COVID-19 DISINFECTION PROTOCOLS
Custodial
Developed by EH&S, March 17, 2020

Coronavirus Disease 2019 (COVID-19) is a respiratory illness that can spread from person to
person. The virus that causes COVID-19 is a novel coronavirus that was first identified during the
investigation of an outbreak in Wuhan, China. Symptoms include fever, cough, and difficulty
breathing/shortness of breath. COVID-19 is spread between people who are in close contact with
one another (within about 6 feet / 2 meters), through respiratory droplets produced when an
infected person coughs or sneezes, or touching objects that have been contaminated with the
virus and then touching one’s eyes, nose, and/or mouth with unwashed hands.

The Centers of Disease Control and Prevention, the California Department of Public Health, and
Merced County Public Health recommend social distancing, including reduced or elimination of
large in-person gatherings, and increased hygiene measures including frequent handwashing and
increased cleaning of touch surfaces as well as cleaning/disinfection of locations with suspected
or confirmed cases of COVID-19.

The campus has implemented social distancing measures and frequent handwashing as well as
provided increased access to hand sanitizer in high traffic locations. The next step in breaking the
transmission chain is to clean and disinfect high touch surfaces or locations/areas with suspected
or confirmed cases of COVID-19. This document is in place as a framework for UC Merced to
provide appropriate cleaning and disinfection throughout the campus and affiliated locations.

Levels of Cleaning/Disinfection:
These levels will help individual departments determine an appropriate cleaning/disinfection
process for their specific location.

I. LEVEL 1: Increased Cleaning of Public Spaces
This level can be used by staff to clean high volume restrooms, food courts, and gymnasiums.
This level is meant for increased disinfection frequency of work areas with appropriate
disinfectant. This level of cleaning is the standard on campus and includes the use of broadly
effective disinfectants against a wide variety of bacteria and viruses, to reduce the potential for
disease transmission from surfaces.

High-touch surfaces to focus cleaning and disinfection:

1. Counters
2. Doorknobs/handles
3. Doorframes
4. Lights Switch Plates
5. Toilet Room Surfaces
6. Phones
7. Computer Keyboard and Mouse
8. Press buttons on equipment
9. Tables and Chairs
10. Remote Controls
11. Railings
12. Cash Registers
13. Kitchen Surfaces
14. Sink handles
15. Condiment Bottles

a. **Personal Protective Equipment (PPE):**
   - Disposable gloves
   - Eye protection [safety glasses, goggles, etc.]

b. **Disinfectant:**
   Be sure to follow the manufacturer’s instructions for proper disinfection and safe handling. Use disinfectants in well-ventilated areas. For approved disinfectants effective against coronavirus, please visit: [https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2)

   Recommended:
   - **Waxie Solsta 710 spray** (1/2 ounce disinfectant per gallon of water) for contact time of 10 minutes
   - **Waxie Solsta 730 spray** (2 ounces disinfectant per gallon of water) for contact time of 1 minute
   - **Waxie Solsta 764 spray** (2 ounces disinfectant per gallon of water) for contact time of 10 minutes
   - Lysol Spray
   - Disinfecting Wipes

   Other disinfectants will require verification as an EPA registered disinfectant for COVID-19 and confirmation from supervisors. If there are questions on disinfectants or procedures, contact biosafety@ucmerced.edu.

c. **Procedure:**
   - Wash areas with soap and water.
   - Apply disinfectant via spray or wipe
   - Allow to sit for contact time (surface must remain wet, if surface dries before time, reapply)
   - Wipe dry

II. **LEVEL 2: Cleaning/Disinfection of Areas Serving Staff/Faculty on Campus**
Level 2 is for cleaning/disinfecting areas serving the general staff and faculty population where high traffic may occur. Examples would be office areas, conference rooms, and libraries. This level of cleaning is geared towards drastically reducing disease transmission and includes specific disinfectant recommendations effective against coronavirus. This is an increased level from standard cleaning practices.

High Touch Surfaces to focus cleaning and disinfection:

1. Counters
2. Doorknobs/handles
3. Doorframes
4. Lights Switch Plates
5. Toilet Room Surfaces
6. Phones
7. Fabric chairs and partitions
8. Computer Keyboard and Mouse
9. Tables and Chairs
10. Railings
11. Remote Controls
12. Cash Registers
13. Kitchen Surfaces
14. Kitchen area equipment i.e. Coffee machines, tea kettles, microwave, toaster ovens, etc.
15. Hard surface flooring
16. Carpeted surface (where applicable)

a. Personal Protective Equipment:
   - Disposable gloves
   - Eye protection (safety glasses, goggles, etc.)

b. Disinfectant:

   Be sure to follow the manufacturer’s instructions for proper disinfection and safe handling. Use disinfectants in well-ventilated areas. For approved disinfectants effective against coronavirus, please visit: [https://www.epa.gov/pesticide-registration/listn-disinfectants-use-against-sars-cov-2](https://www.epa.gov/pesticide-registration/listn-disinfectants-use-against-sars-cov-2)

   Recommended:
   - **Waxie Solsta 710 spray** (1/2 ounce disinfectant per gallon of water) for contact time of 10 minutes
   - **Waxie Solsta 730 spray** (2 ounces disinfectant per gallon of water) for contact time of 1 minute
   - **Waxie Solsta 764 spray** (2 ounces disinfectant per gallon of water) for contact time of 10 minutes
   - **Scott Brand Disinfecting Wipes** for contact time of 6 minutes
   - **Lysol Disinfectant Spray** for contact time of 3 minutes
Other disinfectants will require verification as an EPA registered disinfectant for COVID-19 and confirmation from supervisors. If there are questions on disinfectants or procedures, contact biosafety@ucmerced.edu.

c. Procedure:

- Apply disinfectant via spray or wipe
- Allow to sit for contact time (surface must remain wet, if surface dries before time, reapply)
- Wipe dry

**Note:** Cleaning/Disinfection of Areas Serving the Campus/Student Population Using Clorox 360
This protocol has been separated from other disinfection protocols due to the nature of the power sprayer unit.

1. Disinfectant:
   Be sure to follow the manufacturer’s instructions for proper disinfection and safe handling. Use disinfectants in well-ventilated areas.

2. Personal Protective Equipment:
   - Disposable gloves
   - Safety glasses for diluting and dispensing disinfectant

3. Procedure:
   - Apply disinfectant via spray
   - Allow to sit for contact time (surface must remain wet, if surface dries before time, reapply)

III. **Level 3: Cleaning/Disinfection of Areas with Possible Cases for Faculty, Staff & Others**

Custodial staff should use this level for cleaning areas in which a suspected ill person has been present, provided the person does not have, or is not known to have, COVID-19. This level of cleaning includes the use of specific disinfectant recommendations effective against coronavirus, which are also effective against other bacteria and viruses which can cause respiratory diseases.

Under medical direction from the Center for Occupational and Environmental Medicine, droplet precautions are appropriate, which do not require a wait time prior to entry for cleaning. FM custodial services has determined that they would like to implement a 4 hour wait time. Areas identified as previously occupied by a suspected ill person will be isolated for 4 hours prior to FM cleaning. Signage will be place on doors to indicate the 4 hour hold time.

For laboratory locations, researchers will be performing disinfection of equipment and other research specific items. After the initial disinfection by the lab, FM will wait 4 hours and enter the lab location to clean touch surfaces.

All items in level one and two are included in level three disinfecting, as well as:

1. Window sills
2. Vertical Metal/Wood on Partitions
3. Door Frames
4. Various Desk Surfaces
5. Elevator Walls and Stainless Steel Surfaces
6. Presentation boards
7. All cabinets surfaces
8. Wall surfaces
9. Hard Surface ceiling
10. All carpeted surfaces

a. Personal Protective Equipment:
   - Disposable gloves
   - Eye protection (safety glasses, goggles, etc.)

b. Disinfectant:
   Be sure to follow the manufacturer’s instructions for proper disinfection and safe handling. Use disinfectants in well-ventilated areas. For approved disinfectants effective against coronavirus, please visit: https://www.epa.gov/pesticide-registration/listn-disinfectants-use-against-sars-cov-2

   Recommended:
   - **Waxie Solsta 710 spray** (1/2 ounce disinfectant per gallon of water) for contact time of 10 minutes
   - **Waxie Solsta 730 spray** (2 ounces disinfectant per gallon of water) for contact time of 1 minute
   - **Waxie Solsta 764 spray** (2 ounces disinfectant per gallon of water) for contact time of 10 minutes
   - **Scott Brand Disinfecting Wipes** for contact time of 6 minutes
   - **Lysol Disinfectant Spray** for contact time of 3 minutes

   Other disinfectants will require verification as an EPA registered disinfectant for COVID-19 and confirmation from supervisors. If there are questions on disinfectants or procedures, contact biosafety@ucmerced.edu.

c. Procedure:
   - Apply disinfectant via spray or wipe
   - Allow to sit for contact time (surface must remain wet, if surface dries before time, reapply)
   - Wipe dry

   **Note:** Cleaning/Disinfection of Areas Serving the Campus/Student Population Using Clorox 360

   In the event of the need for disinfection services for areas involving suspected ill staff/occupants on campus property, departments should contact Facility Maintenance. This protocol has been separated from other disinfection protocols due to the nature of the power sprayer unit.

   1. Disinfectant:
Be sure to follow the manufacturer’s instructions for proper disinfection and safe handling. Use disinfectants in well-ventilated areas.

2. Personal Protective Equipment:
   - Disposable gloves
   - Eye protection (safety glasses, goggles, etc.)

3. Procedure:
   - Apply disinfectant via spray
   - Allow to sit for contact time (surface must remain wet, if surface dries before time, reapply)

IV. **Level 4: Decontamination of Areas with Known COVID-19 Exposure**

In the event of the need for disinfection services related to confirmed COVID-19 cases on campus property, departments must contact the Campus Biosafety Officer at biosafety@ucmerced.edu. If a request is received by Facilities Maintenance, Facilities Maintenance will provide details to biosafety@ucmerced.edu prior to start of cleaning.

Process:
1. Gather Information:
   - Employee or campus location of person with confirmed COVID-19 (building name, room number)
   - Number of confirmed cases involved
   - List of all areas that were visited while cases were infectious, with dates/times
     - Identify any research, vivarium, or other facilities with specific entry and use requirements
2. Determine scope of decontamination
   - Coordinate with the biosafety office when needed
3. Isolate rooms to be cleaned
4. Decontaminate by contractor
   - Scope of work must be supplied to Emergency Operations Center (EOC) and approved prior to start of work
   - Certification of Completion of work will be submitted to FM and EOC prior to re-entry of the location