

Title:	<i>SAFE WORK PRACTICE #16:</i> DAYTIME EMERGENCY RESPONSE PLAN
SWP document #:	FSSC-SSWP-016-v1.0
Date of this revision:	2025-09-17

This Safe Work Practice is approved and maintained by the Faculty of Science Safety Committee. Please contact Leanne Lucas, Safety Advisor–Science Activities, with any questions or concerns (leanne.lucas@smu.ca)

1. PURPOSE

- 1.1** This Safe Work Practice (SWP) provides guidance for emergencies including events such as chemical spills, chemical exposures, floods, or low oxygen alarms during regular working hours (8:30 am – 5 pm on non-holiday weekdays) in Science facilities at Saint Mary's University.

2. SCOPE

- 2.1** Education to provide awareness to Science faculty and staff about the procedures in this SWP is the responsibility of the Safety Advisor, Science Activities and the Dean of Science. The Supervisor will inform their staff of these procedures. Enforcement of this SWP is the responsibility of the Department Chair and Dean of Science.
- 2.2** This SWP will apply to anyone participating in teaching, research, or service activities in the Faculty of Science at Saint Mary's University.

3. SAFETY EQUIPMENT AND SUPPLIES

- 3.1** Spill kit
- 3.2** Personal protective equipment (PPE)
- 3.3** The SMU Safe App is available for download. It can be used to contact campus security and will give emergency notifications including building evacuations or campus closures. <https://news.smu.ca/news/2024/1/25/keeping-campus-safe-security-at-smu>
<https://www.smu.ca/alert/>
- 3.4** The SMU Emergency Response / Quick Reference Guide gives additional guidance on what to do in emergency situations on campus. <https://www.smu.ca/about/emergency-response-quick-reference-guide.html>

4. PROCEDURE

4.1 Emergency Situations

4.1.1 In any emergency situation on campus, including fires, suspicious odours, and medical emergencies, please contact the Security Office at the emergency number (902) 420-5000. Evacuate the area if there is risk of fire or health hazard. If you believe that emergency services will be required, phone 911 prior to contacting Security. This will ensure that the 911 call is made in a timely manner and that the correct details are given to the dispatcher. For medical emergencies, Security will respond with a first aid kit and AED, and will help direct paramedics to the correct location on campus.

4.1.2 If needed, seek appropriate medical attention.

4.1.3 Notify your supervisor about the incident as soon as possible.

4.1.4 Complete an incident report as outlined in **Section 4.6.1**.

4.2 Chemical Spills

4.2.1 Depending on the size and the hazards posed by the spilled chemicals, the following procedure should be followed. A brief assessment should be completed by the laboratory personnel to determine whether help is needed to clean up the spill and whether the area should be evacuated. If a spill occurs in a hallway or other common area, evacuate the area. Report the chemical spill to your Supervisor or one of the Technicians of your department (See **Section 4.2.6** for contact numbers). If it is a significant chemical spill, fire, or there are injuries, phone 911 to request help from emergency services (fire, ambulance) and then immediately report the incident to the Security Office at the emergency number (902) 420-5000.

4.2.2 If there is a fire, notify the fire department by phoning 911 and pull the fire alarm to evacuate the building. The Fire Warden System will manage the evacuation of the building. If there is a high risk of a health hazard, notify Security at the emergency number.

4.2.3 If the spill is small and does not require evacuation of more than one room, clean up the spill under supervision. Clean the spill using the appropriate spill kit, personal protective equipment, and procedures depending on the nature of the spill. Bulk Acid, Caustic (basic), and Solvent spill kits are available through the Department of Biology and the Department of Chemistry Technicians. Consult the safety data sheet (SDS), the Department Technician, or the Safety Advisor, Science Activities if there are doubts on what PPE to choose. Consult the SDS for the chemical for specific guidance on the properties of the spilled chemical.

