

Decontamination



Personal Protective Equipment & Personnel Monitoring

BSL1 or BSL2:



Lab Coat



Gloves



Safety Glasses

BSL2+:



Disposable Gown



Double Gloves



Safety Glasses



Surgical Mask

- This SOP applies to individuals who handle, manipulate, transfer, store or dispose of biohazardous agents. This SOP is intended to complement the solid and liquid medical waste SOPs.
- Biological agents can pose varying risks of harm to humans, animals and the environment, including life-threatening disease and chronic illnesses. Therefore, appropriate decontamination of equipment and waste is critical to prevent contact with and release of harmful biological agents.

Engineering Controls, Equipment & Materials

Chemical Disinfectant: A disinfectant that has been validated to deactivate the biological agent of interest

Disposable Absorbent Material: A material that can absorb liquids and can be disposed as hazardous waste (e.g., paper towels)

Procedures

1. Don appropriate PPE for the live biological agent and the chemical disinfectant
2. If necessary, dilute/reconstitute chemical disinfectant to the concentration required to deactivate the agent, making sure to factor in the volume of liquid waste

For Liquids:

3. Carefully pour disinfectant into liquid waste so that the final concentration of the disinfectant deactivates the agent
4. Wait the contact time required to deactivate the agent
5. Dispose of decontaminated liquid waste as chemical hazardous waste

For Solids:

3. Apply disinfectant to the contaminated surface so that it is saturated
4. Keep the surface saturated for the contact time required to deactivate the agent
5. Wipe up chemical disinfectant from saturated area with absorbent materials
6. Dispose of absorbent materials following the SDS recommendations for the disinfectant

NOTE: Liquid solutions containing bleach and no other chemicals may be disposed down the drain with copious amounts of water.

Cautions & Considerations

- The disinfectant in use, the active concentration and the required contact time must be defined in the BUA
- Additional PPE may be required to handle the agent and/or the chemical disinfectant
- An appropriate disinfectant that can deactivate your agent is required and varies from agent to agent
- Ensure that the chemical disinfectant used is chemically compatible with any solutions it is mixed in

References

1. [Lists of EPA-registered Disinfectants](#)
2. Center for Food Security and Public Health (Iowa State University): [Disinfection](#)
3. Public Health Agency of Canada [Pathogen Safety Data Sheets](#)
4. EH&S Fact Sheet: [Sodium Hypochlorite \(Bleach\) Chemical Incompatibility](#)