

IBC Training Procedures

Introduction

To protect the campus community, the IBC is tasked with evaluating research, teaching, and diagnostic testing involving biological hazards and monitoring safety and compliance. Biosafety training represents one of the most important elements in this task and in the implementation of an effective biosafety program. The descriptions and frequencies of biosafety training are listed below. Training may be offered in-person or electronically at the discretion of the IBC and/or Biosafety Officer (BSO) and supporting staff. Unless otherwise noted, lab leadership manages biosafety training records, including assuring that the Research Compliance Officer has copies of all training records by filling out the IBC Training Worksheet and submitting it to the IBC and Research Compliance Officer to ensure that the required training has been completed. Records may also be maintained by the BSO at the discretion of the IBC. IBC contact information is available at <https://www.iit.edu/orcpd/about/recombinant-dna-and-or-biological-materials>

Programmatic Training: Initial

Faculty, staff, students, volunteers, and visitors are required to complete initial biosafety training prior to working in labs or facilities that are registered with the IBC, diagnostic labs handling microorganisms, or federally permitted labs with biosafety containment criteria; or if they are leading/supervising teaching labs that use biohazards. Initial training covers applicable U.S. Federal, state, or local standards or guidelines (including tenets of the NIH Guidelines covering recombinant/synthetic nucleic acid research and the OSHA Bloodborne Pathogens Standard), stakeholder responsibilities, and biosafety principles, including risk assessment; containment/biosafety levels; laboratory/facility safety practices; engineering controls; hazard communication; personal protective equipment; and biohazardous waste management. Retraining is required every three years.

The following list is initial training required and available through the CITI training portal. Recertification is required every 3 years. Refresher training may fulfill this requirement up to 3 times, and then the CITI basic course will be required at the next recertification. This category is required for all faculty, staff, students, volunteers and visitors. This training includes:

- Initial Biosafety training
- OSHA Bloodborne Pathogens
- Select Agents, Biosecurity, and Bioterrorism
- Emergency and Incident Responses to Biohazard Spills and Releases

- Hazard Communication
- Personal Protective Equipment
- Responsible Conduct of Research (RCR)

The following training may be required for anyone doing other research in a lab shared with an IBC-approved protocol. Visitors, such as facilities, custodial, EHS, etc... will not be required to take this training.

- Select Agents, Biosecurity, and Bioterrorism
- Emergency and incident Response to Biohazard Spills and release
- NIH Recombinant DNA Guidelines

The following CITI training may be required if the IBC, EHS or RCO determine additional training is applicable to the protocol:

- Human Gene Transfer
- Nanotechnology
- Dual Use Research of Concern (DURC)
- USDA Permits

Programmatic Training: Refresher

Refresher training is required for anyone for whom the initial training is required. Refresher training may cover any combination of regulatory/guidelines changes, laboratory inspection findings, safety/best practices reminders, and/or lessons learned. Some refresher training will be required every three years. Laboratory safety, inspection findings, safety/best practices reminders, and/or lessons learned will be provided yearly or as the incident occurs.

Lab-Specific Training

Staff, students, volunteers, and visitors are required to complete lab (site)-specific training upon lab initiation/orientation and whenever significant changes occur to procedures, practices, or equipment in the lab. Training includes coverage of lab-specific biological hazards, equipment & infrastructure, emergency procedures, and location of biosafety-related documents (biosafety manual, bloodborne pathogens exposure control plan, standard operating procedures, etc.). Moving labs to new locations are considered a significant change. This process, along with its documentation, is managed by lab leadership and reviewed by the BSO during the audit process.

Regulated Medical Waste Training

Medical waste training is required for anyone packaging regulated medical wastes (UN3291) and signing manifests for the waste contractor to transport off-site. Training will be in accordance with 49 CFR, Parts 171-180 (US DOT). Renewal of the training is required every three years.

Dangerous Goods Shipping Training (Biohazards & Dry Ice)

Exempt biological; UN3373, category B biological substances; and/or dry ice (UN1845) shipping training is required for anyone offering these materials for commercial transport. Training will be in accordance with 49 CFR, Parts 171-180 (US DOT) and the International Air Transport Association (IATA) Dangerous Goods Regulations. Renewal of training is required every two years. Shipping UN2814, category A infectious substances affecting humans, and/or UN2900, category A infectious substances affecting animals, must be facilitated by the BSO or other campus-designated DOT/IATA shipper.

CITI training includes:

- Shipping and Transport of Regulated Biological Materials

IBC Member Training

Prior to service, all Illinois Tech IBC members will receive training covering the NIH Guidelines and other germane U.S. Federal, state, and local regulations and guidelines, including NIH review categories, risk assessment, risk groups, biosafety levels, prudent safety practices, and stakeholder roles/responsibilities. Refresher or topical training will be provided at least annually. Records of IBC member training is managed by the Research Compliance Officer. Recertification is required every three years.

Citi training for IBC members includes:

- Basic Introduction to Biosafety
- Institutional Biosafety Committee Member Training

Citi training where applicable:

- Biosafety Officer Training
- IBC Chair

Other Training

The IBC and/or BSO may offer or require other training at their discretion. Examples include regulatory reviews, agent- or procedure-specific training, and equipment training. Training events (topic, date, location, etc.) will be documented by the BSO.

Remember, research may also need to be approved by other committees such as Radiation Safety committee, Laser Safety Committee, IACUC, etc.. Other committees will have further training requirements. IBC will not approve the start of a protocol until all committees' requirements are met.

Protocol Review

During the Protocol review process, the IBC will review the provided training records to ensure that the modules that have been completed match the specified research aims. If any additional training modules are determined to be necessary, all research personnel listed on the protocol will be required to complete the additional modules before obtaining protocol approval.