

CLEANING AND DISINFECTING TO PREVENT SPREAD OF CORONAVIRUS

COVID-19 is an infectious disease caused by a newly discovered coronavirus. The disease spreads primarily through contact with an infected person when they cough or sneeze. It may also spread when a person touches a surface or object that has the virus on it, then touches their eyes, nose, or mouth. The disease causes respiratory illness with symptoms such as a cough, fever, fatigue, and in severe cases, shortness of breath and breathing difficulty.

Behavioral measures to prevent spread of this contagious virus include the following:

- » Wash your hands regularly for at least 20 seconds with soap and water or alcohol-based hand sanitizer.
- » Cover your nose and mouth with a disposable tissue or flexed elbow when you cough or sneeze.
- » Avoid close contact with people who are ill.
- » Stay home and self-isolate from others in the household if you feel ill.
- » Do not touch your face, eyes, nose, or mouth if your hands are not clean.

Environmental measures to prevent spread of COVID-19 may include routine cleaning and disinfection of frequently touched surfaces in your household or workplace. These surfaces may include tables, doorknobs, light switches, handles, desks, toilets, faucet handles, and sinks. All cleaning products are not created equal, and it's important to know which products specifically work on the coronavirus, how to use them for maximum effectiveness, and which products to avoid.



Cleaning refers to the removal of germs, dirt, and impurities from a surface. Cleaning does not kill germs; however, by removing and lessening them, it lowers the risk of spreading infection.

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

The U.S. Environmental Protection Agency (EPA) has developed a list of EPA-registered products that have qualified for use against SARS-CoV-2, the novel coronavirus that causes COVID-19. EPA List N currently (as of 03.19.2020) contains 287 products listed by EPA registration number and common brand name with demonstrated effectiveness against hard-to-kill viruses and other human coronaviruses. It is noted that disinfectant products without an EPA registration number have not been evaluated and approved as effective in killing viruses and bacteria.

Cleaning and Disinfecting Hard and Soft (Porous) Surfaces (Centers for Disease Control Guidelines)

- » Dirty surfaces should be cleaned using a detergent or soap and water prior to disinfection.
- » For disinfection, most common EPA-registered household disinfectants, alcohol solutions with at least 70% alcohol, or diluted household bleach solutions should be effective.
 - ▶ Diluted household bleach solutions can be used if appropriate for the surface.

Follow manufacturer's instructions / safety data sheet for application and proper ventilation.

Check to ensure the product is not past its expiration date. Bleach will maintain label strength of active sodium hypochlorite for up to six months after manufacture (when stored between 50°F and 70°F and away from direct sunlight). After six months, bleach starts to break down into salt and water, but still may work for household applications for nine months up to one year. Bleach stored in warmer environments (garage or outdoor shed) may start to lose its effectiveness in as few as three months. Most bleach manufacturers recommend replacement with a fresh bottle after one year. Unexpired household bleach will be effective against coronaviruses when properly diluted.

Diluted bleach solution in a secondary container is potent for approximately one to two days. Diluted bleach degrades faster than concentrated bleach in its original container.

Never mix household bleach with ammonia or any other cleanser. Mixing bleach and ammonia can create toxic chloramine gases and an explosive called nitrogen trichloride.

- » Prepare a bleach solution by mixing:
 - ▶ Five tablespoons (tbsp) or 1/3 cup / 2.5 fluid ounces bleach per gallon of water or four teaspoons (tsp) bleach per quart of water

To use a bleach solution for disinfection, wipe the surface with a saturated cloth, and allow the solution to contact the surface for five minutes and air dry. For food contact surfaces, like countertops, rinse the surface with warm water and air dry after disinfecting. Exercise caution to prevent splash of the bleach solution on your clothes or in your eyes. Use bleach solution sparingly on stainless steel sinks and surfaces and wipe down metal surfaces with water after treating them with bleach to prevent corrosion.

