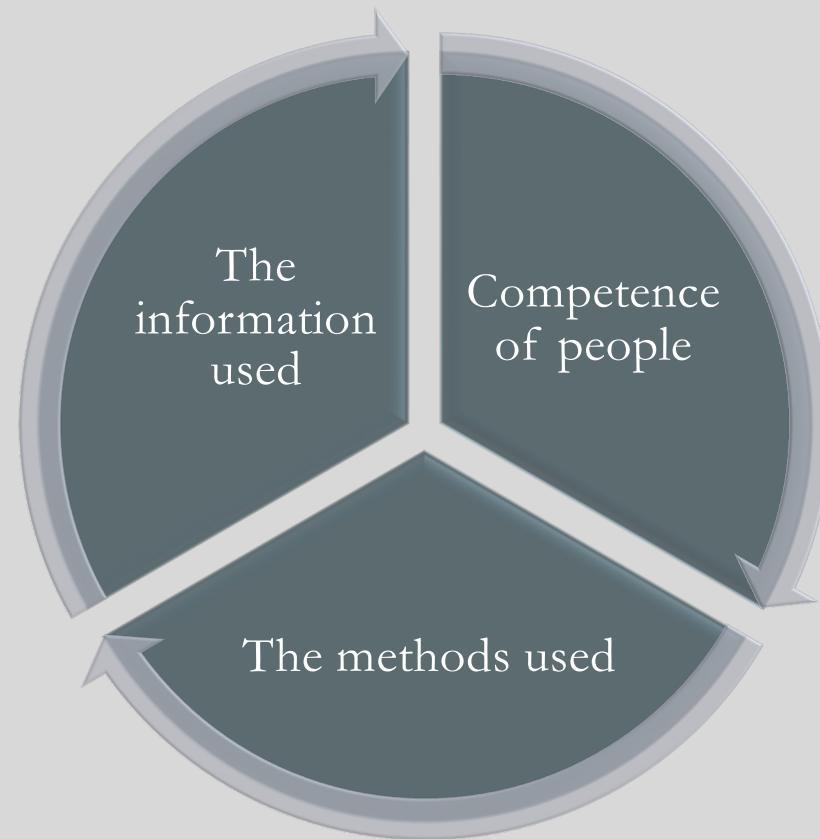
Dr Drew Rae is  
Manager of the Safety  
Science Innovation  
Lab, Griffith University,  
Australia.



# Why is hazard identification difficult?

- **There is no list to tell you what all the hazards are and no way of knowing if the list is complete?**
- **No one method can identify every hazard**
- **Two or more approaches increases the capacity to identify more hazards**

