Public health experts recommend frequent handwashing and cleaning and disinfecting surfaces to prevent COVID-19 and other viral respiratory illnesses. As Americans reach for hand sanitizers and disinfectants, many people wonder what works against COVID-19 and what doesn’t. Combat misinformation about coronavirus by learning the facts to counter these myths about cleaning hands and surfaces.

### Surfaces

**Cleaning is less effective than disinfecting.**  
*Truth.* Cleaning removes germs, dirt and impurities from surfaces or objects. Soap, detergents and water physically remove germs but usually do not kill germs. Surfaces should be cleaned thoroughly with soap and water, then rinsed to remove traces of detergent and other organic matter before using a sanitizing or disinfecting product, such as bleach. Detergents and organic matter interfere with the ability of chlorine in bleach to work.

**Sanitizing and disinfecting are the same thing.**  
*Truth.* Sanitizing lowers the number of germs on surfaces or objects to a safe level so that infection is not likely to occur. Disinfecting kills germs on surfaces or objects. What makes a chemical a disinfectant depends on the concentration and how long it stays on the surface.

**Only certain brands of sanitizers and disinfectants work on COVID-19.**  
*Truth.* To determine if a sanitizer or disinfectant is effective, check the Environmental Protection Agency (EPA) registration number on the label. This means that the EPA has determined that the product is effective. There are specific products listed for the human coronavirus. Go to the EPA website and choose Coronavirus Disease 2019 (COVID-19) page for List N: List of Disinfectants for use Against Coronavirus (COVID-19). Search for the EPA Registration Number on your product in List N. As long as the number is the same, different product names may work.
Any kind of bleach can be used for sanitizing and disinfecting.

*Truth.* Some bleach is made for sanitizing and disinfecting, and some is made for cleaning clothes. Bleach that kills germs should be plain, with no scent, made with 5 to 6 percent hypochlorite. Bleach that is splash less and has a fragrance should not be used for sanitizing and disinfecting.

Any kind of alcohol can be used against coronavirus.

*Truth.* Alcohol kills germs if the solution has the right percentage of alcohol. Disinfecting solutions of at least 70 percent alcohol can clean surfaces like tables, mobile devices, doorknobs and light switches. Isopropyl and ethyl alcohol are both effective if the solution is at least 70 percent. Isopropyl alcohol typically purchased at drug stores is a combination of alcohol and water and will not need to be diluted for cleaning.

Disinfectants work the same on all surfaces.

*Truth.* Disinfectants may not work on all surfaces. Some surfaces are porous, some are semi-porous and some are non-porous. Read the product label to determine which surfaces a disinfectant will work on.

Making your own disinfecting wipes is effective against COVID-19.

*Truth.* Advice on making your own disinfecting wipes is making its way across social media. A better solution is to make a bleach and water solution and use a spray bottle. The Centers for Disease Control (CDC) recommends four teaspoons of bleach per quart of water. Make a fresh solution every day as bleach becomes less effective over time. Using dishcloths soaked with bleach solution may not be as effective because any traces of detergent in the cloth or any organic material can interfere with the ability of the chlorine to kill germs.

Any kind of sanitizing or disinfecting product will work on food-contact surfaces.

*Truth.* Not all products are made for use on food-contact surfaces. Some may need to be diluted and some may leave residues. If a product is safe for food-contact surfaces, it will say so on the label.

Always read the directions on cleaning and disinfecting products. Some only work for particular surfaces, some must be diluted correctly and some must stay in contact with the surface to disinfect properly.
**Hands**

I can make my own hand sanitizer since it is not available in stores.

*Truth.* Making your own hand sanitizer is not recommended. Using the wrong proportion of ingredients can burn your skin and or make the sanitizer ineffective.

Any kind of hand sanitizer will kill germs.

*Truth.* Hand sanitizers must be 60 percent alcohol or more to be effective against germs. Always read the instructions on the label to apply the sanitizer correctly. Some hand sanitizers do not contain any alcohol and are not effective against coronavirus.

Hand sanitizer lasts a long time.

*Truth.* Check expiration dates to determine if stored hand sanitizers are still effective. They are typically good for three years after the manufacture date. Over time, the germ-killing alcohol in hand sanitizer will evaporate, lowering the alcohol percentage and making the product less effective. Heat causes alcohol to evaporate. Hand sanitizer stored in a vehicle during hot summer months may be less effective.

Sanitizing wipes can also be used as a hand sanitizer.

*Truth.* Sanitizing or disinfectant wipes are made for surfaces. Unless the product states it is for hands, use sanitizing or disinfecting wipes only on surfaces.

Hot water is necessary for effective handwashing.

*Truth.* Water temperature is not a factor in washing away germs. Soaping up and scrubbing for 20 seconds helps remove germs from hands when they are rinsed with water of any temperature.