



# Biological Spill Response Plan

(Post this plan in the lab)

A biological spill kit must always be readily available in the lab.

Biological Spill Response			
<b>PI/Lab Supervisor:</b>		<b>Contact Information:</b>	
<b>Room Location:</b>		<b>Alternate Contact:</b>	
Biological Agent(s)	Risk Classification	Mode of Transmission	
Spill Response Equipment		Personal Protective Equipment	
<input type="checkbox"/> Specify disinfectant: E.g. Accel TB (H <sub>2</sub> O <sub>2</sub> ), 70% ethanol or bleach 5.25% - 6% (should be diluted 1:10/1:100 to use inside biological safety cabinet) _____ _____ <input type="checkbox"/> Paper towel/absorbent liners Other:	<input type="checkbox"/> Sharps container <input type="checkbox"/> Forceps <input type="checkbox"/> Tongs <input type="checkbox"/> Biohazard bags on stand or receptacle lined with bags <input type="checkbox"/> Commercial bench top keepers	<input type="checkbox"/> Lab Coat <input type="checkbox"/> Gloves (Double gloves with one inside the lab coat sleeve and one over the sleeve - preferred for cleaning spills.) <input type="checkbox"/> Safety goggles	<input type="checkbox"/> Surgical Mask <input type="checkbox"/> N-95 respirator <input type="checkbox"/> Full face shield <input type="checkbox"/> Disposable shoe cover

<b>Spill Clean-Up Procedures (lab coat, gloves, surgical mask and eye protection required)</b>	
<b>Large Spill in a Biological Safety Cabinet (BSC) (For spills flowing through the front or rear grills)</b>	<b>Large Spill in Open Area (e.g. Lab) (&gt;500 mL, aerosols have been released)</b>
<ol style="list-style-type: none"> <li>1. STOP WORK</li> <li>2. LEAVE THE CABINET TURNED ON</li> <li>3. Discard your outer pair of gloves and don a new pair. If the spill flows into the grills and drain pans, then additional barriers such as a face shield and N95 respirator are required while cleaning them.</li> <li>4. Cover the spill with paper towels. Spray an appropriate disinfectant on the spill working from outside edge of spill inward.</li> <li>5. Spray or wipe (with disinfectant-soaked towels) cabinet walls, work surfaces, and equipment with the disinfectant</li> <li>6. If necessary, flood the work surface, as well as drain pans and catch basins below the work surface, with disinfectant</li> <li>7. Wait at least 20 minutes, depending on the disinfectant and the spill volume</li> <li>8. Soak up disinfectant and spill with paper towels. Drain catch basin into a container</li> <li>9. Lift front exhaust grill and tray and wipe all surfaces</li> <li>10. Re-wipe the spill area again with disinfectant soaked towels or repeat the above steps one more time to ensure thorough decontamination</li> <li>11. Ensure that no paper towels or solid debris are blown into the area beneath the grill</li> <li>12. Dispose all clean-up materials into the biohazardous waste container</li> <li>13. Wash hands and any exposed surfaces thoroughly after the clean-up procedure</li> </ol> <p><b>Lab specific requirements (if any):</b></p>	<ol style="list-style-type: none"> <li>1. HOLD YOUR BREATH AND LEAVE THE ROOM IMMEDIATELY</li> <li>2. Warn others to stay out of the spill area to prevent spread of contamination</li> <li>3. Post a sign on the door warning others of the biological materials spill</li> <li>4. Remove any contaminated clothing and put it into a biohazard bag for later decontamination</li> <li>5. Wash hands, exposed skin, and inform your PI/supervisor about the spill.</li> <li>6. Put on protective clothing (lab coat, gloves, mask, eye protection, shoe covers) and assemble clean-up materials</li> <li>7. WAIT AT LEAST 30 MINUTES before re-entering the contaminated area to allow dissipation of aerosols. However, if the area is a high traffic area and you need to clean the spill right away, wear N-95 respirator instead of surgical mask along with mandated PPE to enter the room</li> <li>8. Cover the spill with paper towels and gently apply the appropriate disinfectant, proceeding from the outer edge of the spill to its center</li> <li>9. Leave in place for at least 20 minutes, (depending on the disinfectant)</li> <li>10. Collect all treated materials and discard in a biohazard bag</li> <li>11. Use forceps to pick up any broken glass and place in a sharps container</li> <li>12. Re-wipe the spill area again with disinfectant soaked towels or repeat the above steps</li> <li>13. Remove gloves and wash hands thoroughly with a soap solution</li> </ol> <p><b>Lab specific requirements (if any):</b></p>