# Identification of Machinery Hazards



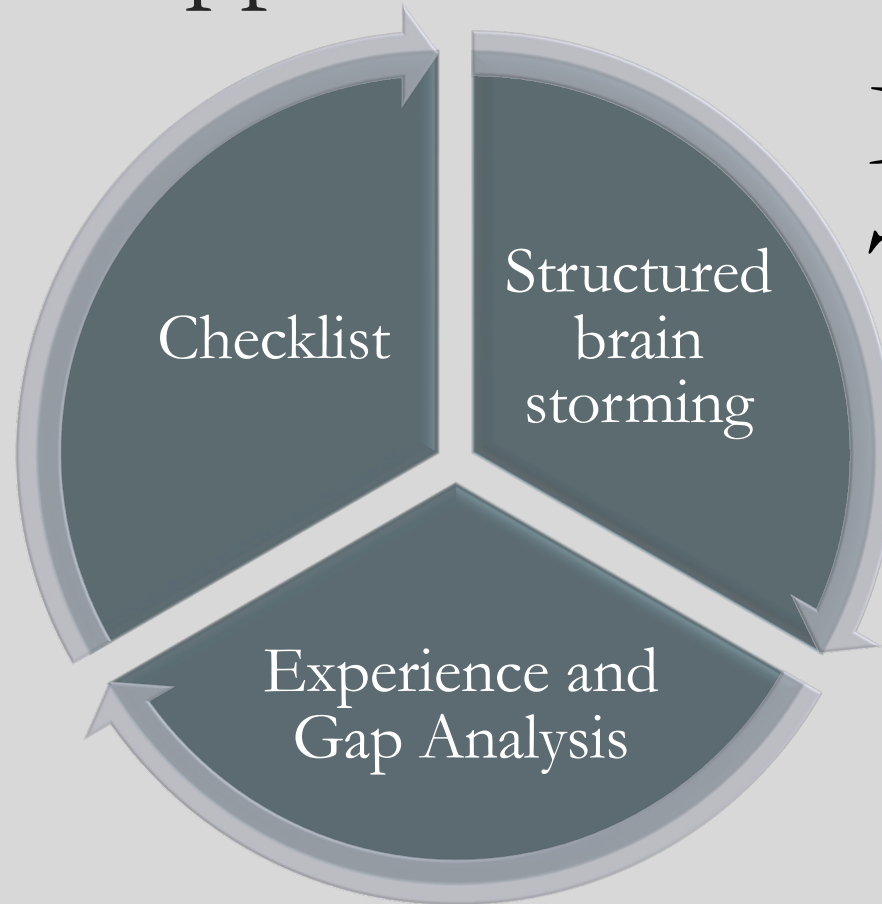
# Identification of Machinery Hazards

## Consider

- **Stakeholders - Workers, Suppliers, Cleaning, Maintenance, H&S Reps, Union Reps, Management reps**
- **Focus on each phase of machine use (Set up, Run, Cleaning, Clearing Jams, Maintenance)**
- **When a hazard is identified consider when does it become present**

