



# Biorisk Management

## Summary



# Biorisk Management

**Biorisk Management =  
Assessment, Mitigation, Performance**



## In Groups

🦠 Agree on five key messages from this workshop

🦠 Use post-it notes for each message and place on flip chart



# Individual Reflection

- 🦠 How will you describe this course to your professional colleagues back home?
- 🦠 What will you tell your boss about this course?
- 🦠 What will be your 'elevator speech'?



# Biorisk

Encompasses both biosafety and biosecurity

- 🦠 **Biosafety**: prevent unintentional exposure to pathogens and toxins, or their unintentional release
- 🦠 **Biosecurity**: prevent the loss, theft, misuse, diversion, or intentional release of pathogens and toxins



# Risk

**Likelihood** and **consequences** of an undesired event specific to a certain hazard or threat

$$R = f (L,C)$$



# Risk Assessment

Risk Identification

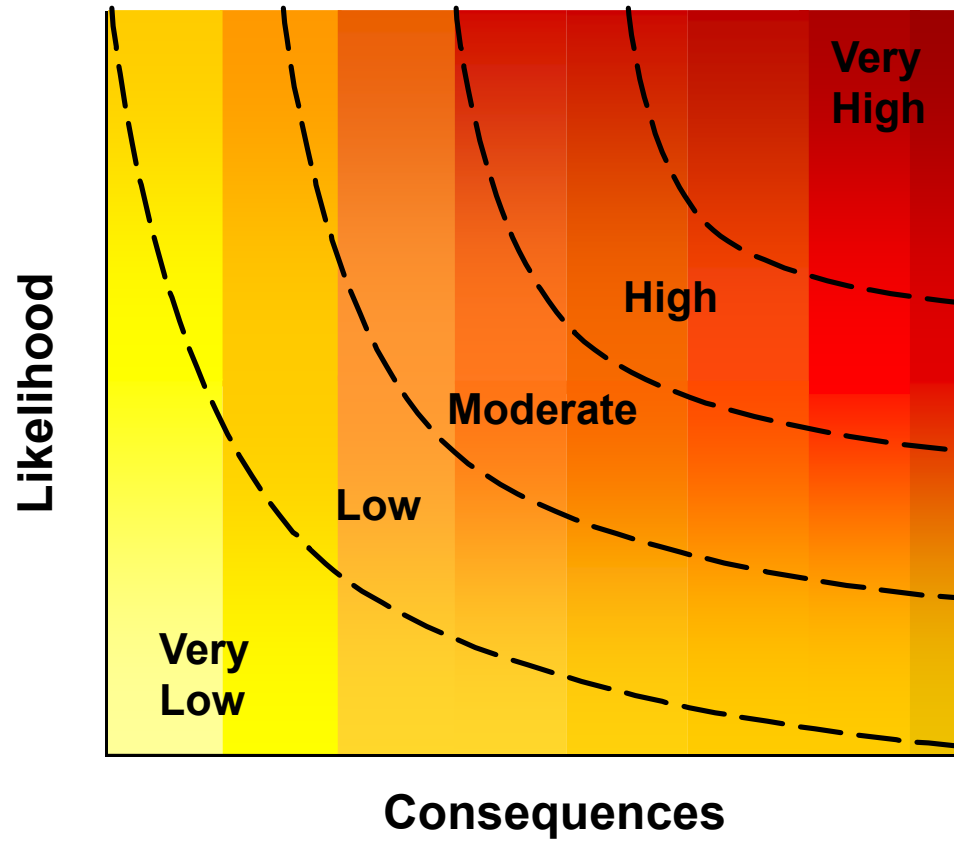
Hazard and/or threat identification

Evaluation of likelihood

Evaluation of consequences



# Risk Graph







# Benefits of a Robust Risk Assessment

- ⚠ Facilitate risk assessment process;  
repeatable/reproducible
- ⚠ Facilitate risk mitigation decisions
- ⚠ Provide quality control documentation



# Various Types of Controls to Mitigate Risk

- ⚠ Elimination or Substitution
- ⚠ Engineering Controls
- ⚠ Administrative Controls
- ⚠ Practices and Procedures
- ⚠ Personal Protective Equipment

**Advantages/disadvantages of each?**

**Which one most reduces biorisks?**

# Biorisk Performance

- ⚠ Knowing your assessment is adequate
- ⚠ Knowing your mitigation measures work
- ⚠ Knowing your programme is viable and sustainable

## Components of performance

- ⚠ Control
- ⚠ Assurance
- ⚠ Improvement



# CEN Biorisk Management Standard

☠ CWA 15793:2008

☠ Based on a PDCA framework (plan, do, check, act)





# Continuous PDCA at every step of AMP

 Assessment  PDCA

 Mitigation  PDCA

 Performance  PDCA



# Biorisk Management = Assessment, Mitigation, Performance



Risk identification  
Hazard/threat identification  
Likelihood evaluation  
Consequences evaluation



Elimination or Substitution  
Engineering Controls  
Administrative Control  
Practices and Procedures  
Personal Protective Equipment



Control  
Assurance  
Improvement

