

Biosecurity and Cyberbiosecurity



Biological agents have a dual-use potential. They can be used in research for the advancement of science, but also can be misused to pose a threat to public health and safety, agriculture or the environment. MCE Consulting assists laboratories in assessing the potential for dual-use of the agents and the biosecurity risks of agents handled at their facilities and recommends mitigation strategies to prevent theft, mis-use or intentional release. Key features of MCE's comprehensive biosecurity approach include restricting access to the laboratory, maintaining an inventory of biological agents, emergency procedures for biosecurity incidents, controlling and protecting sensitive information and ensuring employees are properly trained in these biosecurity measures.

Our comprehensive biosecurity expertise includes the following areas:

- Performing biosecurity risk assessments and recommending mitigation strategies
- Integration of biosecurity and biosafety policies and practices
- Biological material accountability programs
- Practical biosecurity measures in an infectious disease outbreak setting
- Working with law enforcement for a multi-disciplinary approach to biosecurity •

Dual-use and bioethics

- Biological non-proliferation
- Implementation of Biological Weapons Convention and UN Security Council 1540

Cyberbiosecurity is defined as “the safeguarding and mitigation of misuse, exploitation, damage to or disruption of valuable information, data, databases, equipment and facilities at the interface of the biological laboratory, related life sciences facilities and digital worlds”. MCE Consulting provides guidance to professionals working in and around biological materials with guidance on the mitigation of cyberbiosecurity risks within biological laboratories including Information Technology (IT) and Operational Technology (OT) risks in order to protect sensitive biological research, data, databases, and laboratory facilities and equipment against illicit or unauthorized access, theft, tampering, or other forms of misuse.