Toxins

Safe working practices to minimize exposure via ingestion, inhalation, mucous membrane contact, and absorption or penetration through the skin.

BL2 Work Practices

- Label toxin work areas within lab
- Cover work surface with plastic backed absorbent paper
- Avoid generating aerosols; handle the powdered form carefully
- Use a chemical fume hood or biosafety cabinet when feasible
- Avoid the use of needles or Pasteur pipettes
- Substitute plastic for glass wherever possible
- Decontaminate work surfaces with 25% household bleach or 0.25N sodium hydroxide
- Treat liquid waste with 50% household bleach or 0.25N NaOH (soak overnight). For T-2 mycotoxin use a combination of 50% household bleach and 0.25N sodium hydroxide. Please contact OEHS before use
- Collect and autoclave waste at the end of the day
- Autoclave or chemically disinfect contaminated protective clothing before reuse

Personal Hygiene

- Keep your hands away from your face
- Do not eat, drink, or smoke in the lab
- Do not mouth pipette
- Always wash hand after removing protective clothing and before leaving the lab

Labels and Transport

- Post BL2 biohazard sign at lab entry
- Restrict access to the lab
- Label equipment used with or storing toxins
- For transport, use sealed, unbreakable, leakproof containers with a biohazard label and full toxin name

Protective Clothing Requirements

- Lab coat buttoned to the top with knit or grip cuffs, or use gloves that are long enough to cover the sleeves; a back-fastening gown is suitable; sleeve covers offer additional protection
- Gloves
- Face protection such as a face shield or safety glasses and a mask to cover the eyes, nose and mouth
- Dedicate protective clothing for work with toxins and do not wear outside the lab
- Avoid skin contact when removing gloves

Work with Powdered Form of Toxin

- Carefully weigh and convert to aqueous form as soon as possible
- Store powdered form in an unbreakable secondary container labeled with the complete toxin name to identify the hazard
- Change gloves after handling powdered toxin being sure to avoid skin contact with the toxin while removing gloves; wash hands prior to donning new gloves
- Purchase toxin in aqueous form whenever feasible

Emergency Response

- Flush skin or eyes with running water for 15 minutes, notify PI immediately, seek medical assistance
- Follow BL2 spill procedures: leave lab for 30 minutes, upon return, decontaminate spill with 25% household bleach or 0.25N NaOH solution for 30 minutes, collect and autoclave waste