



Cleaning in the Time of Coronavirus: Kill the Virus not your Lungs



We all worry about the corona virus and how to keep surfaces in our home clean and virus free. Though experts say that the best way to be safe is simply to wash our hands, thoroughly and often.

Most household chemicals are dangerous if used incorrectly and even when used *correctly* can still cause respiratory and other health issues. Bleach, Lysol, and even cleaning wipes have proven to damage lung tissue and cause neurological issues. Just because they are common, doesn't mean you don't **need to take care** in using them safely.



DO

- Read and FOLLOW all instructions for use.
- Mix as directed. If the directions say 1/4 per gallon, they mean 1/4 cup per gallon. More is not more effective, it's more dangerous.
- Leave product on surface as directed long enough to be effective and rinse surface if directed.
- Protect your skin, eyes, lungs and brain by wearing gloves, mask, safety glasses or goggles.
- Open windows and doors and turn on exhaust fans when using bleach, Lysol or other strong chemicals.
- Don't use chemicals around children or those with asthma or other respiratory issues.

DON'T

- Overuse chemicals.
- Use "natural" recipes or recipes you find on Facebook.
- Try to make your own hand sanitizer out of vodka. It doesn't work.



NEVER MIX

Bleach + Ammonia = Chloramine, a toxic gas
Bleach + Rubbing Alcohol = Chloroform
Bleach + Vinegar = Chlorine gas
Hydrogen Peroxide + Vinegar = Peracetic acid



Baking Soda + Vinegar = Ineffective against COVID 19

WASH YOUR HANDS: There is no evidence that antibacterial soap is more effective than washing your hands with regular soap. In fact, antibacterial soap contains harmful endocrine disruptors. The important part is making suds for at least 20 seconds and covering the entire hand.

For more information please visit www.cdc.gov/covid19

Here are some of the most common products approved by the EPA

Clorox Multi Surface Cleaner + Bleach
Clorox Disinfecting Wipes
Clorox Commercial Solutions® Clorox® Disinfecting Spray
Lysol brand Heavy-Duty Cleaner Disinfectant Concentrate
Lysol Disinfectant Max Cover Mist
Lysol brand Clean & Fresh Multi-Surface Cleaner
Purell Professional Surface Disinfectant Wipes
Sani-Prime Germicidal Spray
You can [read the full list of disinfectants here](#).

Effective Solutions for Killing Corona Virus

You need to amp up your typical cleaning routine *only if* someone in the household exhibits signs and symptoms of a respiratory infection, or if you live in an area with known cases of COVID-19. In that scenario, clean high-traffic areas that get touched frequently, such as kitchen counters and bathroom faucets, three times a day with a product that kills viruses. The good news is that coronaviruses are some of the easiest types of viruses to kill with the appropriate product, according to the Environmental Protection Agency. Win.

A lot of cleaning products might be hard to come by for a while. In the meantime you can make your own cleaners, that if used safely, will kill the virus and keep your home squeaky clean.

Soap and Water: Just the friction from scrubbing with soap and water can break the coronavirus's protective envelope. Discard the towel or leave it in a bowl of soapy water for a while to destroy any virus particles that may have survived.

Bleach: The CDC recommends a diluted bleach solution ($\frac{1}{3}$ cup bleach per 1 gallon of water or 4 teaspoons bleach per 1 quart of water) for virus disinfection. *Wear gloves while using bleach*, and **never mix it with ammonia** or anything except water. Once mixed, don't keep the solution for longer than a day because bleach will degrade certain plastic containers or use a glass spray bottle. Because bleach is harsh for many countertops as well, you should *rinse surfaces with water* after disinfecting to prevent discoloration or damage to the surface.

Isopropyl (Rubbing) Alcohol: Alcohol solutions with at least 70 percent alcohol are effective against coronavirus on hard surfaces. First, clean the surface with water and detergent. Apply the alcohol solution (do not dilute it) and let it sit on the surface for at least 30 seconds to disinfect. Alcohol is generally safe for all surfaces but can discolor some plastics.

Hydrogen Peroxide: According to the CDC, household (3%) hydrogen peroxide is effective in deactivating rhinovirus, the virus that causes the common cold, within 6 to 8 minutes of exposure. Rhinovirus is more difficult to destroy than coronaviruses, so hydrogen peroxide should be able to break down coronavirus in less time. Pour it undiluted into a spray bottle and spray it on the surface to be cleaned, but let it sit on the surface for at least 1 minute. Hydrogen peroxide is not corrosive, so it's okay to use it on metal surfaces. But similar to bleach, it can discolor fabrics if you accidentally get in on your clothes. It's great for getting into hard-to-reach crevices. You can pour it on the area and you don't have to wipe it off because it essentially decomposes into oxygen and water.