Laboratory Ramp-Up Checklist

Use this checklist as a guide for resuming operations in your lab after the extended disruption to operations. Shared office spaces need to be part of the consideration for restarting personnel. This checklist may not address every consideration for your lab. Please contact your Department Safety Representative or askEHS@cornell.edu with questions about how to safely resume research operations in your laboratory.

For the immediate future, social distancing remains paramount and labs need to re-think traditional work schedules. Calendar systems, alternating shift schedules should be used as part of the strategy to maintain physical distance between personnel. In some instances, this will decrease the number of persons who can be in a lab at a given time. Guidance on disinfection for labs can be found in the document on Disinfectant Selection within Biosafety's program pages.

Please keep in mind that this phased resumption of operations could change or even be halted as conditions change. Plan accordingly.

Preparation

Item	Complete or N/A	Notes
All personnel complete return-to-work training, EHS 2019 on CULearn.	✓	
The Plan Review Process and approval is complete as in the Research Reactivation Committee Report.	✓	
All personnel must have access to community-protective face coverings and have spares available. Masks made of flammable material like rayon should not be used in a laboratory setting and must not be used around sources of heat or open flame.	✓	
Identify all critical activities that must be brought back online to support research in the lab in 3 months.	N/A	
Identify primary and backup personnel able to safely perform essential activities to permit 'staggered start'.	N/A	
Identify methods that may help personnel maintain social distancing requirements. This includes spatial and temporal measures.	✓	Single individual working at the lab throughout
Develop visual guidance for the workflow in the lab. Tape off every other workspace in the lab, tape traffic flow on the floor. See appendix for example.	N/A	Single workspace with social distancing

Item	Complete or N/A	Notes
Consider the use of plexiglass shields between workspaces where social distancing is not possible.	N/A	Social distancing possible
Order / restock laboratory disinfection products. Expect delays in shipping and availability. Disinfectants should be chosen from List N of Selected EPA-Registered Disinfectants Lists. Guidance on disinfectants is located with the Biosafety & Biosecurity program pages.		
PPE must not be shared without being disinfected. Order / restock laboratory disposable gloves and other PPE, and lab supplies. Expect delays in shipping and availability.	N/A	

Communications

Item	Complete or N/A	Notes
Revisit contact list of lab personnel, principal investigator, lab administrative director, research operations manager, and building manager.	✓	
Ensure the contact list is saved where it can be remotely accessed by everyone in the lab. Include home and cell phone numbers.	✓	
Test your phone tree or email group to facilitate emergency communication amongst lab researchers and staff.	N/A	
Ensure that HASP is up to date with hazards and emergency contacts listed and posted on outside of lab doors. Request access to update HASP at askEHS@cornell.edu.	N/A	

Research Materials

Item	Complete or N/A	Notes
Survey the laboratory for unsafe conditions	✓	
Check incubators, freezers, refrigerators for failures that may have occurred during shutdown	N/A	
Mitigate any chemical leaks, spills, or releases	N/A	
Mitigate any biological leaks, spills, or releases	N/A	

Item	Complete or N/A	Notes
Check inventory and condition of peroxide forming chemicals. Perform testing.		
Check security of radiological material inventory.		
Check inventory of controlled substances. Report missing materials to EHS and CUPD.		
Check inventory of hypodermic syringes and needles. Report missing materials to EHS.		
Check inventory of exempt quantities of Select Toxins. Report missing materials to EHS Biosafety.		
Consult with CARE about current animal care recommendations. CARE may be emailed.		
Ensure all flammables are stored in flammable storage cabinets.		
Secure, correctly label, and/or request a pickup for Hazardous Wastes. (If safe, please reduce the frequency of waste pick up requests.)		

Equipment

Item	Complete or N/A	Notes
Prepare equipment if routine upkeep is required		
Flush eyewashes for 5 minutes upon return and flush and document weekly.		
Check refrigerator, freezer, and incubator doors for leaks.		
Check portable survey meters used for RAM monitoring to ensure meter calibration is current. Notify askEHS@cornell.edu if due for recalibration.		
Check biosafety cabinet certification is current. If the cabinet has lapsed, post information on the sash that the cabinet is not to be used. Contact B&V Testing (through e-Shop) to schedule any lapsed certifications. Do not use lapsed BSCs.		
Check that the chemical fume hoods are operating correctly.		

