

WP 3/29/20

## **The right way to clean and disinfect household surfaces**

Good household hygiene means cleaning and disinfecting the same areas you tackle in normal times. Brian Sansoni, senior vice president at the American Cleaning Institute, says to pay attention to food preparation surfaces and other high-touch surfaces, including light switches, faucets, remote controls, doorknobs, refrigerator door and microwave handles, and your computer keyboard. Sansoni echoes Vinetz's advice, "You don't need to panic-clean. Smart, targeted hygiene throughout the day and week is the best way to go."

Before disinfecting, remove any visible dirt and grime; this will help the disinfectant do its job. Vinetz and Sansoni recommend using tried-and-true disinfectants such as bleach (sodium hypochlorite), hydrogen peroxide (hydrogen peroxide expires six months after opening but can last up to three years unopened), grain alcohol (ethanol, found in beverages), and rubbing (isopropyl) alcohol. If you purchase any over-the-counter products that say "disinfectant" on the label, Sansoni says they are required to meet government specifications; but to be sure the product has met all government requirements for effectiveness, look for an EPA Registration Number on the label. He also says you must follow the product label instructions exactly for the disinfectant to be effective. Vinetz says to look for any product that has an alcohol content of 60 percent or higher.

When using any type of disinfectant, both Vinetz and Sansoni emphasize the importance of waiting 30 seconds to several minutes (check the label for timing) for the product to effectively kill a germ or virus. Vinetz also says it's a myth that wiping surfaces in circles spreads the virus around; no matter how you apply a disinfectant — spraying or wiping — as long as you wait for the area to dry, the germs will be killed.

Sansoni says bleach is one of the most economical disinfecting agents. He says to create a bleach/water solution per the label instructions, or follow the Centers for Disease Control and Prevention's recommended recipe of a third-cup bleach per gallon of water or four teaspoons bleach per quart of water. But when using bleach, Sansoni and Vinetz stress one thing: Never mix bleach and ammonia together, as it creates a dangerous and potentially deadly chlorine gas.

Kurt Zilm, chair of the Yale University Chemistry Department, cautions against mixing any products together because the outcome could be dangerous (or one product could simply neutralize another, causing it to be ineffective).

For hard, durable surfaces that are meant to be chemically resistant, such as metals, granite or tile, use any disinfectant you have on hand. For porous surfaces including marble, consult the surface manufacturers' recommendations for the best ways to clean them to avoid damage. Don't use any cleaners that are acidic on a porous material; it will ruin the surface. And last, if disinfecting any surfaces that come into contact with food (like counters or cutting boards), rinse them with water after the disinfectant dries.

Zilm says that just about any disinfectant and cleaner is safe to use on glass because glass is chemically inert. “But,” he cautions, “you need to be careful particularly with other clear plastic materials like polycarbonate and Plexiglass, because a lot of cleaners can cloud those by breaking up their surfaces.” In those cases, use a specially formulated product (check with the manufacturer) or use soap and water, which Vinetz and Zilm say, in most cases, will render the virus less effective or kill it.

When you bring mail or boxes into your house, washing your hands after handling is sufficient, but Vinetz says you should spray the outside of reusable shopping and grocery bags with a disinfectant, because they have been in a highly public place.

And when it comes to protecting yourself and your family, Vinetz says to ditch the gloves. “Unless you are wearing gloves to protect your hands from drying and cracking while washing the dishes, then you should forget them. They are harmful, because they will just give you a false sense of protection.” Better to just wash your hands and not touch your face.