
Bloodborne Pathogen Cleanup And Biohazard Disposal

1.0 Objective & Intent

This SOP defines the safety protocols for the cleanup and disposal of bloodborne pathogen spills and biohazardous waste within the cabinet and millwork manufacturing facility. The primary objective is to prevent occupational exposure to bloodborne pathogens such as Hepatitis B (HBV), Hepatitis C (HCV), and Human Immunodeficiency Virus (HIV) in accordance with WorkSafeBC OHS Regulation Part 6 (Substance Specific Requirements) and the Canadian Biosafety Standard. This procedure mitigates the risk of infection transmission through direct contact with blood, bodily fluids, or contaminated materials, ensuring a safe and compliant response to any biohazard incident.

2.0 Operational Scope

This procedure applies to all designated first aid attendants, maintenance personnel, and supervisory staff who have received formal bloodborne pathogen training. It covers the cleanup of spills involving blood, bodily fluids (e.g., vomit, urine, feces with visible blood), and any materials contaminated by these substances within all production areas, warehouses, break rooms, washrooms, and administrative offices. This SOP does not apply to routine janitorial cleaning of non-biohazardous waste or to medical facilities.

3.0 Hazard Identification & Mandatory PPE

- **Biological Hazards:** Exposure to bloodborne pathogens (HBV, HCV, HIV) through needlestick injuries, cuts from broken glass, or contact with mucous membranes (eyes, nose, mouth) or non-intact skin.
- **Chemical Hazards:** Irritation or burns from disinfectant solutions (e.g., bleach, quaternary ammonium compounds) used during cleanup.
- **Physical Hazards:** Slip, trip, and fall risks from wet floors during spill cleanup; sharps injuries from improperly disposed needles or broken glass.
- **Mandatory PPE:** Disposable nitrile gloves (heavy-duty, puncture-resistant), safety glasses or face shield, fluid-resistant disposable gown or coverall, and closed-toe, non-slip shoes. For large spills or aerosol-generating procedures, add a N95 respirator or half-face respirator with P100 filters.

4.0 Required Safety Equipment & Tools

- Biohazard spill kit (commercial or facility-assembled) containing absorbent pads, granular absorbent, red biohazard bags, twist ties, scoop and scraper, and disposable wipes.
- EPA-registered disinfectant effective against bloodborne pathogens (e.g., 1:10 bleach solution prepared fresh, or a tuberculocidal disinfectant).
- Sharps disposal container (puncture-proof, leak-proof, labeled with biohazard symbol).
- Impervious waste container (e.g., rigid plastic bucket with lid) for transport of biohazardous waste to designated disposal area.
- First aid kit (for responder self-treatment if exposure occurs).
- Barrier tape or warning signs to isolate the spill area.

5.0 Step-by-Step Safety Procedure

1. Assess the scene from a safe distance. Ensure no immediate danger to bystanders or the responder. Evacuate non-essential personnel from the area and post a second person to prevent entry. If the spill involves broken glass or sharps, do not proceed until sharps are secured.
2. Don all required PPE as listed in Section 3.0 before approaching the spill. Verify that gloves are intact and that the respirator (if needed) is properly seal-checked. Double-gloving is recommended for large spills.
3. Isolate the spill area with barrier tape or warning signs to prevent foot traffic. Ensure adequate ventilation if using chemical disinfectants (open windows or use fans if safe).
4. If sharps (e.g., needles, broken glass) are present, use the scoop and scraper from the spill kit to carefully pick them up and place them directly into the sharps disposal container. Never use hands to pick up sharps, even with gloves.
5. Contain the spill by placing absorbent pads or granular absorbent over the liquid biohazard. Allow the absorbent to fully soak up the material (typically 2-5 minutes). Use the scraper to collect the saturated absorbent and place it into a red biohazard bag.
6. Apply the EPA-registered disinfectant to the entire spill area, covering a perimeter at least 30 cm (12 inches) beyond the original spill. Allow the disinfectant to remain wet for the manufacturer's recommended contact time (typically 10 minutes for bleach solution).
7. Wipe the disinfected area with clean disposable wipes or paper towels, working from the outer edges toward the center. Place all used wipes and towels into the same red biohazard bag. Seal the bag securely with a twist tie and place it inside a second red biohazard bag (double-bagging).
8. Remove PPE carefully to avoid self-contamination: first remove outer gloves, then gown (rolling inward), then inner gloves, then face shield or goggles, and finally respirator (if used). Dispose of all PPE in the red biohazard bag. Seal the outer bag and label it with the date and 'Biohazardous Waste'.
9. Transport the sealed biohazard bag and any sharps container to the designated biohazard waste storage area (e.g., locked, labeled bin). Wash hands thoroughly with soap and water for at least 20 seconds immediately after removing PPE. If an exposure occurred (e.g., splash to eyes, needlestick), flush the affected area with water for 15 minutes and report to a supervisor and first aid immediately.
10. Complete the incident report and exposure log (if applicable) as per facility policy. Notify the supervisor and the Joint Health and Safety Committee (JHSC) representative. Arrange for professional biohazard waste disposal service to collect the waste within 30 days.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.