

Holmberg Laboratory Guidelines for In-Person Research to Prevent COVID-19 Infection

This guideline is developed to prevent COVID-19 infection and maximize the safety of in-person research during the COVID-19 pandemic. Speak up if you observe someone not following these guidelines. We are all responsible for stopping the spread of the SARS-CoV-2 virus.

General Guidelines for Laboratory Personnel Safety

1. Never come to campus or a UW facility if you are experiencing any of the following symptoms of COVID-19 infection:

(<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>)

- Fever (100.4 F or higher) or a sense of having a fever.
- Cough that you would not attribute to another health condition.
- Shortness of breath that you would not attribute to another health condition.
- Sore throat that you would not attribute to another health condition.
- Muscle aches that you would not attribute to another health condition or that may have been caused by a specific activity, such as physical exercise.
- Respiratory symptoms, such as sore throat, runny nose/nasal congestion or sneezing, that you would not attribute to another health condition (like seasonal allergies).
- Chills or repeated shaking with chills that you would not attribute to another health condition.
- Loss of taste or smell that you would not attribute to another health condition.

If you have any of these symptoms, stay home and contact your healthcare provider.

2. If you have been in proximity to someone with COVID-19, then stay home and follow the instructions of your healthcare provider.

3. If you have tested positive for COVID-19, then immediately notify the EH&S Employee Health Center at emphlth@uw.edu or 206-685-1026. Note that:

- a. The identity of individuals who have or may have COVID-19 is handled as protected information.
- b. EH&S will provide guidance on communicating to staff (as appropriate).
- c. EH&S will notify individuals who had close contact with the ill person up to 48 hours prior to the development of symptoms.
- d. EH&S will provide close contacts with public health recommendations that may include staying home and monitoring their health for 14 days.
- e. EH&S will evaluate the locations where the person spent time on campus for enhanced cleaning and disinfection.

4. Develop a personal transportation plan that minimizes proximity to other people. Consider cycling, walking or driving instead of public transportation. **Wear a face mask or cloth face covering if during transit you may come within 6 feet of another person.**

5. Be present in the lab **only as long as necessary for conducting experimental work. Analyze data remotely and minimize time on campus.**

6. Assume that everyone (including yourself) might be an asymptomatic carrier. Use appropriate precautions as **transmission may still occur with people displaying no symptoms**. This includes frequent hand washing and using a mask that covers the nose and mouth when in an enclosed space.

**Specific Guidelines for Working in the Holmberg Lab
(Benson B3B/C/D/E/F, and the Unit Ops Lab - Benson 35)**

1. Lab personnel with upcoming deadlines may request to be approved for in-person research. Check your eligibility and request to perform in-person work. **Only research staff that have been approved** by Vince Holmberg **and** approved by Chemical Engineering chair Jim Pfaendtner, may conduct in-person research.
2. **Before returning to the workplace, all lab members coming to campus are required to complete the EH&S COVID-19 training.** You can access the training here:
<https://www.ehs.washington.edu/training/covid-19-safety-training-back-workplace>
 - a. **After completion of the training, please upload your training certificate to this folder:**<https://drive.google.com/drive/folders/1hoB-sPufYq9O9gOQMDd2NOcqbYHpHDmC?usp=sharing>
3. **The COVID-19 Site Supervisor is Brittany Bishop.** She is responsible for developing site-specific COVID-19 Prevention Plans, providing training on the unit and/or site-specific plans, updating the unit and/or site-specific plans, monitoring compliance and answering questions, and reporting implementation and safety concerns. **All lab members must also confirm their completed EH&S COVID-19 training with Brittany.**
 - a. Contact information: bbishop3@uw.edu, 617-519-8437
4. **Each day** before traveling to the lab:
 - a. **Perform a self-check of wellness:** Bring awareness to your body and assess if any symptoms of COVID-19 infection (listed on the previous page) are present.
 - i. If you are free of the symptoms, log into [UW's Workday System](#) and select "**Working On-Site Attestation**," and attest that you are symptom free **each day before coming to campus**.
 1. Non-employees (i.e., master's students) should use the google form provided by uw:
<https://www.cheme.washington.edu/mycheme/coronavirus/non-employee-attestation>
 - ii. If you are experiencing symptoms then (i) **remain at home** and do not go to campus, even if the symptoms are mild, (ii) notify Vincent Holmberg (holmvc@uw.edu; 612-964-5731), and (iii) contact your health care provider.
 - b. **Sign up for a lab occupancy shift using your [NetID linked UW Google Account](#):** The Holmberg Laboratories in Benson Hall currently have a **maximum safe occupancy of 3** due to the presence of only one exit in Benson B3B/C/D/E/F and

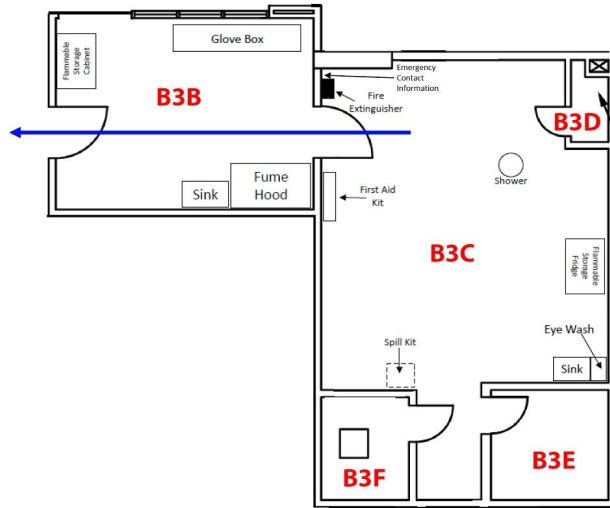
the limited fume hood space in the Unit Ops lab. One person can be in Benson B3B/C/D/E/F, one person can be in the Unit Ops lab at a time, and one person can be stationed at a desk as a safety buddy (3 in Benson lab total). Use the “Holmberg Group” calendar that has been shared with your UW NetID to check the occupancy during your shift. If the occupancy is less than 1 for either location, then add your shift, indicate the hours that you will be in the lab, the location (MoIES, Benson, Unit Ops) and briefly describe your planned experimental workflow in the calendar entry. For syntheses, include your lab safety buddy, who will work separately at a desk in Benson. For example: “Ge Gu, Unit Ops, 10AM-4PM, SiGe Nanowire SFLS Synthesis, Buddy = Elena Pandres.” For use of the SFLS equipment, use both the SFLS calendar **AND** the Holmberg group calendar. Both of these calendars are linked so that the department and university can track campus presence and link it to who has completed their daily wellness attestation.

5. After arriving to the lab:
 - a. **Do not come to the lab unless** you have logged your attendance in the Lab Occupancy Calendar **and** made your daily wellness attestation in Workday.
 - b. **Cloth masks must be worn in all public spaces**, including bathrooms, kitchens, hallways, lobbies, and shared office spaces. If you see anyone in a public space without a mask, please remind them (safely and from a distance) that wearing a mask is required in these spaces.
 - c. Use your **elbow** when possible to enter through the outer doors of Benson.
 - d. **Wash your hands** with soap and water upon entering the lab, especially since physical keys are still used in Benson Hall.
 - e. **Put on a pair of nitrile gloves and leave them on while in the lab.** If you need to exit the lab for the office area, remove your gloves and wash your hands before leaving.
 - f. If you are the **first person to arrive at the lab, you must disinfect** all high-touch surfaces (such as door knobs and faucets) and all near-face surfaces (such as the transparent front shield of each of the glovebox and the fume hood sashes). In addition, if you anticipate using the base bath that day, disinfect the face shield. See instructions below for disinfection.
 - g. Only full-time members of the Holmberg Group that have been approved for in-person work are allowed in the lab. **No guests or guest users are allowed.**
 - h. If at any time there are more than 3 people in the Holmberg lab and office portion of Benson B3B/C/D/E/F or the Unit Ops Lab, then notify Vince Holmberg and leave the building.

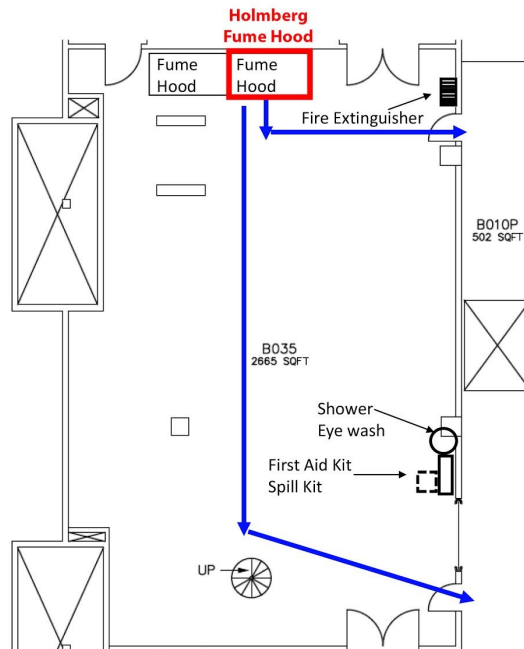
6. While working in the lab:
 - a. **Always maintain 6 feet between researchers** unless it compromises safety. This pertains whether you are in the lab or office area.
 - a. **Face masks or face coverings are recommended in the lab as an additional precaution.** The CDC recommends, at a minimum, a cloth face covering or a personal mask if there is a potential to (even temporarily) come within 6 feet of another person. Please purchase your own cloth face mask before scheduling and performing any research. Personnel may remove their masks or face covering when there is a low likelihood of another person coming within 6 feet of them and they are in a private space. For example, a mask can be removed for lunch or breaks, or while working at a desk or lab station, as long as there is not another person within 6 feet and diminishingly small likelihood that someone could walk by. In addition, if you are working with flammable substances, use a flame-resistant face mask or ensure that you are 6 ft. away from others and do not use a face mask, since cloth and paper face masks are flammable.
 - b. Since there is only one exit in the B3B/C/D/E/F laboratory, only one person can be in the lab at a time and the main exit will be used to leave the lab. If a safety buddy is needed, they can be stationed in room B3E to allow social distancing from the other labmate. Since the Unit Lab has two exits, **one of the following two pathways to exit the lab must be person-free at all times:** (i) route 1 via the left exit near the fire extinguisher or (ii) route 2 via the main exit near the fire aid and spill kits. See the lab diagram below.
 - c. **Since the Unit Ops Lab has several stations, ensure that no else from other labs is using the fume hoods or lab benches in the surrounding area while performing an experiment.** See diagram below.
 - d. The office area should be used only as a place to reside while periodically tending to active experiments. **If you are not tending an active experiment or acting as a safety buddy, then you should work remotely from your home.**
 - e. For food breaks, try to bring food that does not need a refrigerator or microwave. If weather permits, eat outside. If that is not an option, wipe down surfaces in the undergrad or grad lounge with disinfectant prior to using surfaces and wash your hands.
 - f. If you begin experiencing symptoms while already in the lab, you must:
 - i. **Leave campus immediately and go home.**
 - ii. Notify Vince Holmberg (holmvc@uw.edu; 612-964-5731)
 - iii. Contact your healthcare provider.
7. When using a workstation:
 - a. Follow existing protocols for safe maintenance and operation.
 - b. After use, disinfect instrument surfaces, keyboard, mouse, face masks, and/or bench space as described in the disinfection instructions below.

- When leaving the lab, fill out the laboratory log-book on google drive and remove gloves and wash hands with soap and water.

Benson B3B/C/D/E/F Floor Plan



Unit Ops Lab (B35) Floor Plan



General Guidance for Cleaning and Disinfection

1. Increase the frequency of cleaning and disinfecting, **focusing on high-touch surfaces**, such as buttons, handrails, tables, faucets, doorknobs, shared equipment, 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!):
 - a. Wash hands often with soap and warm water for at least 20 seconds.
 - b. If soap and warm water are not readily available, use an alcohol-based hand sanitizer that contains at least 70% ethanol.

Safety Guidelines During Cleaning and Disinfection

1. Wear disposable gloves when cleaning and disinfecting. Clean hands immediately after gloves are removed.
2. Wear eye protection when there is a potential for splash or splatter to the face.
3. Lab coats are recommended to protect personal clothing.
4. Store chemicals in labeled, closed containers. Store them in a manner that prevents tipping or spilling.

Disinfecting Solutions

The CDC has provided a list (in conjunction with the EPA) of cleaning solutions effective for killing SARS-Cov-2 (the virus that causes COVID-19) at:

<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

70% alcohol / 30% water solutions are the preferred disinfectant for the Holmberg lab.

Please use either isopropanol or ethanol for the alcohol. Note that alcohols may extract fat from the skin and cause dermatitis after repeated or prolonged use. Further, inhalation of concentrated alcohol vapor may cause irritation of the respiratory tract and effects on the central nervous system. Therefore, always use gloves when disinfecting surfaces and be sure that the space is well ventilated.

In accordance with [UW's guidance on safe cleaning solutions](#), avoid using sodium hypochlorite (bleach) and quaternary ammonium compounds, when possible. Although they are approved for killing SARS-CoV-2, these ingredients *may* cause or exacerbate asthma. However, they may be used if other disinfection products are not available.

Let alcohol-based disinfectants stay glistening wet on the surface or air dry for 5 min, then wipe dry with paper towel. For keyboards, first moisten a chemwipe or paper towel with the alcohol solution then wipes across the keyboard and mouse.

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](#).

Hand Hygiene

(https://www.who.int/gpsc/5may/Hand_Hygiene_Why_How_and_When_Brochure.pdf)

HOW TO HANDRUB?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

🕒 Duration of the entire procedure: 20-30 seconds

1a  **1b** 

Apply a palmful of the product in a cupped hand, covering all surfaces;

2 

Rub hands palm to palm;

3  **4** 

Right palm over left dorsum with interlaced fingers and vice versa;

Palm to palm with fingers interlaced;

5 

Backs of fingers to opposing palms with fingers interlocked;

6  **7** 

Rotational rubbing of left thumb clasped in right palm and vice versa;

Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

8 

Once dry, your hands are safe.