Frequently Asked Questions Related to Facilities Changes to Address COVID-19

What is OPP doing to increase the cleaning of commonly touched surfaces?

OPP will be following Centers for Disease Control and Prevention (CDC) and PA Department of Health guidelines to see that spaces are properly cleaned and disinfected.

EPA-registered List N disinfectants and specialty microfiber cleaning tools will be used daily to disinfect frequently touched surfaces in critical spaces. Where a suspected or confirmed case of COVID-19 is identified, an enhanced cleaning protocol has been established to clean and disinfect those areas. In addition, water fountains will be cleaned and disinfected with approved cleaners once per day.

We are maintaining compliance with the PA Department of Health Building Safety Measures, April 2020 website for our cleaning protocols. Additional information can be found in the Environmental Safety and Health document 'Updated Cleaning and Disinfection Procedures in Response to Coronavirus'.

What is OPP doing to increase outdoor air ventilation in my building?

OPP is following CDC, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), and PA Department of Health guidelines for ventilation.

OPP is currently implementing the CDC's 'Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019,' May 2020. In addition, we are maintaining compliance with the PA Department of Health Building Safety Measures, April 2020 website. OPP is also following the expert guidance of ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) through their Position Document on Infectious Aerosols.

Using building mechanical system economizers and addressing under-ventilated spaces, OPP is working to improve outdoor air conditions in all Penn State facilities across the Commonwealth, starting with the highest-use facilities. OPP has a team of more than 12 engineers and building automation analysts who are currently focused on evaluating the condition of building outside air intakes and will be working to improve those conditions where outdoor air doesn't meet code minimum requirements, all within the constraints of each building's mechanical system. These facility modifications will be balanced with indoor space temperature and humidity conditions so we do not create uncomfortable working conditions inside facilities or create conditions that would promote the potential growth of mold.

This is part of a multi-pronged approach to help manage the risk of COVID-19 in spaces across the University where people are together for extended periods of time.

Does COVID-19 spread thorough building mechanical systems?

Based on numerous studies, we do not believe that the virus can be effectively transmitted through a building's central mechanical system.

Multiple studies have identified that, while transmission is theoretically possible, the risk of transmission seems improbable. Taylor Engineering, a private engineering firm, performed a review of more than 80 research reports and concluded that none of the studies demonstrated transmission through central air handling systems.

Despite this evidence, there is not enough information to conclusively state that the virus cannot be transmitted through heating, ventilation and air conditioning systems. Out of an abundance of caution, the University is following a multi-pronged approach consistent with all applicable Centers for Disease Control and Prevention guidelines, as well as ASHRAE guidance to help prevent the possible spread of COVID-19.

What is OPP doing to improve filtration in University facilities?

OPP is transitioning to high-efficiency filters in accordance with the latest Centers for Disease Control and Prevention and ASHRAE (American Society of Heating, Refrigeration and Air-Conditioning Engineers) guidance.

OPP is following the expert guidance of ASHRAE through their Position Document on Infectious Aerosols. This document identifies that the use of highly efficient particle filtration in centralized HVAC systems reduces the airborne load of infectious particles. As a result, ASHRAE's recommendation -- as well as the recommendation of the CDC -- recommends the use of high-efficiency filters.

The replacement of the filters is part of a multi-pronged approach to help manage the potential risk of COVID-19 in spaces across the University where people may be together for extended periods of time.

What is OPP doing to flush building water piping systems and prevent the possible development of legionella?

OPP has implemented a comprehensive flushing program to prevent bacteria growth in all of our facilities.

Legionella is a bacteria present in very low amounts in all water systems. If not disinfected through the use of chlorine or ultra violet light in drinking water systems and then subsequently inhaled in sufficient quantities through water vapor, it can cause Legionnaire's Disease. The University-supplied drinking water at the University Park, Wilkes-Barre and Mont Alto campuses and the public water authorities/companies serving all of the other Commonwealth Campuses all use chlorine to disinfect their water systems. This chlorine lingers in the water and provides lasting prevention of bacterial and other microbiological growth as long as a chlorine residual is present.

If water is left stagnant for too long, this chlorine residual can be consumed, allowing bacteria - including legionella – to start to grow. For occupied buildings, normal everyday use is enough to flush chlorinated water through the building plumbing system to provide protection. For buildings that have been unused, a flushing program is the standard practice to bring in fresh, chlorinated water to facilities.

