

How to Clean and Disinfect Surfaces as We Return to Life as We Knew It

By Barbara M. Soule, RN, MPA, CIC, FSHEA, FAPIC

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In a nutshell...

This article discusses guidance from the U.S. Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) on cleaning and disinfecting surfaces as Americans return to pre-pandemic life. Surfaces addressed include those in public spaces, workplaces, businesses, schools, and homes.

As areas of the United States begin opening up following months of inactivity during the coronavirus (COVID-19) pandemic, the EPA and CDC have issued [joint guidance](#) to help families and facility operators properly clean and disinfect their surroundings. The guidance, according to an [April 29 press release](#), is part of the White House's and CDC's [Opening Up America Again Guidelines](#). Cleaning and disinfecting is needed because coronaviruses may live on surfaces from hours to days, depending on the type of surface¹ and other factors such as the air temperature and humidity.²



Staying Mindful of the Invisible Enemy

The federal government's cleaning and disinfecting recommendations are meant to help protect people from spreading the coronavirus from contaminated surfaces in homes, schools, offices, and businesses as life begins to return to normal. After individuals make hand contact with a contaminated surface they risk contracting the virus when they touch their mouth, eyes, or nose. They also may spread the virus to others via hand-shaking (a custom that probably should go the way of the dinosaur), or by contacting a frequently touched surface such as a door handle.

Washing hands frequently and thoroughly for at least 20 seconds is strongly encouraged to curtail the spread of the coronavirus and other pathogens. Another tactic is to clean and disinfect surfaces, especially those frequently touched including door handles, staircase banisters, refrigerator handles, cupboard handles, counter tops, the kettle handle, bathroom taps, kitchen taps, and the toilet flush handle or button.³

¹ Kampf, G. et al (2020). Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *Journal of Hospital Infection*, v. 104, 246-251.

² Prussin, A.J. et al (2018). Survival of the enveloped virus Phi6 in droplets as a function of relative humidity, absolute humidity, and Temperature. *Applied and Environmental Microbiology*, v. 84(12): e00551-18.

³ "Why 'targeted hygiene' could help protect you from Covid-19," by Jack Rear, *The Telegraph*, May 5, 2020.

Pointers on Cleaning and Disinfecting

- Just as “C” comes before “D” in the alphabet, it is important to always first *clean* surfaces to remove dirt and grime before *disinfecting* them. Applying disinfectant to a dirty surface will deplete your disinfectant’s capacity to kill pathogens, so rid surfaces of dirt, dust, body fluids, food, and other substances, and *then* disinfect.
- EPA has compiled a frequently updated list of disinfectants for use against the coronavirus. Known as “[List N](#),” all products on the list meet [EPA criteria](#) for destroying the coronavirus. The EPA and CDC note that “when EPA-approved disinfectants are not available, alternative disinfectants can be used (for example, [1/3 cup of bleach added to 1 gallon of water](#), or 70% alcohol solutions).” In fact, many household bleach products are registered by EPA and the active ingredient in bleach, sodium hypochlorite, is also the active ingredient in many of the List N products.
- Disinfectants are “stand alone” products and should not be mixed with anything but water. As our [article](#) on a recent CDC report noted, calls to U.S. poison centers during the first quarter of 2020 were up 20.4% over 2019 figures and 16.4% over 2018 figures. The timing of this increase suggests consumers may not be following product label directions carefully as they clean and disinfect surfaces for the coronavirus. One of the most dangerous things they can do is to mix disinfectants with other products, [including household products, such as vinegar](#). So, for all disinfectants, always follow the manufacturer’s information for use, which will include dilution methods, timing for the surface to remain wet and other safety features.

Keep Your Guard Up

As important as it is to clean and disinfect surrounding surfaces, researchers believe the main way the coronavirus is spread is by inhaling respiratory droplets from infected people when they cough and sneeze. As we venture into the outside world again, it is important to keep practicing social distancing and wearing appropriate face coverings in addition to cleaning and disinfecting.

Everyone wants to get back to pre-pandemic life, but unfortunately that will take time and patience. In the past few months we have been conditioned to be on our guard for an invisible and potentially deadly enemy. That enemy has not yet been eradicated. Keep your guard up by faithfully following CDC and EPA science-based guidance. We all play a part in ensuring better days are ahead!

Barbara M. Soule, RN, MPA, CIC, FSHEA, FAPIC is an infection preventionist consultant and a member of the WQ&HC.

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