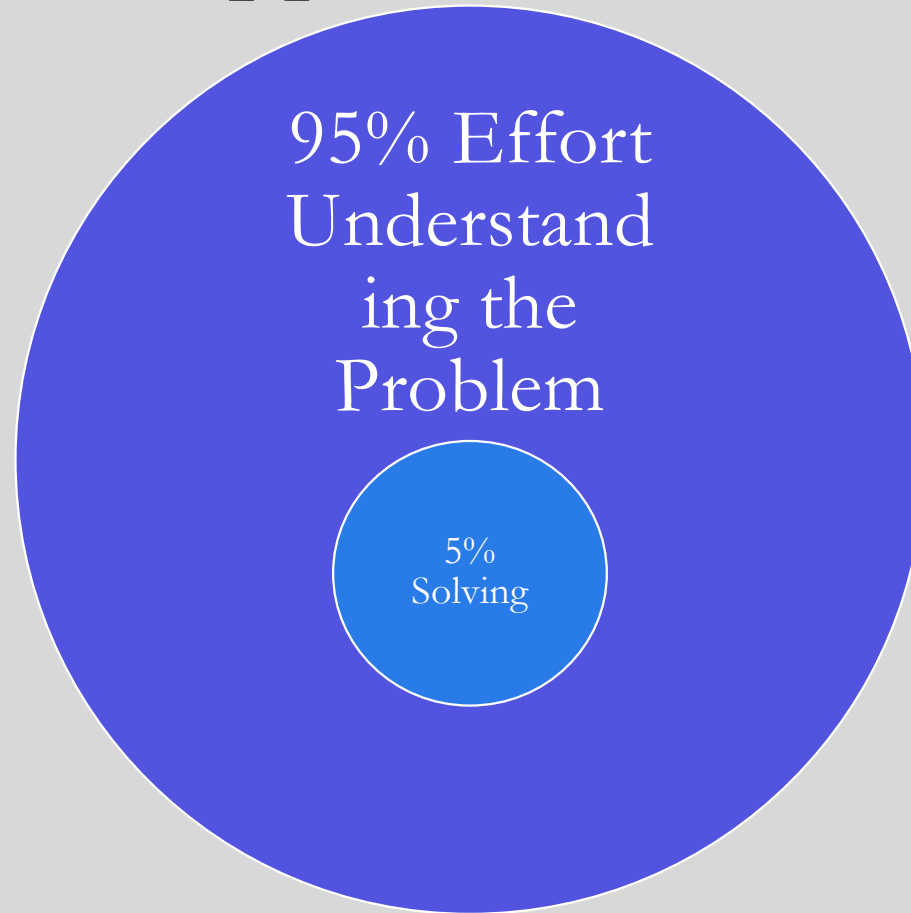


# Three Method Approach

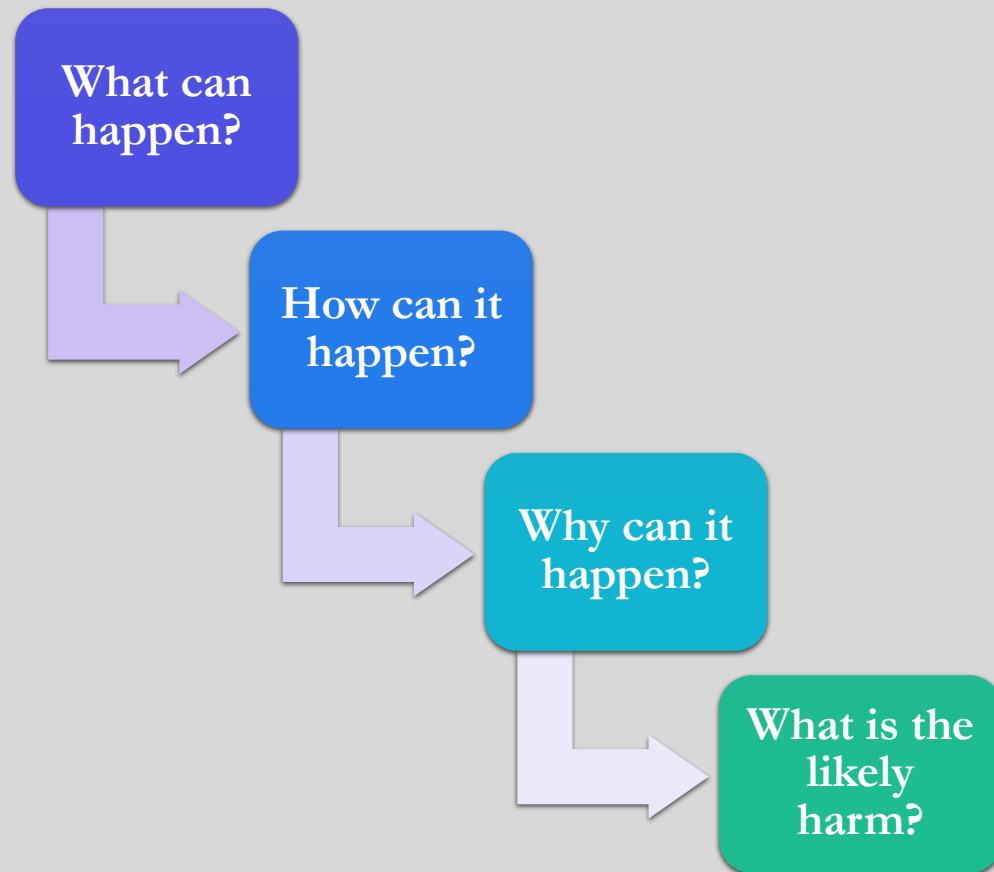


Learning  
Team

# Learning Team Approach ‘Context of Risk’



# Learning Team Approach ‘Context of Risk’



LEARNING  
TEAM  
APPROACH  
'BE  
CURIOUS'

Tell me about your work (the tasks and activities they do)

What does a good day look like?

What does a bad day look like?

Where is it easy to make a mistake?

What near misses have we had?

What is the worst thing that could happen?

What is the likely impact to you if that happen?

What are we doing to stop that from happening?

And is that enough?

What else should we do?

Make notes of:

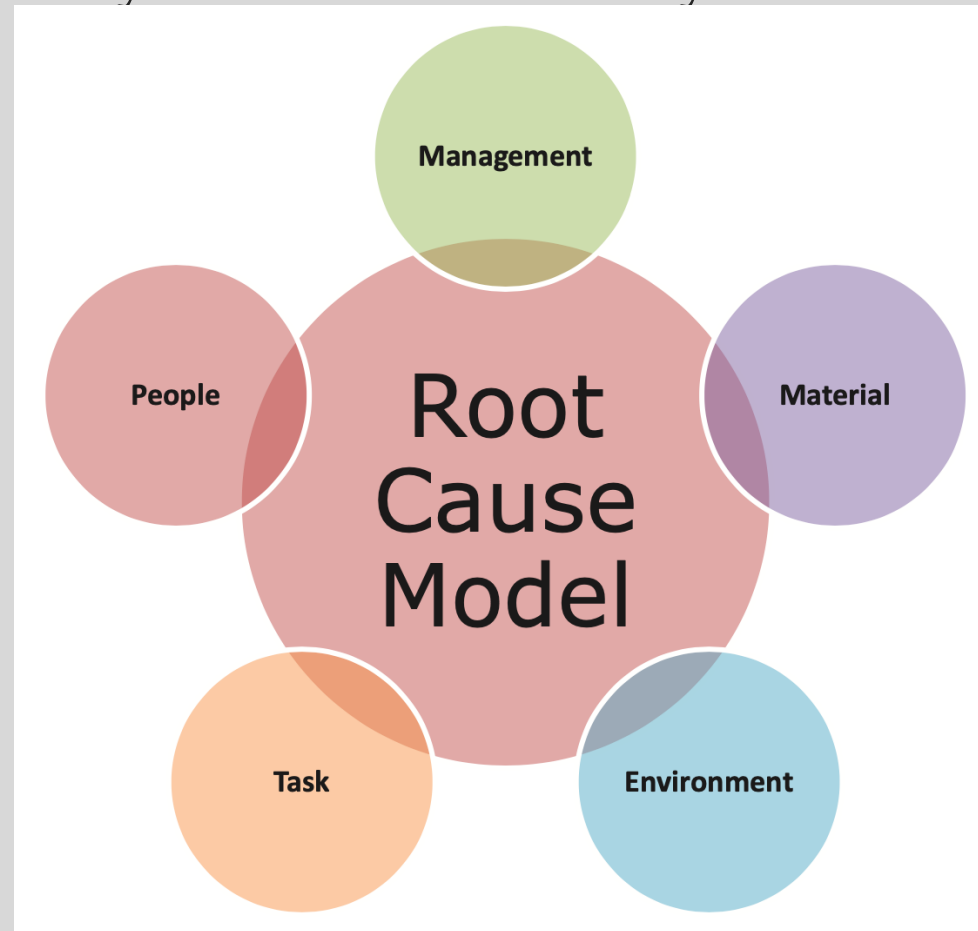
What can happen?

How can it happen?

Why can it happen?

What is the likely impact

# Reflecting on your risk analysis



# Reflecting on your risk analysis

## Environment

How could the following influence the risk:

- ✔ Need and level of housekeeping?
- ✔ Need and level of ventilation (clean air) for dust, gases, fumes etc?
- ✔ Need and level of noise management?
- ✔ Need and level of lighting?
- ✔ Need and level of heat/cold/sun/hydration etc?

# Determining Risk (Risk Assessment)

**H. Harm**

**E. Exposure**

**A. Avoidance**

**L. Likelihood of hazardous event**

# Determining Risk

**Harm = Scale of acute and chronic harm**



# Determining Risk

## Exposure

- the nature of access
- time spent in the hazard zone
- the number of persons requiring access
- the frequency of access

# Determining Risk

## **Avoidance**

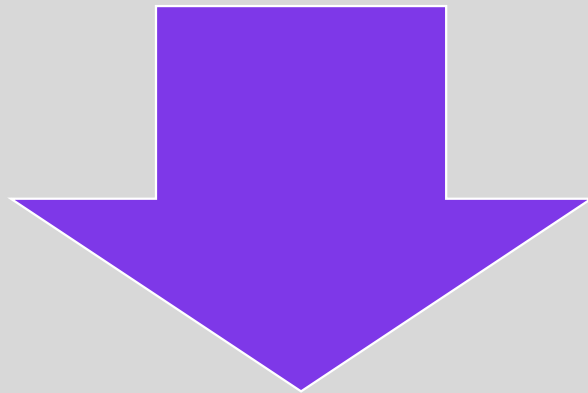
- **different persons exposed to the hazard(s)**
- **how quickly the hazardous situation could lead to harm**
- **awareness of risk**
- **the human ability to avoid or limit**
- **experience and knowledge**

# Determining Risk

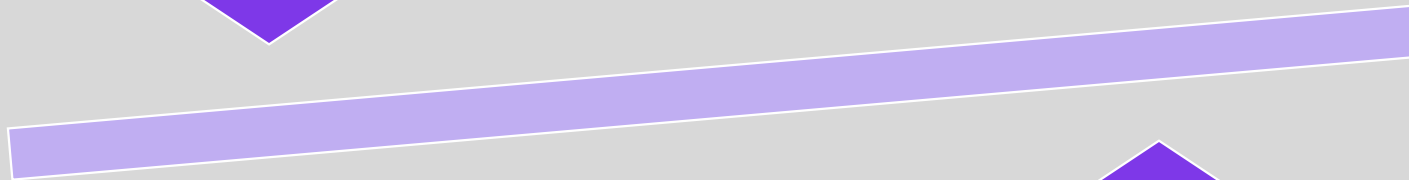
## **Likelihood of hazardous event**

- **reliability and other statistical data**
- **accident history**
- **history of damage to health**

