Guidelines for COVID-19 prevention while working in the laboratory

As State definitions of Essential Work evolve, many labs may consider how to operate at a baseline level in readiness for an eventual return to full activity. Below are safety guidelines that will allow PIs and others to maximize the safety of researchers who come to work and continue to reduce spread of illness throughout our community.

No research personnel may be required or pressured to come to campus, to their usual work location, or into the field, unless they are designated critical personnel and they are ALSO required to maintain critical operations. Graduate students whose lab work falls into a critical research category can only be designated critical personnel with their consent. Undergraduate students taking a 499 lab course may, at their discretion and the discretion of the PI, complete their work if the lab engages in critical research, but only if appropriate supervision allows incorporation of the guidelines in this document. Any questions or disputes involving trainees in the lab should be brought to the attention of your department chair. If critical employees are in a high-risk category or are concerned about safety, supervisors are asked to do their best to accommodate their employees without impacting critical operations. If accommodations are not possible, please notify your department chair for problem solving and support.

All conduct of allowable research must minimize the number of researchers in the laboratory or other facilities at any one time. The concept of a “skeleton crew” should be in place, but it could be a rotating crew. In that case, scheduling is critical. Note that this is a guideline only. We cannot envision every circumstance. Always exhibit your best judgement, and if you have any doubts please consult with your department chair or designated laboratory safety officer.

Guidelines for laboratory personnel safety

1. **Stop, think, attest** – perform daily attestations of wellness.
2. **Never come to work at a laboratory or research facility if you are experiencing any symptoms of infection.** In particular, no one should come to work if they are beginning to experience any of the following symptoms:
   a. Fever
   b. Cough
   c. Shortness of breath or difficulty breathing
   d. Respiratory symptoms
3. **If you come to work and start showing any possible symptoms of illness, you must leave the lab and inform your PI or supervisor and healthcare provider. If your health care provider suspects or confirms you have COVID-19, contact the EH&S Employee Health Center at 206-685-1026 or emphlth@uw.edu.**
4. **If you have had close contact with anyone who is COVID-19 positive (e.g., household member), stay home for 14 days to monitor symptoms per public health guidance.**
5. Develop a personal transportation plan that minimizes proximity to other people. Consider cycling, walking, or driving instead of public transit.
6. Consider footwear as a possible transmission medium. You should have a pair of shoes that you use for external use including working in a laboratory/facility that you do not wear into your place of residence. Clothing worn in the workplace should be immediately removed upon return to your residence.
7. Be present in the lab only as long as necessary for your experiment. Minimize time around other people.

8. Assume everyone you see is infected, including yourself, and use appropriate precautions, including not touching your face and washing your hands often. Some transmission occurs from people with no symptoms.

**Guidelines for operating a safe laboratory**

1. Create a lab schedule and adhere to it. This schedule should minimize the number of people in each laboratory room at any one time. A shared google calendar or other online tool may be helpful.
   - Distribute a list of duties to be performed by critical personnel, with location and designated time of day for such duties indicated.
   - Use a sign-in sheet, clip board, online calendar or other means of signifying who is present in lab space at any given time or other mechanism of controlling the number of people in the lab at the same time. Disinfect shared materials as described below.
   - Stagger break times to minimize contact between people in rooms used for eating or drinking.
     - Be sure to disinfect surfaces such as tables and chairs before and after using such facilities. See EH&S guidelines.
     - Cups, mugs, plates, and silverware must be washed with soap before and after use.
     - Wash your hands before and after using a break room.

2. Create safe spaces to maintain at least 6 feet between researchers at all times
   - Post lab map with maximum room/bay occupancy to maintain social distancing inside lab entryway (May be based on existing fire maps. See attached example.)
   - Small, narrow laboratories/facilities on the order of 100-150 sf can likely only accommodate one person at a time.
   - Square or rectangle laboratories larger than 200 sf can possibly accommodate more but keep the number to a minimum. Use common sense. If you cannot maintain at least 6 feet of social distance, revise the schedule and/or reconfigure the room.
   - Move equipment to create at least 6 feet between users.

[Paste lab map indicating maximum occupancy of each space here.]
3. Create a plan for safe practices in the lab.
   - Keeping a distance (at least 6 feet) from other people is our best protection against COVID-19; however, wearing a mask can add another layer of protection. Masks can help protect others by containing respiratory droplets when the mask wearer coughs, sneezes or speaks. Surgical masks or N-95 respirators are critical supplies that must continue to be reserved for healthcare workers and other medical first responders. Face coverings must not interfere with PPE, e.g. eye shields, required for safety and must be compatible with all safety requirements.
   - Hand hygiene before and after using ANY face covering is critical.
   - Researchers will wash their hands with soap upon entering and before leaving the lab and touching shared accessory devices like phones (use speaker phone if possible).
   - Each researcher will have their own set of any tools that are used very frequently, including pipets, frequently used reagent bottles, laboratory notebooks, and pens.
   - Gloves, cloths, or disposable towels will be used when handling common reagent bottles, laboratory equipment, and cabinet handles.
   - Door handles will be wiped or sprayed with 70% ethanol (or other approved disinfectant) after use. See EH&S guidelines.

4. Create a plan for shared equipment. All shared equipment must be disinfected before and after each use.
   - Wear disposable gloves, when available, while cleaning and disinfecting. Discard gloves after each use. Clean hands immediately after gloves are removed.
   - Wear eye protection when there is a potential for splash or splatter to the face.
   - Gowns or aprons are recommended to protect personal clothing.
   - Follow EH&S guidelines (and see below) for hard, non-porous surfaces and porous surfaces, as appropriate.
   - Special care should be taken to disinfect equipment that makes direct physical contact with skin, including eyepieces for microscopes, touch pads, etc.
   - Use disposable tissues, Kimwipe, etc. to touch surfaces that cannot be disinfected and when gloves are not available.

5. Create a plan for interactions with others outside the lab
   - Contact with other labs should be made via phone or electronic means except in cases of extreme emergency.
   - Transfer of items should be arranged by leaving them in the hallway or other designated area rather than handing them over in person.
   - Use of shared facilities and other labs’ equipment should be pre-arranged in order to avoid accidental contact. Be sure that all users know lab sign-in procedures.
   - Use precautions when entering a restroom or other shared use facility. Call out to assess occupancy. Use a disposable towel or Kimwipe to touch door handles and faucets and wash your hands upon entering and leaving.

6. Create a plan for a possible or confirmed case of COVID19 among personnel in a lab.
   - Notify EH&S Employee Health Center immediately at emphlth@uw.edu or 206-685-1026.
EH&S will evaluate the specific locations where the person spent time on campus for enhanced cleaning and disinfection.

If everyone working in a laboratory or research facility uses such precautions, we will minimize risk of COVID-19 and maximize prevention and safety. Speak up to your supervisor or Department chair if you observe someone not following such precautions; we are all responsible for stopping the spread of the virus.

Example of lab map, indicating maximum occupancy of each area.
ENHANCED CLEANING FOR PREVENTION General guidance:

1. Increase the frequency of cleaning and disinfecting, focusing on high-touch surfaces, such as residence hall communal rooms, public restrooms, exercise rooms, library tables, buttons, handrails, tables, faucets, doorknobs, shared toys, and shared keyboards. Increased frequency of cleaning and disinfecting with attention to these areas helps remove bacteria and viruses, including the novel coronavirus.

2. Practice good hand hygiene after cleaning (and always!):
   i. Wash hands often with soap and warm water for at least 20 seconds.
   ii. If soap and warm water are not readily available, use an alcohol-based hand sanitizer that contains at least 60% alcohol.

Safety guidelines during cleaning and disinfection:

1. Wear disposable gloves, when available, while cleaning and disinfecting. Gloves should be discarded disinfected after each use. Clean hands immediately after gloves are removed.
2. Wear eye protection when there is a potential for splash or splatter to the face.
3. Gowns or aprons are recommended to protect personal clothing.
4. Store chemicals in labeled, closed containers. Store them in a manner that prevents tipping or spilling.

Cleaning and disinfection of surfaces:

1. Clean surfaces and objects that are visibly soiled first. If surfaces are dirty to sight or touch, they should be cleaned using a detergent or soap and water prior to disinfection.
2. Clean and disinfect affected surfaces as soon as possible after a known exposure to a person with respiratory symptoms (such as coughing/sneezing).
3. Use an EPA-registered disinfectant for use against COVID-19. Refer to the list of products pre-approved for use against emerging enveloped viral pathogens, or the list of disinfectants for use against SARS-CoV-2. Readily available products include 70% ethanol, 10% bleach, and NPD. Allow at least 2 minutes of contact time before wiping.
4. Follow the manufacturer’s instructions for safe and effective use of all cleaning and disinfection products (e.g., dilution concentration, application method and contact time, required ventilation, and use of personal protective equipment). Review the COVID-19 Chemical Disinfectant Safety Information guide to potential health hazards and the recommended protective measures for common active disinfectant agents used at the UW.
5. Consult manufacturer recommendations on cleaning products appropriate for electronics. If no guidance is available, consider the use of alcohol-based wipes or spray containing at least 70% alcohol. Use of alcohol-based products may reduce risk of damage to sensitive machine components. Whenever possible, consider using wipeable covers for electronics.

If a COVID-19 case is confirmed in the UW community, University units are required to follow the guidance Enhanced Cleaning and Disinfection after Notification of a Confirmed Case of COVID-19 outlined in this document and on the UW COVID-19 website.