- » Household hydrogen peroxide (3% solution) is another stable and effective disinfectant against viruses when used on hard, non-porous surfaces. Hydrogen peroxide can be used as-is, directly from the bottle without dilution. Hydrogen peroxide solution should remain on the surface for at least one minute before wiping.
- » Isopropyl alcohol is an effective disinfectant against coronavirus if used in concentration of at least 70%. Pure (100%) alcohol evaporates too quickly to be an effective disinfectant. Wipe or spray the surface and allow it to remain in contact for at least 30 seconds.
- » Vinegar or vinegar-based alternative cleaning products are not approved by EPA as a disinfectant and are ineffective against most bacteria and viruses – it kills neither the flu nor coronavirus.

- » 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, formulation (dilutable or Ready-To-Use), application method and contact time, etc.). Contact time is an essential feature of product effectiveness in killing germs. The treated surface should be visibly wet for the duration of contact time – full contact time may require multiple applications of the product.
- » 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 that are suitable for porous surfaces

Linens, Clothing, and Other Laundered Items

- » Do not shake dirty laundry; this minimizes 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.

HOT WATER	130°F or above	Hot water is best to remove germs and heavy soil. Can shrink, fade, and damage some fabrics. Recommended for whites, typically dirty clothes and diapers.
WARM WATER	90°F to 130°F	Warm water offers good cleaning without significant fading or shrinking. Recommended for man-made fibers.
COLD WATER	80°F	Recommended for dark or bright colors that bleed or delicate fabrics.



It's important to note that the lower the temperature of the water, the more detergent you need. For heavily soiled items, prewash in cold water with a second / repeat wash in hot water is recommended.

- » Dirty laundry that has been in contact with an ill person can be washed with other people's items.
- » Clean and disinfect all hampers and carts for transporting laundry according to guidance above for hard or soft surfaces.

Personal Protective Equipment (PPE) and Hand Hygiene

- » Disposable gloves and gowns are recommended for tasks in the cleaning process, including handling trash.
 - ▶ Gloves and gowns should be compatible with the disinfectant products being used.
 - ▶ Additional PPE may be required based on the cleaning / disinfectant products being used and whether there is a risk of splash. Specific personal protection requirements will be highlighted in Section 8 of the Safety Data Sheet.
 - ▶ 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 any 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% to 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 the following:
 - ◆ 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.
- » Symptoms may appear 2 to 14 days after exposure. Employees showing early warning signs for COVID-19 should be directed to get medical attention immediately. Early warning signs may include the following:
 - ▶ Difficulty breathing
 - ▶ Persistent pain or pressure in the chest
 - ▶ New confusion or inability to arouse
 - ▶ Bluish lips or face
 - ▶ Any other symptoms that are severe or concerning
- » 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 put on, use, and 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. Updated Safety Data Sheets (SDSs) for most chemicals are readily available on the manufacturer's or supplier's website. Employers should rigorously require that employees carefully review the SDS for any cleaning and disinfecting chemical that they use or come into contact with.
- » Employers must comply with OSHA's standards on Bloodborne Pathogens, including proper disposal of regulated waste, and PPE.





Resources

EPA List of Disinfectants for Use Against SARS-CoV-2

» <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

CDC Environmental Cleaning and Disinfection Recommendations

» <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>

Please be advised that any and all information, comments, analysis, and/or recommendations set forth above relative to the possible impact of COVID-19 on potential insurance coverage or other policy implications are intended solely for informational purposes and should not be relied upon as legal advice. As an insurance broker, we have no authority to make coverage decisions as that ability rests solely with the issuing carrier. Therefore, all claims should be submitted to the carrier for evaluation. The positions expressed herein are opinions only and are not to be construed as any form of guarantee or warranty. Finally, given the extremely dynamic and rapidly evolving COVID-19 situation, comments above do not take into account any applicable pending or future legislation introduced with the intent to override, alter or amend current policy language.