Centers for Disease Control and Prevention

Coronavirus Disease 2019

Cleaning and Disinfection for Community Facilities

Interim Recommendations for U.S. Community Facilities with Suspected/Confirmed Coronavirus Disease 2019 (COVID-19)

Summary of Recent Changes

Revisions made on 4/1/2020:

- Added guidance on the timing of disinfection after a suspected/confirmed COVID-19 case

Revisions made on 3/26/2020:

- Updated guidance for cleaning and disinfection of soft (porous) surfaces
- Updated links to EPA-registered disinfectant list
- Added guidance for disinfection of electronics
- Updated core disinfection/cleaning guidance

Background

There is much to learn about the novel coronavirus (SARS-CoV-2) that causes coronavirus disease 2019 (COVID-19). Based on what is currently known about the virus and about similar coronaviruses that cause SARS and MERS, spread from person-to-person happens most frequently among close contacts (within about 6 feet). This type of transmission occurs via respiratory droplets, but disease transmission via infectious aerosols is currently uncertain. Transmission of SARS-CoV-2 to persons from surfaces contaminated with the virus has not been documented. Transmission of coronavirus in general occurs much more commonly through respiratory droplets than through fomites. Current evidence suggests that SARS-CoV-2 may remain viable for hours to days on surfaces made from a variety of materials. Cleaning of visibly dirty surfaces followed by disinfection is a best practice measure for prevention of COVID-19 and other viral respiratory illnesses in community settings.

It is unknown how long the air inside a room occupied by someone with confirmed COVID-19 remains potentially infectious. Facilities will need to consider factors such as the size of the room and the ventilation system design (including flowrate [air changes per hour] and location of supply and exhaust vents) when deciding how long to close off rooms or areas used by ill persons before beginning disinfection. Taking measures to improve ventilation in an area or room where someone was ill or suspected to be ill with COVID-19 will help shorten the time it takes respiratory droplets to be removed from the air.

Purpose

This guidance provides recommendations on the cleaning and disinfection of rooms or areas occupied by those with suspected or with confirmed COVID-19. It is aimed at limiting the survival of SARS-CoV-2 in key environments. These recommendations will be updated if additional information becomes available.

These guidelines are focused on community, non-healthcare facilities such as schools, institutions of higher education, offices, daycare centers, businesses, and community centers that do, and do not, house persons overnight. These guidelines are not meant for cleaning staff in healthcare facilities or repatriation sites, households, or for others for whom specific guidance already exists.

Definitions

- *Community facilities* such as schools, daycare centers, and businesses comprise most non-healthcare settings that are visited by the general public outside of a household.
- *Cleaning* refers to the removal of dirt and impurities, including germs, from surfaces. Cleaning alone does not kill germs. But by removing the germs, it decreases their number and therefore any risk of spreading infection.
- *Disinfecting* works by using chemicals, for example EPA-registered disinfectants, to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs. But killing germs remaining on a surface after cleaning further reduces any risk of spreading infection.

Cleaning and Disinfection After Persons Suspected/Confirmed to Have COVID-19 Have Been in the Facility

Timing and location of cleaning and disinfection of surfaces

- At a school, daycare center, office, or other facility that **does not house people overnight**:
    - Close off areas visited by the ill persons. Open outside doors and windows and use ventilating fans to increase air circulation in the area. Wait 24 hours or as long as practical before beginning cleaning and disinfection.
    - **Cleaning staff should clean and disinfect all areas such as offices, bathrooms, common areas, shared electronic equipment (like tablets, touch screens, keyboards, remote controls, and ATM machines) used by the ill persons**, focusing especially on frequently touched surfaces**.**
- At a facility that **does house people overnight**:
    - Follow Interim Guidance for US Institutions of Higher Education on working with state and local health officials to isolate ill persons and provide temporary housing as needed.
    - Close off areas visited by the ill persons. Open outside doors and windows and use ventilating fans to increase air circulation in the area. Wait 24 hours or as long as practical before beginning cleaning and disinfection.
    - In areas where ill persons are being housed in isolation, follow Interim Guidance for Environmental Cleaning and Disinfection for U.S. Households with Suspected or Confirmed Coronavirus Disease 2019. This includes **focusing on cleaning and disinfecting common areas where staff/others providing services may come into contact with ill persons but reducing cleaning and disinfection of bedrooms/bathrooms used by ill persons to as-needed.**
    - In areas where ill persons have visited or used, continue routine cleaning and disinfection as in this guidance.
- If it has been more than 7 days since the person with suspected/confirmed COVID-19 visited or used the facility, additional cleaning and disinfection is not necessary.

