

COVID-19 PREVENTION: CLEANING AND DISINFECTING WORK AREAS

To align with Centers for Disease Control and Prevention (CDC) guidelines, the University has implemented an enhanced cleaning and disinfection protocol for frequently touched surfaces and common areas. Safety and Risk Management (SRM) has developed this guidance to assist custodial staff and others in choosing the most effective disinfecting agents to safely clean and disinfect campus surfaces and prevent the spread of COVID-19.

Know the difference between Cleaning, Disinfecting, and Sanitizing

Cleaning removes germs, dirt, and impurities from the surface. Cleaning works by using soap (or detergent) and water to physically remove dirt and germs. This process does not necessarily kill germs, but by removing them lowers their numbers and the risk of spreading infection.

Disinfecting works by using chemicals to kill germs on the surface. This process does not necessarily clean dirty surfaces or remove germs, but by killing the germs on a surface after cleaning, it can further lower the risk of spreading infection.

Sanitizing lowers the number of germs on surfaces to a safe level, as judged by public health standards or requirements. This process works by either cleaning or disinfecting surfaces to lower the risk of spreading infection.

Enhanced Cleaning and Disinfection for Prevention

A. General Guidance

- i. Increased frequency of cleaning and disinfecting common high touch surfaces such as doorknobs, light switches, tables, desks, countertops, faucets, railings and other high traffic areas to meet CDC sanitation guidelines for disinfection. Increased frequency of cleaning and disinfecting helps to kill germs on the surface. By killing germs on a surface, you can further lower the risk of spreading infection. [Environmental Protection Agency \(EPA\) approved disinfectants](#) are an important part of reducing the risk of exposure and transmission of COVID-19.

Building occupants should wipe down commonly used surfaces before and after use with products that meet the Environmental Protection Agency (EPA) criteria for use against the SARS-CoV-2 virus and are appropriate for the surface material. This includes any shared-space location or equipment (e.g. copiers, printers, computers, A/V and other electrical equipment, coffee makers, desks and tables, light switches, door knobs, tools, etc.).

Shared vehicles should be disinfected before and after use to include wiping down the steering wheel, seat buckle, gear shift, radio controls, and other touch areas.

- ii. Always practice proper hand hygiene, which includes handwashing or using alcohol-based sanitizers which are simple yet effective ways to prevent the transmission of germs and viruses.
 - Wash your hands often with soap and water for at least 20 seconds.
 - If soap and water are not readily available, use a hand sanitizer that contains at least 60% ethanol or 70% isopropanol and rub until dry.

B. Clean and Disinfect Safely

Always follow these general safety guidelines when handling cleaning and disinfecting chemicals:

- Read and follow manufacturer hazard warning labels for use. This includes instructions on how to use the product, especially for dilution preparation and effective contact time.
- Review the Safety Data Sheet (SDS) for additional chemical information.
- Wear disposable gloves when cleaning and disinfecting. Gloves are used to protect your hands from chemical exposure. Gloves should be disposed of properly after use.
- Wear eye protection when working with chemicals where there is a chance of a splash or splatter hazard to the facial area.
- Store chemicals in sealed containers within a secured area.
- Label secondary containers with the full chemical name (no abbreviations or formulas), date of preparation, and applicable hazards (i.e. corrosive, flammable, toxic, etc.)
- Do not mix cleaners and disinfectants unless the manufacturer chemical label indicates it is safe to do so. Mixing of certain chemicals, such as chlorine bleach and ammonia cleaner, can result in serious injury.
- Safely dispose of waste materials. Avoid touching tissues and other waste when emptying wash and garbage receptacles.
- Wash your hands thoroughly with soap and water after removing gloves and before removing PPE from your facial area (i.e. face shield, safety glasses, face mask). Wash your hands again thoroughly after removing all PPE.

C. Enhanced Cleaning and Disinfection of Surfaces

- i. Surfaces and objects that are visibly dirty should be cleaned using a detergent or soap and water prior to disinfection. Rinse with water, if needed. Cleaning with soap and water reduces the number of germs on the surface.
- ii. Use an approved EPA-registered disinfectant. EPA has compiled a list of disinfectant products that can be used against the SARS-CoV-2 virus, including ready-to-use sprays,

concentrates, and wipes. Refer to the [EPA-approved list of disinfectants](#) for products with emerging viral pathogen and Coronavirus claims for use against SARS-CoV-2.

- iii. Always follow the manufacturer's instructions on the label to ensure safe and effective use of the product (concentration, application method, and contact time, etc.).
- iv. The disinfectant concentration and contact time are critical elements for effective surface disinfection. The directions for proper concentration of a disinfectant must be followed to achieve the best result for each situation. The contact time, also known as kill or dwell time, is the duration that the disinfectant needs to stay wet on the surface to kill the agent (i.e. bacteria, virus, etc.) it targets against. Follow manufacturer's instructions with keeping the surface visibly wet for the full contact time as indicated on the label.
- v. Disinfectants will have different dilution factors depending on the desired use of the product. Although some disinfectants may be more efficient at higher concentrations, these levels may be limited by the degree of risk to personnel, surfaces of equipment, as well as the cost of the chemical. However, over-dilution of a product may render the disinfectant ineffective to the target microorganism. The product label will list the best concentration to use for each situation.
- vi. When EPA-approved disinfectants are not available, alternative disinfectants can be used if appropriate for the surface (i.e. bleach or greater than 70% alcohol solutions).
- vii. Bleach is an effective disinfectant to use on hard, non-porous surfaces. To prepare a bleach solution:
 - Check the label to ensure that the bleach is intended for disinfection and has a sodium hypochlorite concentration of 5%-6%. Some bleach solutions, such as those designed to be safe on colored clothing, are not intended for disinfection.
 - Check the expiration date. Non-expired household bleach will be effective against coronaviruses when properly diluted.
 - Mix five (5) tablespoons of bleach (1/3 cup) per gallon of room temperature water. For a smaller volume, mix 4 teaspoons of bleach per quart of room temperature water.
 - Allow bleach solution to remain wet on the surface for at least ten minutes of contact time (or as indicated on the product label) before wiping the excess. If possible, allow to air dry.
 - Never mix bleach with ammonia products.
 - Freshly prepared bleach solutions are effective for disinfection up to 24 hours.
 - Alcohol solutions with at least 70% alcohol may also be used to disinfect hard surfaces.
- viii. For soft porous surfaces, such as carpeted floor, rugs, and drapes:

- Clean the surface to remove any visible contamination using soap and water or cleaner appropriate for use on these surfaces.
 - Launder items, if possible, according to the manufacturer’s instructions. If possible, use the warmest appropriate water settings and dry items completely.
 - If laundering soft surfaces is not possible, disinfect with an EPA-registered disinfectant that meets EPA’s criteria for use against COVID-19. Refer to the EPA-approved list of disinfectants for products with emerging viral pathogen and Coronavirus claims for use against SARS-CoV-2.
- ix. For electronics follow the manufacturer’s instructions for all cleaning and disinfection products. If no manufacturer guidance is available, consider the use of alcohol-based wipes or spray containing at least 70% alcohol to disinfect touch screens. Dry surfaces thoroughly to avoid pooling of liquids. Consider use of wipeable covers for electronics.

For additional information review WCU’s Information Technology (IT) [Disinfectant Guidance for Electronic Devices](#).

Enhanced Cleaning and Disinfection Following a Suspected/Confirmed Case of COVID-19

The following guidance is intended to be used when enhanced cleaning and disinfection is required in a University space when a suspected or confirmed case of COVID-19 is identified. This protocol applies from 48 hours prior to the onset of symptoms until seven days have passed since the person was present in a University space.

- A. After notification of a person with suspected or confirmed COVID-19, the following cleaning and disinfecting procedures should be followed:**
- i. Building and/or specific space(s) where the suspected or confirmed person frequented will be assessed on a case-by-case basis. The cleaning scope will be implemented based on the risk of potential contamination, as determined by University Officials.
 - ii. Identify spaces that require restricted access during and immediately following cleaning and disinfection.
 - iii. Provide communication to affected department(s) and the designated Facility Coordinator.
 - iv. Every attempt should be made to give advanced notice to building occupants to inform them of the spaces that may require restricted access and the schedule for cleaning and disinfecting.

B. Cleaning and Disinfecting procedures:

- i. If possible, open outside doors and windows to increase air circulation in the space.
- ii. Wait a minimum of 24 hours before entering an affected space to clean and disinfect. If 24 hours is not feasible, wait as long as possible. Leaving the area unoccupied allows the virus to be removed via normal environmental exposure. Current evidence suggests that the SARS-CoV-2 virus may remain viable for hours to days on surfaces so the area should be vacated for as long as reasonably possible before cleaning begins.
- iii. Review the chemical safety data sheet (SDS) and label information prior to cleaning and disinfection.
- iv. Manufacturer procedures for dilution, contact time, and waste disposal must be followed.
- v. The level of Personal Protective Equipment (PPE) needed to properly clean and disinfect will be assessed by Safety and Risk Management and may include: disposable gown, safety glasses or goggles, disposable face mask, and disposable gloves.
- vi. Personnel entering the restricted area must be trained on proper donning and doffing PPE procedures to prevent cross contamination.
- vii. Clean and disinfect all spaces used by the person with suspected or confirmed COVID-19, such as office, bathrooms, common areas, and shared equipment.
- viii. Vacuum the space if needed. Use vacuum equipment with high-efficiency particulate air (HEPA) filters, if available.
 - Do not vacuum a room or space that has people in it. Wait until the room or space is empty to vacuum, such as at night for common spaces, or during the day for private rooms.
 - Consider temporarily turning off room fans and the central HVAC system that services the room or space, so that particles escaping from the vacuum will not circulate throughout the facility.
- ix. All personal protective equipment (PPE) should be removed and discarded after cleaning and disinfecting activities are completed. PPE should be treated as potentially infectious material and should be removed and disposed of or cleaned accordingly.
- x. Once the area has been appropriately disinfected, it can be reopened for use.
- xi. Employees without close contact with the suspected or confirmed person can return to work immediately after disinfection.
- xii. If more than 7 days has elapsed since the person who is suspected or confirmed for COVID-19 was present in the facility, additional cleaning and disinfection is no longer necessary.

Continue routine cleaning and disinfection. This includes everyday practices normally used to prevent the spread of COVID-19 within the work space.

- xiii. Should a third-party contractor be used for cleaning and disinfecting services, all procedures and cleaning supplies must be reviewed by SRM before the start of work. This is to ensure the proper steps are followed to clean and disinfect University spaces.

Resources

- [CDC Interim Guidance for Administrators of US Institutions of Higher Education](#)
- [CDC Cleaning and Disinfection for Community Facilities](#)
- [CDC Clean and Disinfect Schools to Help Slow the Spread of Flu](#)
- [CDC Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease](#)
- [CDC Cleaning and Disinfection for Households](#)