4.2.4 In the case of serious spills, the Technician, while in communication with the Supervisor or Chairperson, will evaluate the spill. They may consult with the Safety Advisor, Science Activities and Dean of Science. If the spill is not able to be cleaned by qualified personnel on site, or if there is any doubt as to the nature of the spill, please contact the emergency number listed below in **Section 4.2.5**.

4.2.5 External Emergency Spill Response Contact: RPR Environmental 905-521-4097 (24-hour emergency number).

4.2.6 SMU Daytime Emergency Response Contact Numbers are available at the link.
<https://www.smu.ca/webfiles/FSSC-SSWP-016-v1.0-DaytimeEmergencyContactNumbers.pdf>

4.3 Chemical Exposures

4.3.1 Exposure to chemicals can cause acute (immediate) or chronic (long-term) side effects. The hierarchy of controls is used to prevent chemical exposures. In the case of an exposure, please follow the steps below.

4.3.2 If the chemical exposure causes a serious injury or loss of consciousness, contact 911 immediately followed by Security at the emergency number (902) 420-5000. Security will provide first aid until emergency services arrive on site.

4.3.3 If the chemical exposure is not serious and first aid is required, please contact a person trained in First Aid. A list of select First Aiders on campus are available at the link:
<https://www.smu.ca/about/ohs-resources.html>

4.3.4 Review the SDS for the chemical to determine the appropriate first aid response. Seek medical attention if needed. Send a copy of the SDS with anyone transported by emergency services.

4.3.5 The health effects of chemical exposures depend on a number of factors, including:

4.3.5.1 Chemical properties, including toxicity

4.3.5.2 Dose and concentration of the chemical

4.3.5.3 Route, duration, and frequency of exposure

4.3.5.4 Individual susceptibility

4.3.5.5 Effects of chemical mixtures

4.3.6 Understanding how chemicals enter the body and cause damage, and how chemical hazards affect you will impact the outcome in case of chemical exposure. Practice good hygiene to prevent chemical exposures by washing your hands properly after removing gloves or working with chemicals, and before eating, drinking, or smoking. If there is any doubt about whether chemical exposure has occurred, please seek medical attention. Exposure to laboratory chemicals can occur by and cause the following symptoms:

4.3.6.1 Inhalation – eye, nose, or throat irritation, coughing, shortness of breath, headache, dizziness, confusion, or loss of consciousness. Move to fresh air and seek medical attention.

4.3.6.2 Ingestion – strange taste, upset stomach, vomiting, difficulty swallowing, generally feeling ill.

4.3.6.3 Injection – typically caused by injury from broken glass like a pipette, contaminated metal, or syringes. Cuts should be rinsed with water to clean the wound.

4.3.6.4 Skin or eye contact – can cause skin irritation or allergic reactions. Symptoms can include skin that appears dry, white, redness, swelling, rashes, blisters, itchy, chemical burns, cuts, or loss of fat. Eyes are delicate, and contact with corrosives may cause serious damage or blindness. Symptoms of eye exposure include itching or burning, blurred vision, discomfort, and blindness. Skin or eyes should be flushed immediately for a minimum of 15 minutes, or as outlined in the SDS.

4.3.7 Toxicity can be acute or chronic, and is dependent on the factors outlined in **Section 4.3.5**. The SDS should be consulted prior to use to determine toxic effects of a particular chemical, and the dose or concentration of that chemical which would cause deleterious effects.

4.4 Floods

4.4.1 Floods may be caused by water leaking on a single floor or from one floor of the building to another. This may be due to a burst pipe, damaged experimental setup, or from the use of an emergency shower.

4.4.2 Evacuate the area if there is any immediate risk to the health of anyone in the vicinity.

4.4.3 Assess whether the source of the water can be shut off and turn the water off if it is safe to do so (for example: water shutoff at a sink, water source to a piece of equipment, etc.). Observe whether any equipment or electronics are located near the water and which may be damaged, move the item(s) if this can be completed safely.

4.4.4 If any Saint Mary's staff, faculty, or student encounters a flood or water leak, notify the Security Office at the emergency number (902) 420-5000 and provide the following information:

4.4.4.1 Name and location of caller

4.4.4.2 Location of flooding and whether the source is known

4.4.4.3 Whether there seems to be any immediate risk to health from electric shock (water exiting light fixtures or outlets, etc.) or if the area is flooding chemical storage (especially water reactive chemicals, etc.), if this is known

4.4.5 Security may engage Facilities Management in searching for the leak, and shutting off any utilities that may cause harm (e.g. if water is leaking through electrical fixtures, etc.). Facilities management will work to remediate any flood damage.

4.4.6 The Saint Mary's staff, faculty, or student will notify the Safety Advisor, Science Activities or Dean of Science of the leak.

4.4.7 Safety Advisor, Science Activities or Dean of Science will notify the Supervisor and Department Chair of the leak. They will notify of items including:

4.4.7.1 Whether the lab has power

4.4.7.2 Whether there is damage to any equipment (if known)

4.4.7.3 Whether there was water ingress into chemical storage. They will confirm whether there are water reactive chemicals stored in the lab and confirm the storage location.

4.5 Low Oxygen Alarms

- 4.5.1 In the event of an alarm indicating low oxygen, all occupants of that room must leave and shut the door. A low oxygen alarm consists of a loud audible alarm with a blue flashing visual alarm.
- 4.5.2 Report the alarm to the Security Office at the emergency number (902) 420-5000. Security and Facilities Management should receive a remote notification of the alarm.
- 4.5.3 Security will respond. In consultation with Facilities Management, they will determine whether emergency services should be contacted. Do not re-enter the space until it is confirmed whether or not there is low oxygen.

4.6 Reporting

- 4.6.1 **For all incidents:** complete an incident report form. Submit completed forms to the Safety Advisor, Science Activities; the University OHS Consultant; the Supervisor; and the Department Chair. Forms can be found here: <https://www.smu.ca/faculty-of-science/science-reporting-hazards-incidents-injuries.html>
- 4.6.2 **For Chemical Spills:** spilled chemicals that are regulated under the Transportation of Dangerous Goods may have to be reported to Transport Canada in the following cases:
 - 4.6.2.1 The spill is of a specific quantity and class of chemical as noted in the table on p. 15 at this link: https://tc.canada.ca/sites/default/files/2022-03/guide_for_reporting_dangerous_goods_incidents_2021.pdf
 - 4.6.2.2 **AND** the spill occurs in an area that endangers the public or is not able to be contained (may enter a waterway, etc.). Please consult the Safety Advisor, Science Activities to report spills that meet these criteria to Transport Canada.

5. REFERENCES

- 5.1 SMU Safe App. SMU Security. <https://news.smu.ca/news/2024/1/25/keeping-campus-safe-security-at-smu>
<https://www.smu.ca/alert/>
- 5.2 SMU Emergency Response / Quick Reference Guide. SMU Security. <https://www.smu.ca/about/emergency-response-quick-reference-guide.html>
- 5.3 Reporting Hazards, Incidents and Injuries. SMU Faculty of Science. <https://www.smu.ca/faculty-of-science/science-reporting-hazards-incidents-injuries.html>
- 5.4 Transportation of Dangerous Goods (TDG) Guide for Reporting Dangerous Goods Incidents. Transport Canada. https://tc.canada.ca/sites/default/files/2022-03/guide_for_reporting_dangerous_goods_incidents_2021.pdf
- 5.5 First Aid/ CPR Attendants by Zone. SMU OHS. <https://www.smu.ca/about/ohs-resources.html>

6. REVISION HISTORY

Date	Version	Summary of changes
2025-09-17	v1.0	Replaces Daytime Emergency Response Plan, last updated March 5, 2009.