Decontamination

With the return to work many laboratories will need to be more vigilant than previously about the decontamination of work surfaces. All labs are advised to provide disinfectant and use regularly throughout the day to decontaminate 'high-touch surfaces' (doorknobs, handles, etc.), equipment, computer keyboards, and personal lab benches.

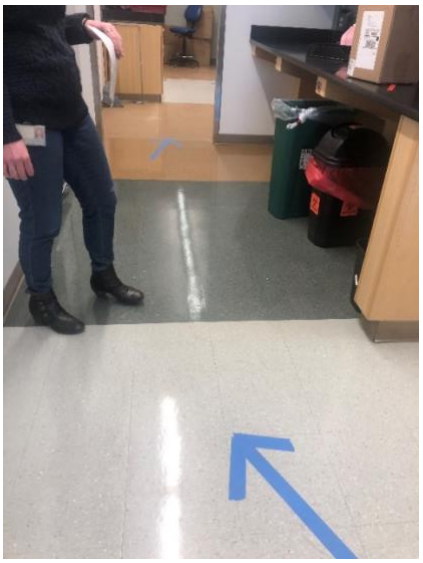
Item	Complete or N/A	Notes
Decontaminate/sanitize areas of the lab as you would do routinely at the end of the day.		
Purchase washable keyboard covers or washable keyboards.		
Decontaminate/sanitize and clean any reusable materials.		
Groups permitted to work with radioactive materials must notify EHS when returning to the lab, and document a contamination survey.		

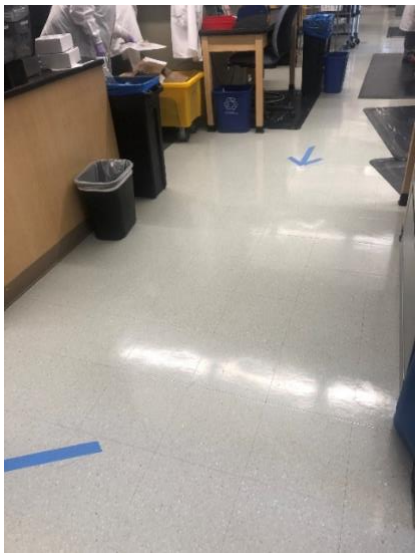
Example: AHDC Receiving Laboratory

Preventative Practices in the Receiving Laboratory through Social Distancing, Communication, and Directional Workflow

There are defined ingress and egress areas that are identified with signs. Arrows are taped onto the floor of the lab space to help users understand workflow and directionality of movement through the room. To enter the receiving laboratory, there are signs placed onto the outside hallway floor and entrance door. There is a line of tape placed across the threshold of the main entrance door, demonstrating where an individual should stop before entering the laboratory. Approximately eight feet in past the line in the laboratory, is a taped out square on the floor designated for visitors to wait until being helped by a member of the lab. An adjacent workbench is used for visitors to drop off or pick up materials.

Arrows move through the center of the lab and lead individuals to the exit door (individuals do not exit out the ingress area).





Workspaces in the laboratory are defined by square taped areas (blue in pictures below) on the benchtop. A single person will work at 1 designated space throughout the day. To increase social distancing, the areas next to the newly defined workspaces have a red "X". Red "X"s are also placed onto bench spaces that are located in heavy traffic areas to prevent individuals from standing for

extended periods of time in that space. Workspaces are cleaned with PreEmpt throughout the day and the area is fully disinfected at the end of the day.

Communication is important for all staff members. All personnel in the lab are required to wear masks and stand 6 ft away from one another. With that said, when people are moving about the lab, if individuals are not facing each other, they can briefly pass by closer than 6 ft to prevent interrupting workflow. When individuals pass near one another, they inform everyone around them (like that of cooks in a kitchen), making comments like “behind” or “please back up?”.

To maximize continuity of operations, staff is split into two teams that come in on alternating weeks. If a staff member becomes ill, the expectation is all staff from their team may need to be quarantined. By having 2 teams, this ensures that work will continue in the laboratory.

Other Lab Spaces (Bacteriology, Virology, Parasitology etc.)

A less elaborate plan is set up in the sample processing laboratories. The inputting of samples into the computer by these lab workers are being done in their respective laboratories (previously they did some inputting in the receiving lab).

Staff throughout the AHDC is split into two teams that come in on alternating weeks, and workspaces are thoroughly cleaned at the end of each shift. In smaller laboratory spaces, no more than 2 people are working in those areas.

Additional Photos: