

Re-opening NMR Facilities as Covid19 restrictions are lifted

Quebec NMR Manager's Meeting, May 8, 2020

Very general questions: Will institutions be providing workers with mandatory training to complete regarding Covid19? Such as an online video/course that must be completed before they are granted access to campus. Who pays for the additional cleaning solutions, PPE, etc.?

Minimizing the number of different people accessing lab space and instruments, both cumulatively and concurrently is the goal of all NMR labs. Depending on the number of instruments, placement of the instruments, and level of use of the instruments, different procedures will be put in place.

All facilities promote frequent hand washing/sanitizing as well as cleaning of keyboards and mice, samples and spinners. Covering keyboards and mice with saran wrap to be removed at the end of each person's use is seen to be the simplest method of keeping them clean. Managers plan to do thorough cleaning of workspaces- desktops, door knobs, chairs, railings etc. as well as keyboard and mice at a minimum of two times a day, possibly more depending on level of use and their availability. Putting gloves on clean hands before beginning to work is preferred, although when supplies are limited, if there is hand cleaning upon entering a room, and disposable keyboard/mouse covers, this may be sufficient. While many feel that masks are advisable, requiring the use of masks may not always be possible, and official recommendations vary, especially in situations where social distancing can be practiced. Availability is an issue, and social distancing will be enforced.

Managers will ensure that all users of facilities are instructed in the new protocols, and should be allowed to ban any user that does not adhere to the rules. Hopefully common sense and courtesy will prevail in cases where travel corridors between instruments and in and out of lab doors do not allow 2 m distancing.

Posting government issued general warning signs about Covid19 symptoms, what to do if you have them, and general hygiene protocols at the entrance to labs seen as a good idea to reinforce the messages. Maps indicating traffic flow particular to the space, and specific lab rules should also be posted at the door.

In some institutes researchers currently involved in covid19 projects have (unrestricted) access to shared instrumentation. As other work ramps up, they will likely have to follow the same rules regarding instrument use as other workers. In general, the number of analyses will likely take quite some time to return to "normal" levels, as it can be expected that there will be a percentage of regular users that do not come back to work due to health concerns, family situations, or personal choice.

In order to help with social distancing, most facilities plan to change current booking rules to have larger blocks of time: this will ensure that multiple samples can be run at one time, vs. multiple trips to the instrument, as well as helping to keep traffic low and minimizing the number of people together in one space. Staggered start times for instruments located in the same room are favoured.

Access types

Manager only:

Having all samples run by facility staff is considered the ideal situation. Depending on the available staff hours and need for analyses this could be the initial stage in many locations, with a gradual introduction of other users as becomes necessary. A secure sample drop-off location, and ability of users to maintain social distancing when dropping off samples is needed. Concerns about cleaning, use and availability of PPE could be less, depending on how many staff work in each area.

One person per research group:

Another method of limiting the number of different people going through the lab space is proposing that one or two people from each research lab be responsible for running samples for the whole group. This would be most effective for instruments with sample changers, where the responsible person just has to insert samples and in the best case the sample owner can access the Bruker Web interface to select what they want to run. Depending on the number of samples a group generates, and whether or not a sample changer can be used, this might place an undue workload on the designated NMR data collector(s).

Multiple users, Strict social distancing:

As more people come back to work, and/or when facility staff have limited or no availability, the use of instrumentation with strict social distancing measures will be implemented, and users may be responsible for cleaning protocols when they are finished their time.

Some facilities have locations where there is one instrument per room. In this case users will be allowed to enter the room one at a time. Whenever there are two doors available one will be used as an entrance, and a second as an exit.

In rooms with multiple instruments, managers plan to tape off work areas, waiting areas, and indicated direction of travel where ever possible. When instruments are closely spaced, some may be off-limits. Booking times will be adjusted so that only instruments that are at an appropriate distance apart, without bottlenecks to reaching them, can be used concurrently. Staggered start times, longer bookings, and blocked off times are all anticipated as way to ensure that the number of people in each room does not exceed safe capacity.