EXAMPLE Biological Spill Control Material Inventory

<u>Please note:</u> This list includes items that are generally recommended for biohazardous spill planning and preparation and should be modified according to your lab-specific agents, materials and work practices. Your laboratory or work area should have access to a sufficient quantity of disinfectant and other materials to control any biological spill that could potentially occur based on your research. Spill kits should be readably accessible and all personnel working in the lab should know their location. Spill kits should also be checked to make sure they are fully stocked.

The general requirement is to protect yourself and others, while neutralizing and removing spilled biohazardous material and then cleaning up the spill.

Personal Protective Equipment

- Disposable lab coats/disposable gown with sleeves
- Disposable gloves (e.g., latex, vinyl or nitrile) include a few pairs in multiple sizes
- Disposable shoe covers (at least 4 pairs)
- Splash-resistant goggles (at least 2 pairs)
- Safety mask/face shield (if possibility of splashing or aerosolization exists)

Absorbent Material

- Absorbent pads
- High-absorbency paper towels (such as Wypalls)
- Micro-encapsulation absorbent (e.g., BioSorb, SafeGuard Absorbent, Safetec EZ Cleans Kit, etc.)

Germicidal Disinfectant

- A solution of 5.25 percent sodium hypochlorite (household bleach) diluted at 1:10 (10% bleach solution this probably should be mixed at time of disinfection or can also use small bleach packets appropriately sized to mix with water).
- Over-the-counter EPA-registered "hospital disinfectant" chemical germicides that have a label claim for tuberculocidal activity. These are chemical germicides that are approved for use as hospital disinfectants and are tuberculocidal when used at recommended dilutions.
- Over-the-counter products registered by the Environmental Protection Agency (EPA) as being effective against human immunodeficiency virus (HIV).
- Labs working with endospore-forming bacteria should utilize sporicidal disinfectants.

Cleanup Tools

- Brush with polypropylene bristles
- Dust pan/scoop (preferably polypropylene)
- Tweezers or forceps (for removing contaminated sharps)
- Biohazard waste bags (red bags)
- Biohazard waste stickers
- Sealing tape or rubber bands for biohazard waste bags
- Disposable trash bags
- Floor sign and/or door sign: DANGER Biohazardous Spill Keep Away
- Sharps Container (available for use)

EXAMPLE Chemical Spill Control Material Inventory

Your laboratory should have access to a sufficient quantity of absorbents and other materials to control any spill that can be reasonably anticipated. Determine what chemicals are present and the hazard of each. Plan for a spill of the largest container of each chemical type. Determine if you have chemicals that will require specialized cleanup equipment and procedures (e.g., mercury, hydrofluoric acid, bromine, etc.). Keep Safety Data Sheets (SDS) for all chemicals in a centralized location. Post emergency contact information and evacuation routes. Know where equipment shutoff switches are located. Know the location of the nearest eyewash, safety shower, fire pull and type and location of fire extinguisher. Establish procedures for responses to personal injuries.

The general requirement is to protect yourself while you absorb / neutralize the spilled material and then clean the spill. Thus, items you will likely need in a spill response kit include:

Personal Protective Equipment

- 2 pairs of chemical splash goggles
- 2 pairs of gloves (e.g., Silvershield, nitrile, a universal glove, etc.)
- 2 pairs of shoe covers
- 2 plastic or Tyvek aprons and/or Tyvek suits

Absorbent Materials

- Absorbent pillows / powders (e.g., 3M Powersorb or other commercial products)
- Activated carbon (good for organic solvents)
- Floor-dry / oil-dry (inexpensive absorbent)

Neutralizing Materials

- Acid neutralizer
- Caustic neutralizer (e.g., Neutrasorb [for acids] and Neutracit-2 [for bases] include a color change substance to indicate complete neutralization)
- Solvent neutralizer (e.g., solusorb, activated carbon) to reduce vapors and raise the flash point of the mixture

Cleanup Tools

- Polypropylene scoop or dust pan
- Broom or brush with polypropylene bristles
- 2 five (5) gallon polypropylene pails
- 2 polypropylene bags
- Sealing tape
- pH test papers
- Floor sign and/or door sign: DANGER Chemical Spill Keep Away