



# Health and Safety Guidance for Essential Lab Work Approved by University Authorities During the COVID-19 Pandemic

Thank you for the rapid [ramp down](#) of research activities. **With the rare exception of [essential research activities](#) that have been approved by University authorities, researchers must continue to stay away from their campus workspaces.**

This document provides guidance for **approved essential research activities** to mitigate community spread while still protecting researchers from routine laboratory hazards. Researchers should periodically review the [main University Coronavirus website](#), [FAQs](#), and the [Research Continuity website](#) for updated information on how to protect themselves and others when coming to campus to perform essential laboratory work.

## Mitigating Community Spread During Approved Essential Research

The virus which causes COVID-19 is transmitted via respiratory droplets. Exposure can occur by direct inhalation of aerosolized droplets or by touching a surface that the virus has been introduced to and then touching your mouth, eyes, or nose. People may be infectious without showing symptoms.

**Stay home if you are ill.** If you become ill at work, avoid others, contact your supervisor, and go home. If you [develop symptoms of COVID-19](#), immediately consult with your healthcare provider by telephone.

**Distance:** Keep at least 6 feet (2 meters) of separation between researchers. Work at separate benches, or every other bench. Place markers on the floor to maintain separation between workstations. Avoid performing non-lab activities like paperwork in the lab if it will help increase distance between personnel. Post signs limiting the number of people allowed in a specific area. If possible, please limit elevator use to those who cannot use the stairs. If you require the use of an elevator, limit one person per elevator ride.

**Time:** Minimize contact time between researchers, staggering schedules for staff and use of shared equipment, offices, kitchens, or restrooms.



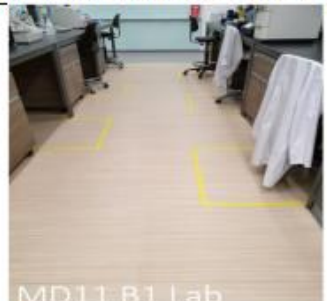





**Contamination reduction:** Assign specific work areas or processes to individual researchers when possible. *Disinfect shared areas and equipment*, especially “high-touch” locations like doorknobs, faucet handles at sinks, keyboards, before and after use. Whenever possible, reusable personal protective equipment (PPE) should only be used by a single individual. When work areas, equipment, or PPE must be shared, sanitize with a [disinfectant approved for SARS-CoV-2](#) between uses and as personnel leave the lab. For high-touch surfaces in the lab that are difficult to decontaminate (e.g. microscope eyepieces, touch-screen control panels), keep a supply of plastic wrap nearby to cover the surface work beginning work, and remove it when done.

**Cloth face coverings:** The CDC recommends wearing a cloth face covering in public settings where other social distancing measures are difficult to maintain, as it can slow the spread of the virus from those who may be infected but not know it. Surgical masks and N95 respirators remain critical medical supplies and must be reserved for medical providers. The CDC has [instructions for making cloth face coverings](#) at home.



**Good hand hygiene:** Wash your hands upon arriving in the lab and before leaving. Wear gloves while in the lab and replace disposable gloves or disinfect reusable gloves frequently. Avoid touching your eyes, nose, and mouth. Wash your hands again when you arrive home.

Figure 1: Examples from National University of Singapore

Workstation labels and Floor Markings	
 <p>Labels for out-of-bound bench area and chair</p>	 <p>Floor labels where users should work</p>
 <p>Floor labels for chairs / standing work</p>	 <p>Floor labels for waiting when another user is at the shelf</p>
 <p>Floor label indicating that others should not enter if someone is inside</p>	 <p>Floor labels to indicate separate work areas</p>
 <p>Floor label to indicate working positions</p>	 <p>Floor labels to indicate waiting area</p>



## Concerns About Working Alone in the Lab

While implementing social distancing, it is important to remember there can also be serious concerns about working alone in the lab. This is especially relevant while our buildings are largely vacant, since a person who is injured or in trouble may not be able to find help nearby. This section offers some suggestions to resolve the apparent conflict between the current acute need for social distancing with guidance from OSHA and Cornell's Lab Safety Manual to avoid working alone in the lab.

**It is up to each lab group to determine how best to manage both lab safety and COVID-19 exposure risks. Faculty and lab managers can contact their college safety representative or [askEHS@cornell.edu](mailto:askEHS@cornell.edu) for assistance.**

RISK LEVEL	EXAMPLE ACTIVITIES
<b>LOW RISK</b>	Lab walkthroughs
<b>ACTIVITIES</b>	Computer system checks / reboots
<b>MEDIUM RISK</b>	Working with compressed gas cylinders or cryogenics
<b>ACTIVITIES</b>	Working with some biohazards Benchtop work with less hazardous materials
<b>HIGH RISK</b>	Working at a chemical fume hood with hazardous substances such as acids, bases, toxic materials, acute biological toxins.
<b>ACTIVITIES</b>	Working with high pressure, high voltage or stored energy systems. Working with machine tools such as lathes, end mills, drill presses.

### Start / Stop Check-ins (Low Risk Activities)

For low-risk activities of short duration (10-15 minutes), one option may be to check in with another lab member before and after the activity, using social media, text, video chat, etc. If the partner does not hear back from the individual at the appropriate time and they are unreachable, the partner can contact CU Police (607-255-1111) to request a check on the lab.

### RAVE Guardian Safety Timer (Low to Med Risk Activities)

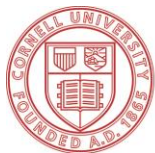
The RAVE Guardian App ([Apple Store](#) or [Google Play](#)) [provides a safety timer function](#) that can help someone monitor a person working remotely. This function works best for shorter tasks (under 30 minutes) that have a well-defined duration.

### Virtual Lab Partner (Med to High Risk Activities)

For higher-risk activities and activities with variable duration, a virtual lab partner using video chat may be a good option. The device should be plugged in, and the camera should capture the entire work area so if an emergency occurs, the virtual lab partner will see it and notify CU Police. Don't handle the video-chat device while wearing PPE and remember to disinfect devices regularly (e.g. [Apple](#), [Motorola](#), [HTC](#)).

### Physical Lab Partner (High Risk Activities)

Some lab activities might be risky enough to require another person to be present in the lab. Follow the above guidance for mitigating community spread, maintaining adequate distance between personnel.



## Laboratory Security

Given the low occupancy of our facilities, it is also very important to ensure that all labs are secured when you leave. If you have problems with securing your lab, please contact your Facility Coordinator or local management for assistance.

## Laboratory Support Services

EHS continues to provide waste pick-up services on campus on an as-needed basis. Labs may continue to [submit their pick up requests online](#). Please submit any specific waste questions through [askEHS@cornell.edu](mailto:askEHS@cornell.edu).

## Requesting Emergency Response and Assistance

CU Police and EHS Emergency Services maintain staffing on campus and can respond to lab emergencies. Cornell Emergency Services can be reached using any campus emergency phone, by dialing 607-255-1111 from personal device, or dialing 911 from a campus phone.

All fires must be reported to Cornell Emergency Services (above), even if they have been extinguished.

Incidents or injuries [must be reported within 24 hours of occurrence](#).