

# ■ How To Implement A Biosafety And Biosecurity Program

## OVERVIEW

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**How To Implement A Biosafety And Biosecurity Program** summarizes the effective practices, principles, and controls used to integrate biological safety and security protocols into existing and new laboratory operations.

### Five Takeaways:

1. Fluency in the principles needed to start a biosafety and biosecurity program.
2. Define the inherent risks encountered in a facility handling biological agents.
3. Comprehension guidances, inventory systems, training, and risk communication protocols.
4. Explain various controls implemented in a biosafety and biosecurity program.
5. Explore biosafety program roles and structures.

## AGENDA

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### Principles

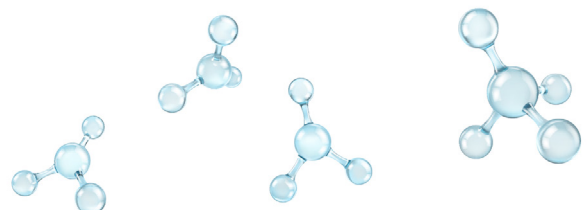
- Biosafety and biosecurity programs
- Biological and select agents
- Four biosafety risk levels
- Infectious agents

### Practices

- Structure-based affinity maturation
- Targeted diversification methods
- Chain shuffling
- Formulation
- CMC liabilities
  - Aggregation
  - Solubility
  - Immunogenicity
  - Glycation

### Personnel

- Institutional biosafety committee (IBC)
- Biosafety program roles
  - Biosafety officers
  - Chief scientific officers
  - Principal investigators
  - Ancillary workers
  - Biohazard workers
  - Head of facility
  - Biosecurity director
  - Animal care and handling director



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## **Controls**

- Risk assessment considerations
- Change management programs
- Work practice controls
- Personal protective equipment (PPE)
- Decontamination and disposal
- Facility and equipment
- Biosecurity
  - Physical
  - Information
- Incident reporting and investigation
- Transport
- Occupational health
- Emergency plans
- Inventory
- Control reviews