<b>Small Spill within a Biological Safety Cabinet (BSC) (50 mL or less, with NO liquids flowing through the front or rear grills)</b>	<b>Small Spill in Open Area (e.g. Lab) (&lt;500 mL, low splatter and less potential for aerosols)</b>
<p>LEAVE THE CABINET TURNED ON</p> <p>Small spills within the operating BSC can be handled immediately. Remove the contaminated absorbent liner and place it into the biohazard bag.</p> <p>If no absorbent liner was used while working in BSC:</p> <ol style="list-style-type: none"> <li>1. Cover the spill with paper towel and gently spray the appropriate disinfectant</li> <li>2. Allow to sit for 5-20 minutes, depending on the disinfectant and the size of the spill</li> <li>3. Pick up the towels using a pair of tongs and discard into a biohazard receptacle lined with bag</li> <li>4. Decontaminate/wipe all items (as appropriate) within the cabinet, as well as the cabinet interior, with a disinfectant dampened towel</li> <li>5. Re-wipe the spill area again with disinfectant soaked towels or repeat the above steps</li> <li>6. Remove gloves and wash hands thoroughly with a soap solution before placing clean absorbent towels in the biosafety cabinet.</li> </ol> <p>Note: When bleach is used, wiping with sterile water is essential to remove the residual chlorine, which may eventually corrode metal surfaces of BSC.</p> <p><b>Lab specific requirements (if any):</b></p>	<ol style="list-style-type: none"> <li>1. Place paper towels to establish a physical barrier between the spill and yourself</li> <li>2. Starting from the outside and working in, carefully soak the spill with the appropriate disinfectant being careful to minimize aerosolization</li> <li>3. Allow 5-20 minutes of contact time (depending on the disinfectant and spill volume)</li> <li>4. Pick up the towels using a pair of tongs and discard into a biohazard bag</li> <li>5. Decontaminate/wipe all items (as appropriate, including equipment) within the spill area with disinfectant soaked towels</li> <li>6. Re-wipe the spill area again with disinfectant soaked towels or repeat the above steps one more time</li> <li>7. Discard contaminated disposables in biohazardous waste</li> <li>8. Remove gloves and wash hands thoroughly with a soap solution</li> </ol> <p><b>Lab specific requirements (if any):</b></p>

Decontamination & Disposal	Spill in a Centrifuge
<ul style="list-style-type: none"> <li>• Dispose contaminated disposables after spill always inside appropriate biohazard bags/ receptacles lined with bag or commercial bench top keepers. Tie the bags or close bench top keepers prior placing them in biohazard bins.</li> <li>• For contaminated lab coats decontaminate chemically i.e. soak in bleach for an hour and then air dry or autoclave prior sending them to laundry</li> <li>• If your lab coat is soiled with human blood and/or blood products, place in a clear plastic bag, tie and label it</li> <li>• Follow any other required steps prior to laundry as recommended by your laundry instructions</li> </ul>	<ol style="list-style-type: none"> <li>1. Wait at least 30 mins -1 hr. (after centrifuge has stopped) before opening the lid to allow hazardous aerosols to settle in the centrifuge</li> <li>2. Notify others in the lab not to use the centrifuge (include signage) and inform the lab supervisor</li> <li>3. Prior to opening centrifuge, don lab coat, gloves, and face shield</li> <li>4. Carefully open to assess the situation. Note: Use of a respirator is recommended, and double gloving is mandatory if glass tubes were used and broken</li> <li>5. Attempt to determine if the spill is contained in a closed safety cup/bucket or tray carrier, or within a closed rotor</li> </ol>
<b>Reporting</b>	
<p><b>Report biohazard spills:</b></p> <ul style="list-style-type: none"> <li>• To Principal Investigator/Lab supervisor</li> <li>• Incident/injury illness report</li> </ul> <p>For more information contact the Biosafety Officer Ext. 53190 or email <a href="mailto:bsa@uoguelph.ca">bsa@uoguelph.ca</a></p>	<ol style="list-style-type: none"> <li>6. If the spill is contained, spray the exterior with the appropriate disinfectant and allow adequate contact time.</li> <li>7. Take the carrier to the biological safety cabinet (BSC)</li> <li>8. In the BSC, carefully retrieve unbroken tubes using forceps or tongs (<b>NEVER USE YOUR FINGERS</b>), wipe outside with disinfectant, and dispose contaminated glass in a sharps container</li> <li>9. Immerse safety cups or buckets in a receptacle of disinfectant solution for an appropriate time to achieve disinfection</li> <li>10. Thoroughly wipe the inside of the centrifuge chamber and all parts including the lid with disinfectant saturated towels. Allow for adequate contact time before wiping up excess liquid</li> <li>11. After proper decontamination, wash carriers, rotors etc. with mild detergent as per the manufacturer's instructions.</li> </ol> <p><b>Lab specific requirements (if any):</b></p>