

## **BIOLOGICAL SPILL KIT IN A 5 GALLON BUCKET WITH LID**

- Spill response and cleanup procedures (SOP)
- 1 Notepad
- 1 Pen
- 6 Business cards
- 1 Permanent marker
- 1 trash bag
- 6 Biohazard stickers
- 1 roll duct tape
- 1 roll absorbent paper towels
- 4 Absorbent pads (each holds 500ml)
- 1 Small sharps container
- 4 Biohazard waste bags and closures
- 1 hand broom with dustpan
- 1 squeegee
- 1 pair tongs
- Antibacterial soap
- Hand sanitizer
- 250 ml concentrated bleach less than 1 year old
- 1 Spray bottle with distilled water to mix bleach solution
- 6 pair nitrile gloves (XL)
- 1 set Tyvek coveralls
- 2 Disposable waterproof apron
- 3 pair disposable shoe covers
- Splash goggles
- 2 N-95 respirators
  - (NOTE: medical clearance & fit-testing required by Occupational Safety for respirator use)\*

## **STANDARD OPERATING PROCEDURES**

### **SPILL RESPONSE AND CLEAN-UP OUTSIDE BIOSAFETY CABINET**

Assemble the materials listed above in the biological spill kit before taking action. After the 30 minute evacuation period clean up the spill as soon as possible.

## **RESPONSE**

- REMAIN CALM!
- Alert people who are in the immediate area there has been a spill
- Remove contaminated clothing as you leave the area (evacuate)
- Also try to isolate the spill as much as possible by closing doors, hood sashes,

etc. if it does not delay your evacuation.

- Post a “DO NOT ENTER” sign outside the spill area and restrict access
- Allow aerosols to settle (~30 minutes)
- Immediately wash your hands and any exposed areas with soap and warm water
- Evaluate the agent’s specific hazards
- Contact emergency services and the Biological Safety Coordinator for assistance
- Seek medical treatment if warranted\*
- Assess the extent of the spill and formulate a plan for decontamination
- Assemble a spill response kit and clean-up team

## **SPILL CLEAN-UP**

- Put on gowns, gloves (double if needed), shoe covers, and appropriate personal protective equipment from spill kit.
- Starting at the perimeter of the spill and working toward the center, cover the spill with paper towels or other absorbent material.
- Slowly pour disinfectant over the absorbent material being careful to avoid splashing and spill starting around the edges and working toward the center. Saturate the area with the disinfectant.
- Allow sufficient contact time for the disinfectant to inactivate biohazardous agents; typically 15-20 minutes, but double the contact time for viscous materials or body fluid.
- Use a squeegee and paper towels to wipe up the spill, working from the edges to the center.
- Use tongs/forceps/dust pan to pick up sharp objects (broken glass, etc.) that may puncture gloves.
- Discard absorbent material used to clean-up the spill in biohazard waste bag. Use the 5 gallon bucket for large sharp objects or saturated absorbent materials.
- Clean the the spill area again using with fresh paper towels soaked in disinfectant. Thoroughly wet the spill area and allow to disinfect for approximately 15-20 minutes.
- Discard cleanup materials in biohazard bag, along with any contaminated PPE.
- Any re-useable and autoclavable materials that are contaminated could be placed in a separate bag or autoclavable container for sterilization.

- Close and secure bag, then place bag in second biohazard bag. Secure outer bag and disinfect by autoclaving (steam sterilization).

## **SPILL RESPONSE AND CLEAN-UP PROCEDURES** **INSIDE BIOSAFETY CABINET (BSC)**

### **DO NOT TURN OFF THE BSC!**

Have a complete biological spill kit ready to go before you start the clean-up. Initiate clean-up as soon as possible. Allow cabinet to operate during clean-up.

### **RESPONSE**

- REMAIN CALM!
- Alert people in the immediate area of spill
- Remove contaminated clothing
- Identify the agent's specific hazards

### **SPILL CLEAN-UP ROUTINE PROCEDURES**

- Use tongs/forceps to pick up sharp objects (broken glass, etc.) that may puncture gloves.
- Starting at the perimeter and working toward the center of the spill, cover the spill with paper towels or other absorbent material.
- Carefully pour disinfectant over the absorbent material and spill starting around the edges and working toward the center. Saturate the area with the disinfectant.
- Allow sufficient contact time typically 15-20 minutes and double the contact time for body fluids or viscous substances.
- Wipe up spill with a squeegee and/or paper towels, working from edge to center.
- Re-disinfect the spill area with fresh paper towels soaked in appropriate disinfectant. Wipe down all reachable cabinet surfaces with disinfectant.
- Place disposable contaminated materials into a biohazard bag and autoclave.
- Place contaminated reusable items in biohazard bags or heat resistant pans or containers with lids before autoclaving and further clean-up.
- Expose non-autoclavable materials to disinfectant, 20 minutes contact time, before removing them from the BSC.

- Remove protective clothing used during clean-up and place in biohazard bag for autoclaving.
- The cabinet should be run 15 minutes after clean-up before resuming work or turning off the cabinet.
- Inform all users of the BSC as well as the laboratory supervisor/principal investigator about the spill and successful clean-up as soon as possible.

**Notes:** Medical evaluation, surveillance, and treatment are provided as appropriate, and written records are maintained.