Starting in April 2020, OPP instituted a program to use in-house staff to flush unoccupied or lightly occupied facilities on a regular basis to prevent bacterial/microbiological growth. This program flushes both hot and cold water in the facilities and extends to sinks, toilets, urinals, water fountains, ice machines, and even the water traps in floor drains. Unoccupied facilities are being flushed once per month and lightly occupied facilities are flushed once per week to maintain fresh water in all building systems. This protocol has been disseminated to all University Park and Commonwealth Campus facilities, as well as provided to Housing &Food Services, Athletics, the Applied Research Lab, and our rental agents for implementation.

What other changes are being made to facilities to lower the potential risk of transmission of COVID-19?

OPP is evaluating a number of other facilities changes with a focus on each campus' highest-use facilities.

We are looking to replace hand-washing faucets with hands-free versions, placing hand sanitizer stations where handwashing is unavailable, recommending plexiglass barriers at high-volume interaction counters (such as eatery checkouts and the library circulation desks), and promoting the creation of outdoor space for high-volume shared spaces, such as the HUB dining area for the University's highest use facilities. We also are evaluating the creation of isolation rooms if needed in student health centers.

Are there specifications for the use of plexiglass barriers in front of all reception/forward facing employee counters?

OPP is only recommending plexiglass barriers in front of high-volume, face-to-face interaction counters (food service, libraries, registrar).

Plexiglass barriers should only be placed at high traffic/high- volume transaction counters with the highest potential for face-to-face interaction with the public. We are not recommending plexiglass barriers in lower volume interactions (reception desks, open office settings, etc.) Mandatory mask use should address all low-traffic office interactions and make plexiglass guards redundant.

The ergonomics of plexiglass barrier design is important. Each situation needs design consideration to remain aware that the plexiglass barrier doesn't hinder the functionality and/or worsen the safety situation. All barriers will be required to follow Department of Health requirements for businesses that are open to serve the public. The impact to fire sprinkler coverage and fire suppression systems also must be considered. We are recommending plexiglass barriers are either hung from the ceiling or set on a table top (not fastened to furniture/countertop/etc.)

Social distancing requirements will only allow for one person at a time in many of our restrooms given the size of many of our facilities. Additionally, many of these restrooms do not have any outside/fresh air circulation. Has OPP considered how to manage one person at a time in these locations, or how long between someone being in a restroom and flushing/sneezing/coughing and allowing the next person to enter?

OPP is not recommending any occupant limitations to restrooms.

First and foremost, we want to encourage hand washing and strict occupancy limits may discourage that habit, as people may try to exit quickly. Further, the proper use of universal masks where required or necessary, coupled with the limited time in shared space with others is not expected to be a significant contributing factor to occupant exposure to the coronavirus. Finally, all bathrooms are exhaust-ventilated to maintain negative pressure (to prevent odors from leaving the bathroom). This ventilation will pull air from the surrounding corridors, so that bathrooms have higher air exchange rates than other spaces.

Will the University assist campuses/colleges with costs for temporary storage of classroom and conference room furniture that will need to be removed to meet social distancing requirements? Classrooms and conference rooms can only keep 20 – 35% of their seating with the new guidelines, dependent on room configuration.

OPP is not recommending the removal and storage of any classroom and/or conference room furniture.

The spacing will be self-policing , require assigned seating, or be accomplished by taping off seats rather than removing and storing them. Conference room seating can be stacked or pushed to the side. Room occupancy will be managed through signage, education and scheduling.

It's been suggested that doors be propped open at busy times of the day so that multiple people do not have to touch the same door handles. May we do this, and if so, can CCure alarms be overridden?

OPP does not recommend that any exterior doors be propped open.

First and foremost, a primary concern in buildings are fire and overall safety. In addition, staffing to open/close those doors, maintaining building temperature setpoints (especially in very hot or very cold weather), increasing population of rodents/birds/bugs in facilities, and possibly freezing the sprinkler heads located in most vestibules if doors are left open in winter. Interior doors that are not fire doors may be propped open. OPP is evaluating the installation of power door openers on select exterior doors into high-traffic facilities and placing hand sanitizer stations inside the doors for people to use.

Should we be using water fountains as they seem likely places to spread the virus?

OPP does not recommend any change to the use of water fountains.

Since most water fountains are near bathrooms, we are recommending hand sanitizer stations be located near any water fountain that requires hands for use. Building custodial personnel will periodically clean high-contact surfaces such as water fountains. Current CDC guidelines suggest that commonly touched surfaces are less likely to spread the virus than previously suspected. We would also recommend using the bottle filling stations as appropriate.

Further information can be found here:

Penn State Frequently Asked Questions

Penn State Environmental Health & Safety COVID-19 site

Commonwealth of Pennsylvania COVID-19 site

Centers for Disease Control and Prevention site