CDC Centers for Disease Control and Prevention
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Coronavirus Disease 2019 (COVID-19)

Environmental Cleaning and Disinfection Recommendations

Interim Recommendations for US Community Facilities with Suspected/Confirmed Coronavirus Disease 2019

Background

There is much to learn about the novel coronavirus that causes coronavirus disease 2019 (COVID-19). Based on what is currently known about the virus, spread from person-to-person happens most frequently among close contacts (within about 6 feet). This type of transmission occurs via respiratory droplets. Transmission of novel coronavirus 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 novel coronavirus 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.

Purpose

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

These guidelines are focused on community, non-healthcare facilities (e.g., schools, institutions of higher education, offices, daycare centers, businesses, 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* (e.g., schools, daycares centers, 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 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:
  - It is recommended to **close off areas used by the ill persons and wait as long as practical before beginning cleaning and disinfection** to minimize potential for exposure to respiratory droplets. **Open outside doors and windows to increase air circulation in the area.** If possible, wait up to 24 hours before beginning cleaning and disinfection.
  - **Cleaning staff should clean and disinfect all areas (e.g., offices, bathrooms, and common areas) 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.
  - It is recommended to **close off areas used by the ill persons and wait as long as practical before beginning cleaning and disinfection** to minimize potential for exposure to respiratory droplets. **Open outside doors and windows to increase air circulation in the area.** If possible, wait up to 24 hours 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.

How to Clean and Disinfect

Surfaces

- If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.
- For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered household disinfectants should be effective.
  - Diluted household bleach solutions can be used if appropriate for the surface. Follow manufacturer's instructions for application and proper ventilation. 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 (1/3rd cup) bleach per gallon of water or
  - 4 teaspoons bleach per quart of water
  - Products with EPA-approved emerging viral pathogens claims are expected to be effective against COVID-19 based on data for harder to kill viruses. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.).
  - 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 with the EPA-approved emerging viral pathogens claims (examples at this link)
    that are suitable for porous surfaces

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

- Do not shake dirty laundry; this minimize the possibility of dispersing virus through the air.
- 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:

- **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.
- 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 (e.g., tear in gloves) or any 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 60%-95% 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 (e.g., 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. When working with your local health department check their available hours.
- 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

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Content source: National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases