requirements for each agent. When dealing with any biological spill the degree of risk and subsequent spill response are dependent on the following:

- What was spilled? (What are the physical characteristics and potential hazards of that particular organism?)
- How much was spilled? (What is the volume and concentration of the organism?)
- Where was the spill? (In a BSC, in the lab, outside the lab, in a centrifuge?)
- What is the potential for release to the environment? (Were aerosols or droplets generated?)

Spill Kits

Spill kits are recommended for labs working with microbiological agents because they provide 'one-stop shopping' in the event of a spill. To prevent injury as well as to save time and resources, the most important considerations for spill kits are its location and contents. Kits should be strategically located at fixed positions close to the work areas so that they are easily accessible. Each spill kit should be tailored to meet the specific needs of each lab. It is the responsibility of the Principle Investigator to ensure a well thought out spill kit is readily available and maintained. However, while a prepared kit is ideal, it is recognized that the contents of a spill kit are often readily available in the lab and a formal kit may not be necessary. The following is a list of recommended items for biological spill kits;

- Concentrated disinfectant (i.e. bleach)
- Spray bottle
- Paper towels or another suitable absorbent
- Biohazard/Autoclave bags
- Sharps container
- Forceps (to pick up broken glass)
- PPE

Disinfectants other than bleach may also be used provided the disinfectant is proven to be effective against the agents in use. If you are unsure, or have any other questions regarding spill kits and decontamination please contact the ORM.

Personal Protective Equipment

Personal Protective Equipment (PPE) is used to reduce exposure and contamination during a spill clean-up. Choosing the appropriate PPE is very important and depends on the characteristics of the biological agent (i.e. mode of transmission, infectivity). MSDSs can provide this information as well as recommend suitable PPE. As PPE has been more fully discussed under the heading 'Infection Control', this section will limit its comments to specific issues as they pertain to spill response.

To reduce exposure, one must protect vulnerable personal surfaces (i.e. skin, mucous membranes, and respiratory tract) by choosing appropriate PPE. To reduce personal contamination or transportation of contaminants beyond the laboratory, choose PPE that maximize coverage.

- Lab coats – knee length, long sleeved, closed cuffs (Note: risk of lab coat dragging through spill)
- Gloves – latex or nitrite, long cuffs to cover wrists and allow lab coat sleeves to be tucked in.
- Eyewear – degree of coverage dependent upon the risk of contact (i.e. slashes)
- Respirators – may be used when the risk of exposure to aerosols can not be addresses through other means.
- Shoe coverings - may be used when shoes risk becoming contaminated.