

## HOUSEHOLD CLEANING AND DISINFECTION MEASURES FOR COVID-19

TIP 98-110-0420

This guidance recommends the cleaning and disinfection of households where persons under investigation for COVID-19, those with confirmed COVID-19, or those in self-quarantine reside. It is aimed at limiting the survival of the virus in the household environment.

These guidelines are focused on household settings and use the following definitions when detailing procedures.

- **Cleaning** refers to the removal of germs, dirt, and impurities from surfaces. It does not kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.
- **Disinfecting** refers to using chemicals, for example, U.S. Environmental Protection Agency (EPA)-registered disinfectants, to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface *after* cleaning, it can further lower the risk of spreading infection.

### SECTION 1. GENERAL RECOMMENDATIONS FOR IN-HOME CARE.

As much as possible, an ill person should stay in a specific room and away from other people in the home. If possible, dedicate a specific bedroom and bathroom for use only by the ill person.

**If you have a separate bedroom and bathroom:** only clean the area around the person who is sick when needed, such as when the area is soiled. This will help limit your contact with the person who is sick. Caregivers can provide personal cleaning supplies to the person who is sick (if appropriate). Supplies include tissues, paper towels, cleaners, and EPA-registered disinfectants. If they feel up to it, the person who is sick can clean their own space.

**If the bathroom is shared:** the person who is sick should clean and disinfect after each use. If this is not possible, the caregiver should wait as long as possible before cleaning and disinfecting.

Surfaces to be disinfected include common touch, nonporous surfaces that will be wiped with disinfectant such as doorknobs, faucets, toilet seats, tiles (floor/wall) vinyl/leather furniture/arm rests, mirrors, remote control key pads.

Surfaces that will be sprayed with disinfectant include fabric furniture, bedding, pillow, curtains, carpeting, common traffic areas, shower stalls/bathtubs.

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## SECTION 2. HOW TO CLEAN AND DISINFECT

### 1. HARD (NONPOROUS) SURFACES.

- Wear disposable gloves when cleaning and disinfecting surfaces.
- Discard gloves after each cleaning. If reusable gloves are used, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other purposes.
- Consult the manufacturer's instructions for cleaning and disinfection products used.
- Wash hands immediately after gloves are removed.
- If surfaces are dirty, soiled, or stained, they must be cleaned using a detergent or soap and water prior to disinfection, or they will prevent the disinfectant from reaching the surface.
- 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 at: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>. Follow manufacturer's instructions for all cleaning and disinfection products (for concentration, application method and contact time, and so forth).
  - If your product isn't showing up on the EPA list, refer to the list of pre-approved EPA-registered products for use against emerging enveloped viral pathogens, available at: <https://www.americanchemistry.com/Novel-Coronavirus-Fighting-Products-List.pdf>.
  - Alcohol—if undiluted alcohol is used for disinfection, it must have at least 70% alcohol content.
  - Additionally, diluted household bleach solutions (at least 1,000 parts per million (ppm) 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<sup>rd</sup> cup) 5.25% bleach per gallon of water, OR
    - 4 teaspoons 5.25% bleach per quart of water
- Note: mixing other chemicals with chlorine bleach may produce hazardous gases.
- A bleach/water solution loses its strength and is weakened by heat and sunlight; therefore, mix a fresh bleach solution each day.
- Also, use of bleach solutions or other disinfectants may require additional ventilation.

### 2. SOFT (POROUS) SURFACES.

- For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with soap and water or appropriate cleaners indicated for use on these surfaces (such as steam cleaning solutions).
- After cleaning:
  - Launder items as appropriate according to the manufacturer's instructions.
  - If possible, launder items at 160°F or the warmest appropriate water setting for the items and dry items completely.
  - Otherwise, use products that are EPA-approved for use against the virus that causes COVID-19 at: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2> and that are suitable for porous surfaces.

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### **3. ELECTRONICS.**

- For electronics such as cell phones, tablets, touch screens, remote controls, and keyboards, 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. If using a spray, do not spray the electronics directly. Use the spray to dampen a wipe or cloth, and then wipe the surface.

### **4. LINENS, CLOTHING, AND OTHER ITEMS THAT GO IN THE LAUNDRY.**

- Wear disposable gloves when handling dirty laundry from an ill person, and then discard after each use. If using reusable gloves, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other household purposes.
- Wash hands immediately after gloves are removed.
- If possible, do not shake dirty laundry. This will minimize the possibility of dispersing virus through the air.
- Launder items as appropriate according to the manufacturer's instructions.
- If possible, launder items at 160°F or the warmest appropriate water setting for the items and dry items completely.
- Heated (mechanical) drying further destroys microbes; drying temperature and time for effectiveness will vary. However, a drying temperature of 140°F applied for at least 45 minutes and until the laundry is completely dry will effectively destroy viruses and bacteria remaining on fabrics.
- Clean and disinfect clothes hampers according to guidance above for surfaces. If possible, consider placing a bag liner that is either disposable (can be thrown away) or can be laundered.

### **5. MATTRESS CLEANING AND DISINFECTION.**

- Mattresses with impermeable covers:
  - Remove the sheets and clean soiled areas that would impact the effectiveness of disinfection using a disposable wipe, soap, and water and allow to dry.
  - Spray or wipe the entire mattress cover surface with an EPA-approved disinfectant that is compatible with the mattress cover and allow to dry.
- Mattresses without impermeable covers:
  - If a mattress cover is not used, clean soiled or stained areas with an appropriate fabric cleaner and allow to dry.
  - Disinfect uncovered mattress with a suitable spray fabric disinfectant, sufficiently wetting to allow for required contact time (be careful not to oversaturate).
- Launder blankets, pillow cases, fabric mattress covers, and pillows.

### **6. TRASH.**

- Dedicate a lined trash can for the person who is ill.
- Use gloves when removing garbage bags and handling and disposing of trash.
- Place all gloves, cloths/wipes/paper towels, and disposable mop heads in the trash.
- Tie or knot trash bags to seal and close.
- Wash hands afterwards.

### SECTION 3. INDIVIDUAL MEASURES.

#### 1. HAND WASHING.

In addition to cleaning and disinfecting the home, frequent and proper hand washing is an effective and necessary way to prevent the spread of COVID-19 in a household. Follow these five steps every time you wash your hands.

- **Wet** your hands with clean, running water (warm or cold); turn off the tap, and apply soap.
- **Lather** your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.
- **Scrub** your hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
- **Rinse** your hands well under clean, running water.
- **Dry** your hands using a clean towel or air dry them.

#### 2. KEY TIMES TO WASH HANDS.

- **Before** and **after** conducting cleaning and disinfecting procedures
- **Before, during,** and **after** preparing food
- **Before** eating food
- **Before** and **after** caring for someone at home who is sick with vomiting or diarrhea
- **Before** and **after** treating a cut or wound
- **After** using the toilet
- **After** changing diapers or cleaning up a child who has used the toilet
- **After** blowing your nose, coughing, or sneezing
- **After** touching an animal or animal waste
- **After** handling pet food or pet treats
- **After** handling garbage

### REFERENCES

CDC, COVID-19, Cleaning and Disinfecting Your Home, Page last reviewed March 28, 2020: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html>

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