**Coronavirus on Surfaces: What's the Real Risk?**

By [Stephanie Watson](https://www.webmd.com/stephanie-watson)

Sept. 3, 2020 -- In March, concerns over the [coronavirus](https://www.webmd.com/lung/coronavirus) surviving on surfaces fueled a disinfectant shopping frenzy that left store shelves bare of hand sanitizer and cleaning wipes. A video featuring a Michigan doctor sanitizing his groceries one by one captured more than 26 million [views](https://www.youtube.com/watch?v=sjDuwc9KBps) on YouTube.

**Dos and Don’ts of Disinfectants**

Can a DIY cleaner made with vodka kill coronavirus bacteria? Here’s what you should know.

With no signs of the coronavirus [pandemic](https://www.webmd.com/cold-and-flu/features/what-is-pandemic) letting up, protecting yourself from germs is as important as ever. But we now know that the virus that causes COVID-19 mainly [spreads](https://www.cdc.gov/coronavirus/2019-ncov/faq.html) through respiratory droplets in the air. So can you really catch COVID-19 from touching a cereal box you bought at the supermarket, or a package delivered to your door?

It is theoretically possible, but highly unlikely, says Dean Blumberg, MD, chief of pediatric infectious diseases at UC Davis Children's Hospital. "You'd need a unique sequence of events," he says. First, someone would need to get a large enough amount of the virus on a surface to cause infection. Then, the virus would need to survive long enough for you to touch that surface and get some on your hands. Then, without washing your hands, you'd have to touch your eyes, nose, or mouth.

**Coronavirus on Surfaces**

Researchers have found that the coronavirus can stay alive on surfaces. A *New England Journal of Medicine* (*NEJM*) [study](https://www.nejm.org/doi/full/10.1056/NEJMc2004973) from April showed that the new coronavirus can survive on plastic and stainless steel for up to 3 days, and on cardboard for up to 1 day. Another study from China found that the virus can travel on the soles of shoes.

**How to Wear a Face Mask**

Face masks help protect you and others from spreading or catching COVID-19. However, it’s important to follow the proper steps to make sure you’re not contaminating the mask or your face.

But the results of [studies](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7333993/) like this one have led some people to exaggerate the risk of COVID-19 transmission, says Emanuel Goldman, PhD, a professor of microbiology, biochemistry, and molecular genetics at the New Jersey Medical School of Rutgers University. In a response published in *The Lancet Infectious Diseases* this past May, he wrote that the *NEJM* [study](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7333993/) used much higher concentrations of the virus than people would find in the real world.

"In my opinion, the chance of transmission through inanimate surfaces is very small, and only in instances where an infected person coughs or sneezes on the surface, and someone else touches that surface soon after the [cough](https://www.webmd.com/cold-and-flu/overview) or [sneeze](https://www.webmd.com/allergies/features/11-surprising-sneezing-facts) (within 1-2 hours)," Goldman wrote. Basically, it would take the perfect combination of events Blumberg described to get sick from touching something contaminated with the virus.

Also, studies have only proved that the virus stays alive on surfaces -- not that you can catch it from touching those surfaces. "They don't prove that just because it can survive on a surface, it can be transmitted that way," Blumberg says.

In late May, the [CDC](https://www.cdc.gov/media/releases/2020/s0522-cdc-updates-covid-transmission.html) updated its website to say it's possible, but [unlikely](https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html), for people to catch the virus this way. Surface transmission may have played a role in two cases.  A recent [study](https://wwwnc.cdc.gov/eid/article/26/9/20-1798_article?deliveryName=USCDC_333-DM32083#tnF1) from China documented possible transmission through an elevator button, and another [study](https://www.sciencemag.org/news/2020/05/study-tells-remarkable-story-about-covid-19-s-deadly-rampage-through-south-african) of cases in a South African hospital found that contaminated medical equipment may have helped spread the virus.

**The Right Way to Protect Yourself From COVID-19**

Alicia Kraay is an infectious disease epidemiologist at Emory University who is studying how much cleaning and disinfection impacts the risk of getting COVID-19.

She believes that hard surfaces may play a role in transmission of the infection, especially if they’re in a common area. She recommends that those should be cleaned regularly.

But If you are trying to do things that cut your overall risk of catching COVID, obsessively wiping down every surface around you isn’t going to be very protective if it’s the only thing you’re doing.  Cleaning surfaces does help if you’re doing other things, too, like wearing a mask, social distancing and washing your hands regularly. It’s another layer of safety.

Blumberg says if you put too much of your focus on disinfecting surfaces, you could miss the real COVID risks. "I find that all these contact concerns distract people from doing things that are proven to prevent transmission, like wearing a mask and [social distancing](https://www.webmd.com/lung/coronavirus-isolation)," Blumberg says.

People who spray everything in sight with bleach and other harsh cleaners should also know that disinfectants can have [risks](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5702691/), too. For one thing, they can irritate the lungs and worsen symptoms in people who have asthma.

These products can also irritate your skin if you don't use them carefully. "For many of these disinfectants, you should really be wearing gloves," Blumberg says.

Wearing a mask when you're around other people is a proven protection strategy that can cut your risk of catching COVID-19 by about [65%.](https://www.ucdavis.edu/coronavirus/news/your-mask-cuts-own-risk-65-percent/) Putting at least 6 feet between you and the nearest person will also keep the coronavirus at a safe distance.

Blumberg says it's still a good idea to [wash your hands](https://www.webmd.com/cold-and-flu/cold-guide/cold-prevention-hand-washing) with soap and water. Hand-washing is especially important after you've been out in public or used the bathroom, and before you eat. Though you can't catch COVID through [food](https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/food-and-COVID-19.html), there's a slight chance you could get it from the germy hands that carry that food into your mouth.

Keep your surroundings clean, but don't go overboard with the disinfecting. "I don't think the benefits are worth the effort," Blumberg says.

*WebMD senior health news writer Brenda Goodman contributed to this article.*