Bloodborne Pathogen Spill Response

Standard Operating Procedure
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Idaho State University
Environmental Health, Safety, and Sustainability

Potential Safety Hazards:

Bloodborne Pathogen Exposure – blood and other bodily fluids may contain pathogenic microorganisms that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV), and human immunodeficiency virus (HIV). These pathogens have been detected in blood, blood components, urogenital secretions, urine, saliva, and cerebrospinal fluid. Of these materials, human blood presents the greatest potential for transmitting infections.

- Spill response personnel can become infected by coming into contact with blood or other bodily fluids through an open wound, contaminated sharps materials, or poor hygiene and improper spill response procedures.
- If traffic is not controlled through contaminated areas, students, visitors, and University personnel are at risk of coming into contact with potentially infectious material.

Definitions:

- *Blood* – human blood, human blood components and products made from human blood.
- *Bloodborne Pathogens* – pathogenic microorganisms that can cause disease in humans.
- *Contaminated* – the presence of blood or the reasonably anticipated presence of blood or other potentially infectious materials (on a surface or item).
- *Contaminated Sharps* – any contaminated objects that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wire.
- *Decontamination* – the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens (on a surface or item) to the point where they are no longer capable of transmitting infectious particles; and the surface or item is rendered safe for handling, use, or disposal.
- *Gloves* – The most widely used form of personal protective equipment. Gloves act as a primary barrier between hands and bloodborne pathogens. Nitrile gloves are used for medical, dental or laboratory procedures. Heavy duty utility gloves may be used for housekeeping duties.
- *Occupational Exposure* - reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or any other potentially infectious material that may result from the performance of an employee's duties.
- *Other Potentially Infectious Materials (OPIM)* - includes the following: (1) human body fluids: cerebrospinal, synovial, pleural, pericardial, peritoneal, amniotic, semen, vaginal secretions saliva in dental procedures; all body fluids, secretions, and excretion except sweat; all body fluids in situations when it is difficult to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human living or dead; (3) HIV-containing cell or tissue culture, organ culture, and HIV, HCV, or HBV-containing culture medium or other solutions; and (4) blood, organs or other tissues from experimental animals infected with HIV, HCV, or HBV

- *Personal Protective Equipment (PPE)* - is specialized clothing or equipment worn by an employee for protection against a hazard. It includes: gloves, gowns, face shields, masks, and protective eyewear.
- *Regulated Waste* - liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials, also called Biohazardous Waste.
- *Sharps* - an item that may cut or puncture skin. Sharps include unused, disinfected or contaminated: needles, syringes with needles, scalpel blades, lancets, razor blades, broken vials, laboratory slides, exposed dental wire, or any object that may become contaminated and puncture or lacerate skin.
- *Universal Precautions* - is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain other human body fluids are treated as if known to be infected with HIV, HBV, or other bloodborne pathogens.

Safe Work Practices:

CONTROL TRAFFIC

- Take measures necessary to reduce traffic in the area of the spill.
- If the spill occurs indoors and the area can be isolated by closed doors, do so and post signage to prevent entry.
- In high traffic areas, use wet floor signs, caution tape, or co-workers to direct traffic away from the spill area.
- In outdoor areas Public Safety may be called to help divert traffic away from spills.

ASSEMBLE CLEAN-UP EQUIPMENT

- Retrieve a bloodborne pathogens spill kit
- Check kit contents to ensure appropriate response materials and PPE are present:
    - Absorbent materials,
    - Disinfectant
    - Biohazard/infectious waste containers (bags)
    - Disposable dust pan
    - Gloves
    - Goggles
    - Forceps
    - Small sharps bin

PERFORM CLEAN-UP

- For spills on smooth surfaces or porous surfaces outdoors:
    - Don gloves, goggles, shoe covers, and/or face shields.
    - If contaminated sharps are present, use forceps to collect them into a sharps container. Never handle sharps with your hands.
    - Place absorbent materials over the contaminated area.
    - Gently pour disinfectant onto the absorbent materials
    - Allow the disinfectant to sit for the contact time recommended by the manufacturer
        - For Oxiver TB - 1 minute
    - Repeat until no visible blood remains
    - Place absorbent material, a disposable dustpan, and any other contaminated

materials in a biohazard container
    - Wipe the area of the spill with a disinfectant-wetted towel and allow it to dry.
    - Remove gloves, shoe covers, and any other disposable PPE and place them in the biohazard container.
- For spills on the carpet:
    - Don gloves, goggles, shoe covers, and/or face shields.
    - If contaminated sharps are present, use forceps to collect them into a sharps container. Never handle sharps with your hands.
    - Gently pour carpet-safe disinfectant onto the contaminated area soaking the area.
    - Allow the disinfectant to stand for the contact time recommended by the manufacturer
    - Use absorbing material to soak up as much excess liquid as possible from the carpet, and use additional towels or absorbents as needed.
    - Place absorbent material and any other contaminated materials in a biohazard container.
    - Remove gloves, shoe covers, and any other disposable PPE and place in the biohazard container.

DISPOSAL OF WASTE

- Tie the top of the waste bag closed with a single overhand knot (balloon knot)
- Place regulated waste in the biohazard waste accumulation area or a secure area and submit a waste pick-up request to EHSS

PERSONAL HYGIENE

- Thoroughly wash hands, wrists & elbows with warm water and mild soap/detergent immediately after completion of clean up and again after disposing of waste.

Preparedness:

Identification of Bloodborne Pathogen Hazards (Universal Precautions)

- Assume that a bloodborne pathogen hazard exists whenever the following items are observed:
    - Visible signs of the presence of blood and/or blood products or any other potentially infectious material.
    - Biological hazard warning symbols or labels/signs/tags identifying specific areas or materials as contaminated.
    - When providing first aid to victims with injuries involving cuts, abrasions, etc., exposure to blood should be expected.

Training

- All personnel who are at risk for occupational exposure to bloodborne pathogens must attend initial Bloodborne pathogen training prior to responding to an incident. Refreshers must be completed annually.
- All personnel who are at risk for occupational exposure to bloodborne pathogens must complete a Hepatitis-B vaccination series, titer, or opt-out form if they choose not to receive the vaccine.

To submit a waste pick-up request to EHSS: