

Standard Operating Procedure

Clinical Analysis Suite-Access, Use and Safety Rules

PC-SOP-CA-001-v05

Revision History

Version	Reason for Revision	Date
05	Additional information added in the case of a state of emergency declared by the government	April/22/2020

I. Overview

This standard operating procedure (SOP) provides a summary of guidelines for access and use of the Clinical Analysis Suite, the training requirement to work in the laboratories and the general safety rules in order to work efficiently and safely. As laboratories contain inherent dangers and hazards, a constant effort is needed to think about potential hazards and how to work safely.

2. Responsibilities

- 2.1 Clinical analysis supervisor will specify trainings required by Environmental Health and Safety (EHS) that are mandatory according to specific activities in the clinical analysis suite. Certificates are to be sent to the Principal Investigator (PI) and clinical analysis supervisor.
- 2.2 Users must report all potential hazards, safety issues and deviation from normal operations without delay to the clinical analysis supervisor.

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- 2.3 Identifying evacuation routes from the laboratories (see PC-SOP-GA-009).
In the event of any emergency please **dial 3717** or 514-848-3717 or activate the yellow emergency call wall box to contact security.
- 2.4 Report all incidents to the clinical analysis supervisor (ext. 8710) or EHS (ext. 4877). For injury/near-miss reporting please go to the EHS site: <http://www.concordia.ca/campus-life/safety/injury.html>

3. General laboratory safety rules

- 3.1 Wash hands before and upon completion of laboratory procedures and remove all personal protective equipment including gloves and laboratory coats inside the laboratories.
- 3.2 Use and wear personal protective equipment (buttoned closed lab coats, gloves, safety goggles), as well as use safe practices such as wearing long pants, closed toe shoes, etc. according to the instructions provided by the clinical analysis supervisor and EHS. Personal belongings (jacket, jewelry, wallet, winter boots etc.) shall be kept in designated places at all times (lockers etc.);
- 3.3 The laboratory area shall be cleaned as soon as possible after usage. Everyone who works in a laboratory is responsible for ensuring that chemicals and their associated hazards can be identified throughout their lifetime to avoid unidentified hazards.
- 3.4 The disposal of hazardous materials shall be done according to the Concordia University Policy VPS-47 “Policy for the management of hazardous materials”, Biosafety Manual, as well as VPS 40, 41, 52.
- 3.5 Human blood, body fluids and tissues are known to transmit hepatitis B virus. A proof of vaccination must be sent to the clinical analysis supervisor and EHS. To obtain a waiver, an exemption request must be filled out and sent to EHS and the clinical analysis supervisor/PI.
- 3.6 Last authorized laboratory worker to leave the laboratory at the end of the office hours must make sure that the equipment, gas, water, heating apparatus they were using is switched off.

4. State of emergency declared by government

In the event of an emergency declared by a public official, defer to public health, governmental declaration and university communications and official recommendations. Laboratory users

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must review their operations according to their specific activities and hazards. Ensure that any hazardous materials/equipment are secured in the event of a planned or unplanned temporary laboratory closure.

4.1 First phase: In-person activities and access with attention to a pending state of emergency

- Practice physical distancing if recommended, by keeping a minimum of 2 meters from others
- Wash hands frequently with soap for at least 20 seconds
- Additional frequency of cleaning and sanitation protocols to high-touch surfaces
- Ensure communication to students and staff of the above 3 steps
- Ensure communication with users, students and staff prior to activities to screen for recent travel, contact and symptoms, advise as per public health and government recommendations

4.2 Second phase: Suspension of in-person activities and access**4.2.1 Experiment**

- Cease all unattended experiments/processes and all experiments that need monitoring, are temperature or humidity sensitive, or could be affected by loss of electricity, water or other services
- Back up all data on the share drive to work from home by Virtual Private Network (VPN) using the universities' guidelines. Use technology and forms for communication and meetings that respect confidentiality of information using guidelines from governmental bodies, such as the [Ministère de la Santé et des Services sociaux \(MSSS\)](#).
- Ensure to communicate the suspension of the activity in the laboratory and to reassure that contact and activities will resume when it is considered safe to do so.

4.2.2 Equipment

- Close sashes on chemical fume hoods and biological safety cabinets
- Empty incubators from any biological materials left inside and turn them off. Also turn off carbonic gas tanks.
- Turn off all devices, except flow cytometer and the mass spectrometer, which may be left in a standby mode. If the suspension of activity is expected to be of a long duration, these 2 instruments might need to be shutdown. In standby mode, the gas ballast from the oil pump of the mass spectrometer need to be open every 2 weeks to prevent any oil getting backflushed in the system.
- If possible, elevate equipment, supplies and electrical wires off the floor to protect against potential flooding.

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- Coordinate with EHS to top up liquid nitrogen into all cryo storage systems, especially during an indefinite closure. (165L closed tanks will last roughly 5 months if filled completely with evaporation rate of 1L/day).

4.2.3 Materials

- Deliveries: Make sure to contact manufacturer/supplier and inform them about the closure for any items that were supposed to be shipped.
- Properly label, close and place all hazardous (biological and chemical) materials in appropriate storage areas away from incompatible hazards (as per usual practice)
- Properly store all air/water reactive chemicals
- Secure all sensitive material in appropriate storage units
- Decontaminate/disinfect all potentially contaminated surfaces
- Dispose of biological and chemical material properly and plan a waste pick-up with EHS
- Review proper storage of biological and other perishable items. Place valuable research items in temperature-controlled storage units that have backup systems.

4.3 Third phase: Access resumes with physical distancing

- In-person activities defer to public health and governmental recommendations and university policies at all times, respect physical distancing plan, take precautions with regards to personal protective equipment, symptom screening, testing and reporting guidelines.
- If you discover a condition in the laboratory that poses a threat to you or to others, notify occupants in the area, exit the lab and communicate as soon as possible to the clinical analysis supervisor/PI and EHS.
- If you find equipment that may have been affected please communicate with the clinical analysis supervisor.
- Orders for critical supplies such as gloves, masks, protective equipment, hand sanitizers, may be delayed. Make sure you have everything in place to work safely. Before shipping, check for service alerts and the ability of the recipient institution to receive shipment.
- Maintain frequent communication with users and identify projects that should not be started. Labs with a large group of students should coordinate with members on experiment planning to make sure there is no crowding in the working area.
- Ensure to have adequate supply for cryogenic liquid needs to maintain samples (ex. cell lines) and carbonic gas to start incubators.