



Exposure Control Plan

Project Title	
Indicate BHM	

Name and signatures of worker(s) and student(s) who have reviewed this plan:

Name (print)	Signature	Date

Permit Holder

Signature	
Date	

Complete this form for all projects that involve risk group 2 biohazardous materials. Submit it with the biosafety permit application. Once approved, include a copy of you biosafety permit and this exposure control form in your lab binder. Be sure to include a copy of the spill cleanup procedure in the laboratory's biological spill kit for easy reference.

Is there a biological or chemical MSDS or Pathogen Safety Data Sheet (PSDS) available for the biohazardous material (BHM) named above?

Please attach and ensure a copy is available in your lab.

List ways in which the BHM may enter the body and risks associated with that entry as it applies to your project

<input type="checkbox"/> Potential entry points

<input type="checkbox"/> Risks associated with entry

Describe the signs and symptoms of any illness that may arise from exposure

--

Please answer the following questions. If you answer “No” to any question, please attach an explanation

1 Administrative Safety Procedures

- Are laboratory safety training records available? Yes No
- Are routine safety inspections conducted in your area? Yes No
- Are inventory records maintained for all BHM(s)? Yes No
- Have staff received biosecurity training? Yes No

2 Procedural Safety Controls

- Are standard operating procedures available? Yes No
- Is an Emergency Response Plan in place? Yes No
- Is orientation and site specific training related to biosafety provided to all staff? Yes No
- Are records of this training signed by the trainer and trainee and kept on file? Yes No

3 Engineering Safety Concerns

- Biological Safety Cabinet available and annually inspected? Yes No
- Fume hood available and annually inspected? Yes No
- Chemical storage units available and vented? Yes No
- Safety equipment maintenance records available? Yes No

4 Personal Protective Equipment (PPE)

- To maximize safety, is all PPE provided to staff? Yes No
- Are gloves and lab coats worn in the work area and not outside designated zone(s) Yes No
- Is PPE disinfected before disposal or reuse? Yes No
- Is respiratory protection available and used? Yes No
- If yes, is respiratory fit testing completed? Yes No
- Are PPE training and maintenance programs in place? Yes No
- Is eye and/or protection used for splash protection? Yes No

Use and Knowledge of Universal Precautions when handling potentially infectious materials.

- Are all authorized workers aware of what Universal Precautions are and do they exercise these when handling potentially infectious blood, body fluids, etc.? Yes No

Established Emergency Response Procedures for:

1 Spills or leaks of BHM

- Are all laboratory staff trained to clean up a biological spill in the work area? Yes No
- Are biological spill kits available in the work area? Yes No

Location

Identify the disinfectant(s) you will be using

--

Contact Time	
--------------	--

List PPE that must be worn by your staff during clean up of a biological spill

Size of spill that staff can safely cleanup

2 Potential Exposures

Determine in advance how a potential exposure to this BHM will be handled and ensure staff are aware of the procedure.

Methods must be specified for the cleaning, disinfecting, or disposal of clothing, PPE, or other equipment if contaminated with hazardous biological materials. Indicate who is responsible for carrying out these activities.

Describe how staff will be trained to clean up biological spills, who is responsible for this training, and when it was or will be completed.

Emergency Response Plan for Biological Spills: General considerations

- Biological spill procedures are dependent on the type of biological agent involved.
- Ensure the procedures are specific for the type of agent you are working with.
- Be prepared to handle a spill for the type and for the amount of biological agent used in your space.
- Refer to the MSDS
- When a spill occurs, stop what you are doing and assess the situation. What has been spilled? How much has been spilled? Where has the spill occurred? Is it contained within a BSC or on the laboratory floor? Are you contaminated? Is immediate medical help required?
- Notify others in the laboratory to a biological spill. Restrict access to the lab. If you must leave the lab at any time, a sign must be posted to indicate there has been a biological spill and people are to keep out.

Complete the following spill cleanup protocols.

Store one copy in the spill kit for easy reference in the event of a spill.

For a Minor Spill

Step 1: Notify others in the laboratory

Step 2: If an aerosol was generated, or that risk exists, hold your breath while immediately leaving the laboratory. Close the door and post a sign informing others not to enter due to a biological spill. Do not re-enter the lab for at least 30 minutes, giving the aerosolized particles time to settle.

Step 3: Remove any contaminated PPE/clothing, and put in a biohazard bag to be autoclaved.

Wash/flush exposed areas as follows:

--

Step 4: Retrieve the biological spill kit, containing all necessary cleaning supplies. Cover the area with paper towels or other absorbent material. Apply the appropriate disinfectant to the paper towels, starting at the perimeter and working towards the centre, saturating the area.

Disinfectant to be used

Step 5: Allow contact time of

--

Step 6: Pick up any broken glass with forceps and place in glass sharps container. Seal waste in appropriate biohazard autoclave bag or container.

Step 7: Decontaminate area. All adjacent areas must be wiped down with disinfectant. Describe.

--

Step 8: Report spill to supervisor/lab manager

Step 9: Medical help is sought if warranted. Have a copy of the MSDS/PSDS available. Depending on the circumstances and the BHM involved, the Chief Medical Officer (Public Health) may be contacted.

Step 10: Fill out and submit a UPEI Incident Report and Investigation Form. Complete WCB form if the spill could lead to potential consequences to one's health.

Major Spill (larger than you or your colleagues can handle)

Step 1: Alert everyone in the area that there has been a biological spill and vacate the laboratory.

Step 2: Cordon off area with caution tape from spill kit and/or use appropriate signage.

Step 3: Call 9-911 then inform UPEI security @ 0384. Have MSDS/PSDS available.

Step 4: Report spill to lab supervisor

Step 5: Fill out and submit a UPEI Incident Report and Investigation Form and WCB form if indicated.

Spill Occurring within a Biological Safety Cabinet

Step 1: Leave ventilation on

Step 2: Remove gloves if contaminated and replace with new ones.

Step 3: Cover the spill with paper towels or other absorbent material and flood area, starting at the perimeter using _____.

Leave in contact for _____ minutes.

Step 4: All material should be picked up into a biohazard bag and autoclaved. (Unless the disinfectant used was bleach, which cannot go into our autoclaves. Please consult with Central Services on this issue).

Step 5: Wipe down all working surfaces and items within the BSC. Dispose of gloves.

Step 6: Let the BSC run for 10 to 15 minutes.

Spill Occurring in a Centrifuge:

Step 1: Shut centrifuge off, leave lid closed for at least 20 minutes to allow aerosols to settle. Notify others not to use the centrifuge during this time. Attach signage to indicate this.

Step 2: Wearing appropriate PPE, remove centrifuge to a BSC, if possible. If not, remove the rotors and buckets to a BSC where they are opened.

PPE to be worn	
Disinfect with	
Contact time of	

Step 3: With forceps, place any broken glass in a sharps container

Step 4: Wipe down the inside of the centrifuge, including the lid, with chosen disinfectant. If bleach used, rinse with alcohol.

The permit holder shall ensure that every incident is reported, completing and submitting a UPEI Incident and Report Investigation Form.

If the incident is reportable to Public Health, the Chief Medical Health Officer will conduct or initiate a further investigation, as necessary, in consultation with the Permit Holder, and will provide a report to the UPEI Health and Safety Advisor. The Health and Safety Advisor will communicate the information to the permit holder and other appropriate individuals and safety committees.

The Permit Holder, in consultation with staff, shall review the Exposure Control Plan at least every 2 years and amend as necessary. Final amendment to this plan must be made in consultation with the UPEI Biosafety Committee before renewals take place. If new critical/hazardous information comes to light regarding this BHM, this information must be incorporated into this plan immediately.

The Permit Holder shall make available a copy of this plan to every person who may be exposed to a hazardous material in their area. A summary of this plan must be located in the laboratory for quick reference in the event of an accident and the spill cleanup protocol must be included in the biological spill kit.