How to Clean and Disinfect

Hard (Non-porous) Surfaces

- If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.
- For disinfection, most common EPA-registered household disinfectants should be effective.
    - A list of products that are EPA-approved for use against the virus that causes COVID-19 is available here . Follow the manufacturer's instructions for all cleaning and disinfection products for concentration, application method and contact time, etc.
    - Additionally, diluted household bleach solutions (at least 1000ppm sodium hypochlorite) can be used if appropriate for the surface. Follow manufacturer's instructions for application, ensuring a contact time of at least 1 minute, and allowing proper ventilation during and after application. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.
        - Prepare a bleach solution by mixing:
            - 5 tablespoons (1/3 cup) bleach per gallon of water or
            - 4 teaspoons bleach per quart of water

Soft (Porous) Surfaces

- For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces. After cleaning:
  - If the items can be laundered, launder items in accordance with the manufacturer's instructions using the warmest appropriate water setting for the items and then dry items completely.
    - Otherwise, use products that are EPA-approved for use against the virus that causes COVID-19 and that are suitable for porous surfaces

Electronics

- For electronics such as tablets, touch screens, keyboards, remote controls, and ATM machines, remove visible contamination if present.
  - Follow the manufacturer's instructions for all cleaning and disinfection products.
  - Consider use of wipeable covers for electronics.
  - If no manufacturer guidance is available, consider the use of alcohol-based wipes or sprays containing at least 70% alcohol to disinfect touch screens. Dry surfaces thoroughly to avoid pooling of liquids.

Linens, Clothing, and Other Items That Go in the Laundry

- In order to minimize the possibility of dispersing virus through the air, do not shake dirty laundry.
- Wash items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely. Dirty laundry that has been in contact with an ill person can be washed with other people's items.
- Clean and disinfect hampers or other carts for transporting laundry according to guidance above for hard or soft surfaces.

Personal Protective Equipment (PPE) and Hand Hygiene

- **The risk of exposure to cleaning staff is inherently low. Cleaning staff should wear disposable gloves and gowns for all tasks in the cleaning process, including handling trash**.
  - Gloves and gowns should be compatible with the disinfectant products being used.
  - Additional PPE might be required based on the cleaning/disinfectant products being used and whether there is a risk of splash.
  - Gloves and gowns should be removed carefully to avoid contamination of the wearer and the surrounding area. Be sure to **clean hands** after removing gloves.
  - If gowns are not available, coveralls, aprons or work uniforms can be worn during cleaning and disinfecting. Reusable (washable) clothing should be laundered afterwards. Clean hands after handling dirty laundry.
- Gloves should be removed after cleaning a room or area occupied by ill persons. Clean hands immediately after gloves are removed.
- Cleaning staff should immediately report breaches in PPE such as a tear in gloves or any other potential exposures to their supervisor.
- **Cleaning staff and others should clean hands often**, including immediately after removing gloves and after contact with an ill person, by washing hands with soap and water for 20 seconds. If soap and water are not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.
- Follow normal preventive actions while at work and home, including cleaning hands and avoiding touching eyes, nose, or mouth with unwashed hands.
  - Additional key times to clean hands include:
    - After blowing one's nose, coughing, or sneezing.
    - After using the restroom.
    - Before eating or preparing food.
    - After contact with animals or pets.
    - Before and after providing routine care for another person who needs assistance such as a child.

Additional Considerations for Employers

- Employers should work with their local and state health departments to ensure appropriate local protocols and guidelines, such as updated/additional guidance for cleaning and disinfection, are followed, including for identification of new potential cases of COVID-19.
- Employers should educate staff and workers performing cleaning, laundry, and trash pick-up activities to recognize the symptoms of COVID-19 and provide instructions on what to do if they develop symptoms within 14 days after their last possible exposure to the virus. At a minimum, any staff should immediately notify their supervisor and the local health department if they develop symptoms of COVID-19. The health department will provide guidance on what actions need to be taken.
- Employers should develop policies for worker protection and provide training to all cleaning staff on site prior to providing cleaning tasks. Training should include when to use PPE, what PPE is necessary, how to properly don (put on), use, and doff (take off) PPE, and how to properly dispose of PPE.
- Employers must ensure workers are trained on the hazards of the cleaning chemicals used in the workplace in accordance with OSHA's Hazard Communication standard (29 CFR 1910.1200).
- Employers must comply with OSHA's standards on Bloodborne Pathogens (29 CFR 1910.1030), including proper disposal of regulated waste, and PPE (29 CFR 1910.132).

Additional Resources

- OSHA COVID-19 Website
- CDC Home Care Guidance
- CDC COVID-19 Environmental Cleaning and Disinfection Guidance for Households
- CDC Home Care Guidance for People with Pets

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