

Biological Spill Response

1. Assess

- a. Can the spill be contained and cleaned by the lab personnel?
 - i. If **no**, evacuate the room, lock the door, and call the VT Police (231-6411) or 911 and ask for EHS to be contacted immediately.
 - ii. If **yes**, proceed with Steps 2-4.

2. Respond

- a. Inform all coworkers that a spill has occurred and ask them to leave the area for at least 30 minutes.
- b. If possible, without risking exposure, quickly place absorbent material (e.g., paper towels) around the outer edge of the spill to stop it from spreading over the next 30 minutes.
- c. Remove any contaminated PPE and/or clothing, and place into a biohazard autoclave bag.
- d. Leave the room, close the door, and place a sign on the door alerting people that a spill has occurred and not to enter the room for the next 30 minutes to allow aerosols to settle.
- e. Report the spill to the PI or another supervisor right away.
- f. After 30 minutes, proceed to Step 3 (Clean-up).

3. Clean-up

- a. Obtain the lab spill kit, chemical waste bags, biohazard autoclave bags, and biohazard sharps container and bring to the spill area.
- b. Prepare/obtain appropriate concentration of disinfectant for the agent(s) spilled.
 - i. Disinfectant information can be found in the lab's PSDS files and biosafety manual.
- c. Don clean PPE, including a respirator if the spill involves an inhalation hazard.
- d. Using tongs or another mechanical device, remove any sharps and solid debris from the spill area.
 - i. Place sharps into a biohazard sharps container.
 - ii. Place unbroken solids into a biohazard autoclave bag.
- e. Cover spill with absorbent material, starting at the edge and working inward.
- f. Apply disinfectant over the absorbent material, enough to soak the material.
- g. Let it sit for the minimum contact time required for the disinfectant used (see PSDS files or lab biosafety manual).

- h. Remove soaked absorbent material, and place into blue chemical waste bags.
 - i. If there were sharps involved with the spill, use tongs to pick up the absorbent material.
 - ii. Apply disinfectant to the spill area again. Wipe up with paper towels, and place them into the blue chemical waste bags.
 - iii. Wipe area dry, or place “wet floor” signage in area until it air dries.
 - iv. Carefully remove PPE as follows and place into biohazard autoclave bags
 - 1. Shoe covers
 - 2. Gloves
 - 3. Lab coat
 - 4. Respirator and face/eye protection
 - 5. Close up blue chemical waste bags and place into disposal area. Schedule chemical waste pick up through EHS.
 - 6. Prepare biohazard solid waste for autoclave, and autoclave the material
 - a. After autoclaving, dispose of solid waste as RMW.
 - 7. Inform co-workers that spill is cleaned up, and remove spill signage from door.

4. Report

- a. Report the spill and clean-up activities to the PI and lab supervisor.
- b. If anyone was exposed to spill material, report the incident to Environmental Health and Safety (ehs-bsg-g@vt.edu).
- c. If the spill involved recombinant and/or synthetic nucleic acid molecules, report the spill to the Institutional Biosafety Committee Program (ibc@vt.edu).