Emergency Response Plan (ERP)

Biohazardous Material

Environmental Health and Safety
May 2022

Carleton University

This guide provides general procedures to support the mitigation of sudden, unplanned, or unexpected situations when working with Risk Group 1 and 2 materials, human blood, tissues, or bodily fluids. It is the responsibility of each individual laboratory to develop emergency procedures specific to their research that are not included in this guide. Refer to Chapter 17 of the Canadian Biosafety Handbook. Contact the Biosafety Officer for assistance. Emergency response plans must be readily available to all users. Users must be trained in order to ensure an efficient and adequate response.

In emergencies where assistance is required, contact Campus Safety Services as ext. 4444.

As with all emergencies, incidents must be reported to the Environmental Health and Safety Office as soon as it is safe to do so. Any worker who has been exposed to a material, whether directly (cut, needle stick, splash, etc.) or indirectly (spill, potential inhalation, etc.) must report the incident to their direct supervisor. The supervisor must inform the biosafety officer of the potential exposure. These incidents are reported to the Public Health Agency of Canada, as required. Submit incident reports online through the University's reporting portal, CU Worksafe, available on the EHS website (https://carleton.ca/ehs/cu-worksafe/reporting/).

EMERGENCY CONTACT INFORMATION

Environmental Health & Safety	613-520-2600 ext. 3000
Campus Safety Services	613-520-4444 or dial 4444 on any campus phone
Facilities Management and Planning	613-520-2600 ext. 3668

POWER FAILURE

In the event of a power outage contact Facilities Management and Planning (FMP) at 613-520-3668 or Campus Safety Services at ext. 4444 and follow instruction of Carleton officials or emergency personnel. In the event of a power failure while working in a primary containment device (e.g. Biosafety Cabinet, "glove box", etc.), close/cover all containers. Wait until power returns. Start-up procedures must be performed again.

ANIMAL ESCAPE

In the event of animal escape, where the animal was administered a biohazard, follow the procedures of the Animal Care Services and refer to the Animal Care Plan for more information.

EXPOSURES

Exposures to pathogens, toxins, and other disease-carrying agents can occur in a variety of ways. This procedure outlines the processes to follow should you be exposed to materials that have the potential to cause infection.

1. Immediately initiate first aid. Depending on the exposure, this may be flushing eyes with eyewash station for a minimum of 15 mins or gently washing puncture/cut/injury with soap and warm water, letting it freely bleed.
2. Notify your supervisor / designated person
3. Report to Carleton University's Health and Counselling Services department or a health professional (nurse or physician) as they should assess the exposed person as soon as possible to determine if a post exposure prophylaxis is required.

SPILLS

- *Depending on the material that was spilled and the organic load, a pre-cleaning might be required prior to disinfection.*
- *Contaminated materials are collected in a biohazard bag to be autoclaved.*
- *If an aerosol was generated, disinfection of horizontal surfaces in the laboratory might also be required.*
- *Restock items used in the spill kit*

If infectious aerosols are created, the area must be evacuated for 30 minutes to allow the aerosols to settle.

In an open laboratory

1. Don the appropriate personal protective equipment (PPE)
2. Cover spill area with absorbent material. If required, protect floor drains.
3. Soak the spill area with an appropriate disinfectant effective against the agent.
4. Pour disinfectant from the outside of the absorbent material towards the inside.
5. Leave on for a minimum contact time of 30 minutes.
6. Ensure any broken glass is picked up with forceps and placed in a sharps container.
7. Wipe up with absorbent material.
8. Waste should be disposed and autoclave **where possible** (disinfection soaked materials are not to be autoclaved).
9. Remove PPE, dispose and wash your hands.

In a BSC

1. Remove and dispose of gloves within the BSC.
2. Leave the BSC and let it purge the aerosols for 10 mins.
3. Don the appropriate personal protective equipment (PPE).
4. Cover the spill with absorbent.
5. Soak the spill area with an appropriate disinfectant effective against the agent and gentle on stainless steel.
6. Pour disinfectant from the outside of the absorbent material towards the inside.
7. Leave on for a minimum contact time of 30 minutes.

8. Ensure any broken glass is picked up with forceps and placed in a sharps container.
9. Wipe up with absorbent material.
10. Waste should be disposed and autoclave **where possible** (disinfection soaked materials are not to be autoclaved).
11. Remove PPE, dispose and wash your hands.

In a public space

1. Call Campus Safety Services at ext. 4444 to assist in cordoning off the area.
2. Allow aerosols to settle for 30 minutes.
3. Don the appropriate personal protective equipment (PPE)
4. Cover spill area with absorbent material. If required, protect floor drains.
5. Soak the spill area with an appropriate disinfectant effective against the agent.
6. Pour disinfectant from the outside of the absorbent material towards the inside.
7. Leave on for a minimum contact time of 30 minutes.
8. Ensure any broken glass is picked up with forceps and placed in a sharps container.
9. Wipe up with absorbent material.
10. Waste should be disposed and autoclave **where possible** (disinfection soaked materials are not to be autoclaved).
11. Remove PPE, dispose and wash your hands

PERSONNEL INJURY OR ILLNESS

All incidents involving pathogens, toxins, other regulated infectious material, infected animals or involving failure of containment/control systems or release to the environment are to be reported immediately to your supervisor/ designated person to initiate incident reporting process. Supervisors are responsible for reporting and investigating all incidents in the laboratory.

If you require simple first Aid treatment, contact the designated first aid provider in your area. A list of designated first aid providers in the area is posted on the building Health and Safety Board.

Call Campus Safety Service at ext. 4444 for emergency medical assistance, if you encounter a critical injury.

FIRE, EXPLOSION

All workers shall be familiar with the location and operation of the fire extinguishers, emergency telephones, emergency exits, two evacuation routes, fire alarm pull stations and safe destination sites for their laboratory. In the event of a fire follow lab evacuation plan/ fire plan and proceed to a safe destination site or contact Campus Safety Services at ext. 4444 to co-ordinate a response to assist you. Refer to the emergency procedures webpage on 'Fire' for more resources (Fire - Emergency Management (carleton.ca)).

OTHER EMERGENCY SITUATION

In the event of extreme weather exposure (e.g., flood, earthquake, hurricane) refer to the Emergency Management and Continuity of Operations (EMCO) Program's Risk Action Plan (Carleton-University-Risk-Action-Plan-2020.pdf) or contact Campus Safety Services at ext. 4444 to co-ordinate rescue assistance. The Carleton Mobile App will allow any Emergency Notification System (ENS) messages to be delivered right to your phone and with the community (Carleton Mobile App - Carleton University).