1. PURPOSE

1.1. To describe the procedure for proper disinfection and management of spillage in the laboratory

2. SCOPE

2.1. This SOP is applicable to areas where is there is a requirement of proper disinfection during spillage of Blood / Body Fluids / Other Potentially Infectious Material

3. REFERENCE

3.1. Quality Manual

4. ABBREVIATIONS

4.1. SOP: Standard Operating Procedures
4.2. QSP: Quality System Procedure
4.3. HOD: Head of the Department
4.4. QM: Quality Manual
4.5. OSHA**:** Occupational Safety and Health Administration

5. DEFINITIONS

5.1. Blood: means human blood, human blood components, and products made from human blood
5.2. Blood borne Pathogens: means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to HBV (Hepatitis B) and HIV (Human Immunodeficiency) viruses
5.3. Contamination**:** means the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface
5.4. Decontamination: means the use of physical or chemical means to remove, inactivate, or destroy blood borne 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.

6. RESPONSIBILITY

6.1. Quality Manager
6.2. Laboratory In-charge
6.3. Phlebotomists
6.4. Technicians

7. PRECAUTIONS:

7.1. In accordance with the OSHA guidelines for Blood borne Pathogens, all blood and body fluids are considered potentially infectious. Standard Precautions ("Universal Precautions") must be observed at all times.
7.2. Gloves must be worn when handling all blood and body fluids.
7.3. Eye/mucous membrane protection is necessary when splashing of blood or body fluids is expected
7.4. Additional barrier protection (e.g., fluid resistant gowns, boots, shoe covers) may be indicated for certain procedures

8. PROCEDURE:

8.1. Precautions

8.1.1. Assess the nature of the spill and the degree of hazard involved. Report all spills to the Laboratory In-charge, Quality Manager and Laboratory Director for documentation and follow-up. If employee exposure to blood or body fluids has occurred, an incident report and follow-up will be necessary

8.1.2. Do not pour disinfectant directly onto the spill, as this will cause further aerosol formation

8.1.3. Note that bleach corrodes stainless steel. If bleach is used, stainless steel surfaces must be fully rinsed with water upon completion of decontamination.

8.2. Types of Biohazardous Spills

8.2.1. Spills of blood and body fluid specimens are considered to be potentially infectious with blood borne pathogens

8.2.2. Spills of clinical specimens, which possibly contain organisms infectious by aerosol route

8.2.3. Spills of clinical materials known or likely to contain organisms transmitted by aerosol or blood borne routes, spills involving broken glass also.

8.2.4. Spills located in patient contact areas, hallways, or in open laboratory areas.

8.3. Cleaning procedure using the spill kit in the lab /sample collection

8.3.1. Major Biohazardous Spills (>20 ml):

8.3.1.1. If the spill possibly contains infectious organisms that can spread through aerosols evacuate the immediate area and allow 30-60 minutes to permit settling of aerosols if possible.

8.3.1.2. In the case of a serious spill of organisms transmitted by aerosol route, shutting down the air handling system is advised

8.3.1.3. If the spill is in an area unable to be evacuated, decontaminate immediately

8.3.1.4. If an employee is contaminated with biohazardous material, remove contaminated clothing and PPE and immediately flood the contaminated skin, mucous membranes, or eyes with water for at least 20 minutes. Use soap when possible

8.3.1.5. Use tongs or other mechanical means to pick up broken glass; do not use hands directly

8.3.1.6. Wearing biohazard face shield (or mask and goggles), gloves, fluid resistant gown, and, if necessary, shoe covers, cover the area around the spill and on the spill with absorbent materials like cotton, paper towels then add equal volume of 1% sodium hypochlorite solution (disinfectant) for 15 min then with the help of scoop collect the waste into yellow cover tie and discard in yellow bin.

8.3.1.7. In case the spill is micro biology glass waste it has to be taken in a glass beaker for autoclaving. Then discard in yellow bin

8.3.1.8. Disinfect the cleaned area again with 1% sodium hypochlorite, and then with detergent/normal water

8.3.2. Minor Biohazardous Spills (<20 ml):

8.3.2.1. Wearing appropriate PPE and gloves, wipe up the spill with absorbent material

8.3.2.2. Clean the spill area with 1% sodium hypochlorite

8.3.2.3. Wipe the area clean

8.3.2.4. Discard the contaminated materials into a biohazard waste container.

8.3.3. Spills occurring in a Centrifuge:

8.3.3.1. Turn off the centrifuge immediately and unplug from the electrical outlet

8.3.3.2. Clear the area

8.3.3.3. Allow aerosols to settle before opening the lid, unless the centrifuge is equipped with covered buckets; however, allow aerosols to settle before opening the covered bucket

8.3.3.4. If the spill possibly contains organisms infectious by aerosol route, allow 30-60 minutes to permit settling of aerosols if possible

8.3.3.5. Wearing biohazard face shield (or mask and goggles), gloves, fluid resistant gown, and, if necessary, shoe covers, soak up liquids using absorbent towels. Decontaminate the rotor head with 1% sodium hypochlorite, or the hospital's designated germicidal agent

8.3.3.6. Use tongs or other mechanical means to pick up broken glass; do not use hands directly. Be aware of the threat of puncture wounds posed by sharp points and edges when disassembling rotor heads for decontamination.

8.3.4. Spills Occurring in an Incubator, Refrigerator, or Other Contained Equipment

8.3.4.1. If possible, close door immediately and turn off or unplug equipment

8.3.4.2. If the spill possibly contains organisms infectious by aerosol route, evacuate the immediate area and allow 30-60 minutes to permit settling of aerosols if possible

8.3.4.3. Clean-up and decontaminate as directed in "Major Biohazardous Spills (>20 ml)" or Minor Biohazardous Spills (<20 ml)", depending on the spill volume

8.3.5. Hand hygiene

8.3.5.1. To prevent the transmission of potentially infectious agents, OSHA requires hand washing or antisepsis after glove removal. CDC recommends if the hands are visibly dirty or contaminated with blood or proteinaceous material, the individuals wash their hands with soap and water

8.3.5.2. If hands are not visibly soiled, an alcohol based waterless agent may be used for routinely decontaminating hands

8.3.5.3. Cleaning and disinfecting of disposable gloves for reuse are strictly prohibited

8.3.6. Decontamination of Equipment for Service

8.3.6.1. Equipment to be serviced, either on or off of the Labs property, must be decontaminated prior to servicing or shipping.

8.3.6.2. Turn off and disconnect the equipment from any electrical supply

8.3.6.3. Follow manufacturer's instructions for decontamination of equipment

8.3.6.4. In the absence of manufacturer's instructions, use 1% sodium hypochlorite

8.3.6.5. If equipment cannot be fully decontaminated prior to servicing or shipping, a signed and dated biohazard tag must be attached to the equipment, stating which portions remain contaminated

9. RECORDS

S. No	Record	Responsibility	Review / Retention Period
1	Spill Management Records	Operations Manager	1 Year
2	Training Records on Spill Management	Operations Manager	1 Year
3	Spill Kit Maintenance Record	Operations Manager	1 Year