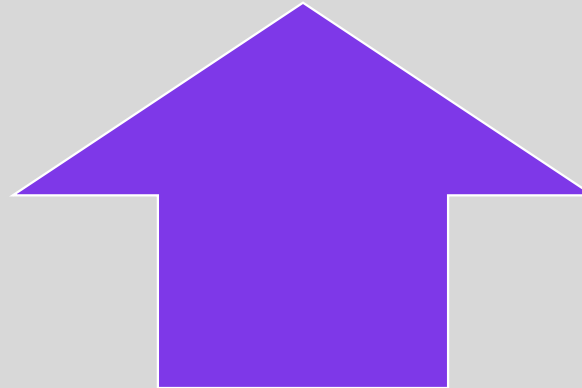
# Determining Risk (Risk Assessment)



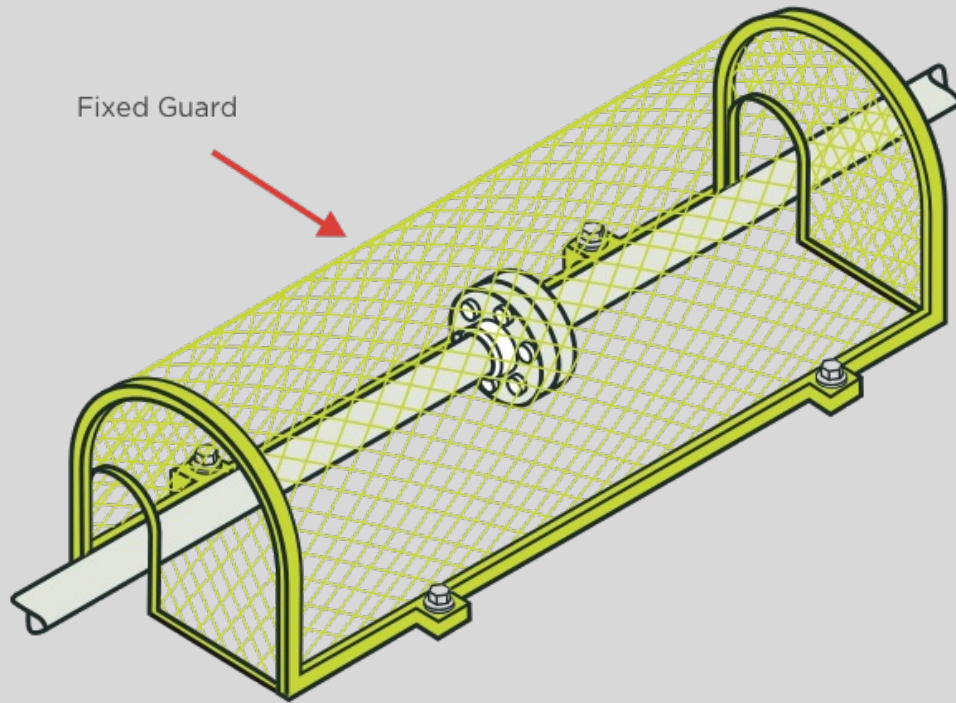
Exposure/Avoidance/Likelihood  
(Max 5 each)



Harm (Max 65)

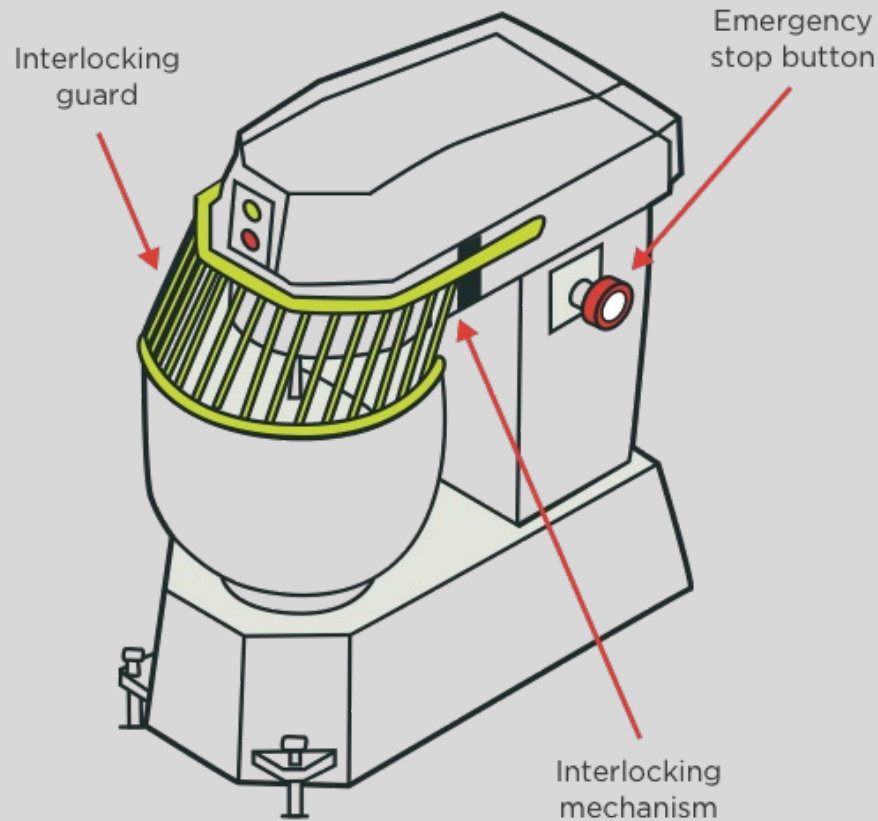


# Determining Risk (Assess as Seen)



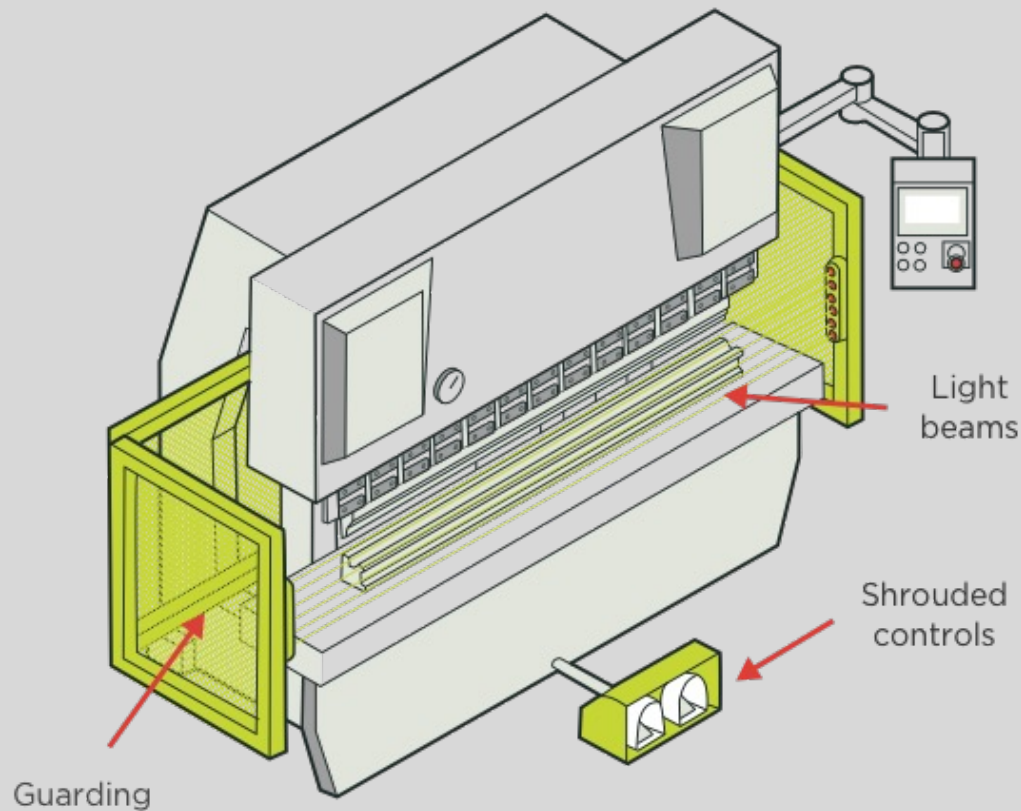
- H. Harm**
- E. Exposure**
- A. Avoidance**
- L. Likelihood**

# Determining Risk (Assess as Seen)



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# Determining Risk (Assess as Seen)



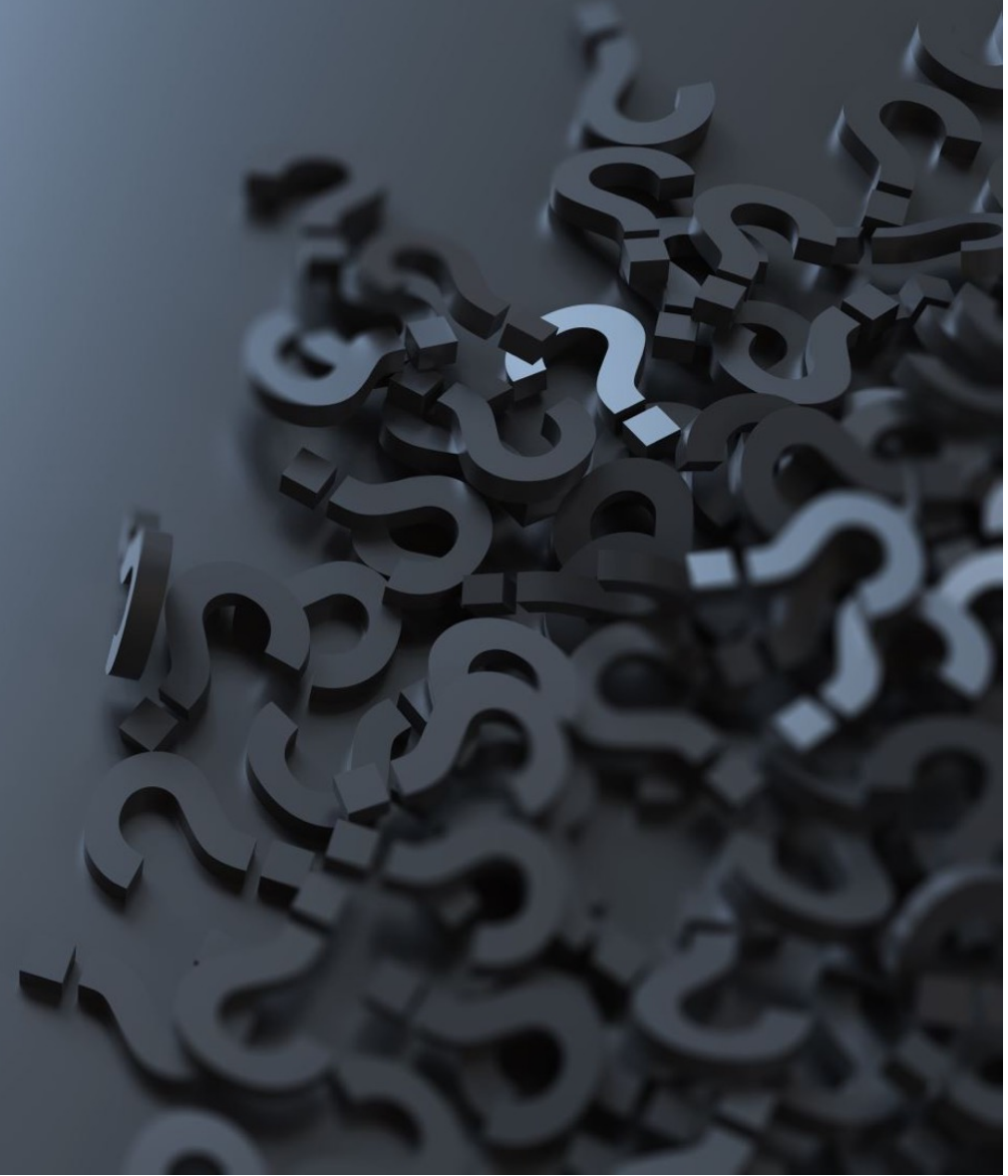
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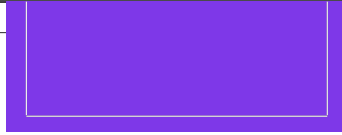
Next Module (8)

Common Safe Systems of Work and Lock-Out-Tag-Out.



QUESTIONS?





THANK YOU FOR YOUR  
ATTENDANCE

