



## COVID-19 PREVENTION FOR BUILDING MAINTENANCE

*Updated 10/8/2020*

The Environmental Health & Safety Department (EH&S) prepared the following guidelines to supplement the [UW COVID-19 Prevention Plan for the Workplace](#) requirements that specifically address hazards associated with University maintenance and repair activities. These guidelines are in alignment with public health recommendations, the [Stay Home Stay Healthy requirements](#) issued by the Washington State Governor's office, and Washington State Department of Labor and Industries [DOSH Directive 1.70 General Coronavirus Prevention Under Stay Home – Stay Healthy Order](#) to prevent community spread of COVID-19.

### **GENERAL GUIDANCE FOR ALL MAINTENANCE AND REPAIR ACTIVITIES**

Building maintenance and repair activities are considered low risk for exposure to COVID-19 as long as the following preventions are in place.

1. All personnel must adhere to the [UW COVID-19 Face Covering Policy](#) while working on-site at a University location.
2. All occupied building spaces are cleaned and disinfected in accordance with the EH&S document [COVID-19 Prevention: Enhanced Cleaning and Disinfection Protocol](#).
3. EH&S will evaluate the location(s) where a COVID-19 positive individual spent time at a University location to determine if cleaning and disinfection is needed following the EH&S [Enhanced Cleaning and Disinfection Protocol](#). Maintenance staff requested to work in these spaces are required to get confirmation that the area has been disinfected prior to work being performed. The cleaning and disinfection status of these spaces can be retrieved from the UW Facilities Work Order system.
4. Emergency maintenance: In the event emergency maintenance or repair work is required where there is a resident with confirmed or suspected COVID-19, personal protective equipment (PPE) is required based on a high transmission risk as described in the [Workplace COVID-19 Risk Level and Selection of Personal Protective Equipment \(PPE\)](#).

### **MECHANICAL HEATING AND VENTILATION SYSTEMS (HVAC) FOR NON-MEDICAL FACILITIES**

The spread of COVID-19 or coronaviruses from person-to-person over long distances, such as through HVAC systems, has not been shown.

1. Changing or cleaning filters regularly is important for controlling microbial growth.
2. Personal protective equipment required when handling dirty filters includes:
  - a. Disposable nitrile gloves



- b. If working with metal ductwork or exposed to sharp edges, leather or cloth gloves should be worn over the disposable gloves to protect from cuts. The disposable inner gloves are to protect the skin from exposure to liquids and chemicals used to disinfect tools and equipment.
  - c. Safety glasses; goggles may be required if there is a risk of flying particles or projectiles.
  - d. Disposable filtering face piece respirator (e.g., N95); it is recommended that the person wearing the respirator is medically screened and fit-tested, although not required for [voluntary use](#).
3. Place used filters in plastic bags or other containers for safe disposal.
4. PPE identified above must be worn during all maintenance activities.
5. Dispose of all materials and disposable PPE in accordance with solid waste disposal requirements. Clean and disinfect reusable PPE in accordance with manufacturer's recommendations.
6. Practice thorough hand washing upon completion of the work. Use alcohol-based hand sanitizer with at least 60% alcohol if hand washing is not available.
7. Avoid sharing tools.
8. Additional controls and procedures are required when accessing filters in an ultraviolet lamp-equipped HVAC system.

## PLUMBING SYSTEMS

The risk of exposure to biological hazards, including bloodborne pathogens (BBP) and other potentially infectious material, including the novel coronavirus (SARS-CoV-2), exist when working with sanitary sewer systems. Always follow universal precautions, which means treating all human blood and body fluids as if they are infected with BBP whether they are actually known to be infected or not. Follow these guidelines:

1. Cover any cuts or open wounds.
2. Personnel working on the sanitary sewer system (i.e., wastewater) and related equipment (e.g., toilets, drains, cleanouts, lines, lift stations, etc.) must wear the following:
  - a. Disposable nitrile gloves (double gloves to protect from exposure to sharps); if working with piping or exposed to sharp edges, leather or cloth gloves should be worn over the disposable gloves to protect from cuts. The disposable inner gloves are to protect the skin from exposure to liquids and chemicals used to disinfect tools and equipment.



- b. Safety glasses/goggles; face shields are required to be worn over safety glasses/goggles if there is a splash or spray hazard to the eyes or face.
  - c. Protective clothing (disposable, or clothing that can be laundered)
  - d. Additional PPE (e.g., boots, respiratory protection) is required if working inside sanitary sewer systems (e.g., lift station wet cells, manholes, open drain systems). Ensure adherence to existing PPE requirements for specific work activity.
3. Respiratory protection is not required unless there is a risk of exposure to aerosols. Aerosols can be generated from splashing, spraying, or use of pressure systems. Follow the [UW Respiratory Protection Program](#) requirements if a respirator is determined to be required or approved for [voluntary use](#).
4. PPE identified above must be worn during all maintenance plumbing activities.
5. All staff must be fully trained on how to safely [put on \(don\) and remove \(doff\)](#) required PPE to prevent cross contamination.
6. Disinfect tools with an [EPA-registered disinfectant approved for use against COVID-19](#). Dry tools before putting them away.
7. Practice thorough hand washing upon completion of the work. Use alcohol-based hand sanitizer with at least 60% alcohol if hand washing is not available.

The UW Bloodborne Pathogens (BBP) Program provides resources to assist UW units to safely perform tasks that may present a bloodborne pathogen hazard. The EH&S [Bloodborne Pathogens Program](#) webpage includes a **Site-Specific Bloodborne Pathogen (BBP) Exposure Control Plan template** to help units outline specific controls for each procedure and task that may include a potential BBP exposure.

## ELECTRICAL SYSTEMS

UW Facilities and Engineering staff must adhere to departmental safe work practices, including using Hazard Review Checklists (HRC) and/or Job Hazard Analysis (JHA), and wearing PPE based on the type of work being performed and the arc-flash and shock boundary distances. At a minimum, disposable nitrile gloves should be worn to protect workers from inadvertent contact with potentially contaminated work surfaces.

Any electrical work (e.g., lighting, electrical receptacles, GFCI, etc.) required in a room or space occupied by a confirmed COVID-19 positive person will be addressed on a case-by-case basis in alignment with UW workplace health and safety policies.

## REFERENCES

[Guidelines to Protect Workers Related to Coronavirus \(COVID-19\) and Other Potential Infectious Materials \(OPIM\) in Plumbing and HVAC Systems](#)



[Coronavirus \(COVID-19\) Response Resources from ASHRAE and Others](#)

[National Air Filtration Association COVID-19 \(Corona Virus\) and Air Filtration Frequently Asked Questions](#)