

# 6 Things You Should Never Do With Bleach

[aarp.org/health/conditions-treatments/info-2020/bleach-precautions.html](https://aarp.org/health/conditions-treatments/info-2020/bleach-precautions.html)

a111495r

## Common mistakes people make with this household cleaning staple

by Peter Urban, [AARP](#), June 11, 2020 |



solidcolours/getty images

[En español](#) | Liquid bleach can be a safe and efficient cleaner and disinfectant when handled correctly, but can be rather harmful when not used properly. Though a staple in American homes for more than a century, many households appear to be unfamiliar with its potential dangers.

The Centers for Disease Control and Prevention (CDC) has reported a 20 percent increase in calls to poison control centers during the coronavirus outbreak presumably related to the misuse of household cleaning products as people sought to protect

themselves from infection. A follow-up survey CDC conducted in May found 39 percent of Americans had engaged in at least one “high-risk practice” in the prior month to prevent the transmission of COVID-19, including gargling with diluted bleach

---

**For the latest coronavirus news and advice go to [AARP.org/coronavirus](https://www.aarp.org/coronavirus).**

---

Robert Laumbach, an associate professor at Rutgers University’s Environmental and Occupational Health Sciences Institute, says there are some misconceptions people have about liquid bleach including “thinking it has systemic antiviral properties if ingested,” or that diluting concentrated liquid bleach weakens its disinfecting ability.

Clorox, the maker of the oldest and most familiar brand of liquid bleach (active sodium hypochlorite or NaClO), say the best first step is to read and follow the instructions on the label. “To use bleach properly, read and follow the label carefully, as instructions may vary depending on the product,” a spokesperson for the company told AARP in an email exchange.

The U.S. Environmental Protection Agency (EPA) advises to check the label to see if the bleach is intended for disinfection, has a sodium hypochlorite concentration between 5 percent and 6 percent, and is not past its expiration date. “Some bleaches, such as those designed for safe use on colored clothing or for whitening, may not be suitable for disinfection.”

Here are six things experts say you shouldn’t do with liquid bleach.

## **1. Don’t mix bleach with other cleaning products**

---

Other than adding water, bleach should be used on its own. Mixing ammonia, vinegar, hydrogen peroxide, alcohol or other chemicals with sodium hypochlorite may cause chlorine gas to be released, a toxic chemical you don’t want to breathe in.

In 2016, the American Association of Poison Control Centers reported over 6,300 exposures to chlorine, making it the most common inhalational irritant in the U.S. About 35 percent occurred as a result of mixing liquid bleach with other household cleaning products, according to *Chlorine Gas Toxicity*, a book cowritten by Ashkan Morim, M.D., and Gregory T. Guldner, M.D., of the University of California, Riverside.

Symptoms of chlorine gas exposure include burning of the throat, eye membranes, trachea and the bronchi that conduct air from the windpipe to the lungs, they wrote. Higher concentrations can cause narrowing of the airway, fluid in the lungs and other lung injuries.

## 2. Don't gargle or drink diluted bleach

---

Some people may think bleach can kill off viruses in the body, but that's not so, according to Laumbach. Gargling or drinking bleach most likely would cause superficial burns in the esophagus. The CDC notes that adults attempting suicide by ingesting liquid bleach have shown that "a lethal dose" of sodium hypochlorite can vary from 7 to 18 ounces at concentrations of 3 percent to 12 percent.

## 3. Don't bathe in bleach

---

Sure, you can swim in a chlorinated pool – but the concentration of bleach used to keep a pool clean is miniscule compared to the strength of household bleach. "It's usually recommended to maintain 2-4 ppm (parts per million) free available chlorine in pool water. That's more than 10,000-fold dilution compared to household bleach," Laumbach says. Household bleach will irritate skin, and prolonged contact can damage skin, he says.

Wash your skin immediately if bleach gets on it, and do the same if it gets in your eyes, advises Clorox. The company also recommends wearing protective gloves, if you plan on cleaning with bleach for an extended period.



**Save 25% when you join AARP and enroll in Automatic Renewal for first year.** Get instant access to discounts, programs, services, and the information you need to benefit every area of your life.

## 4. Don't use bleach straight out of the bottle

---

Household bleach is no more effective in disinfecting at higher concentrations than at those recommended by the manufacturer, according to Laumbach. "You should dilute it to prevent irritation of skin, eyes and the respiratory tract. Higher concentrations are potentially harmful overkill."

A spokesperson for Clorox echoes that advice: "As with any other bleach product, Clorox Bleach must be diluted." To properly disinfect hard, nonporous surfaces, Clorox recommends you pre-wash the surface, mop or wipe with a diluted solution of liquid bleach (1/2 cup of Clorox Bleach per gallon of water), and allow the solution to sit on the surface for five minutes before rinsing it off. Also, make sure to use liquid bleach in a well-ventilated area to avoid inhaling harmful fumes.

## 5. Don't use bleach to clean fruits and vegetables

---

The U.S. Food and Drug Administration (FDA) reassures consumers that “there is currently no evidence of human or animal food or food packaging being associated with transmission of the coronavirus that causes COVID-19.”

Instead, the FDA recommends consumers “rinse fresh fruits and vegetables under running tap water, including those with skins and rinds that are not eaten.” It also suggests washing the lids of canned food before opening to limit potential exposure to other food-borne illnesses.

## 6. Don't soak your face mask in liquid bleach straight out of the bottle

---

“Soap and hot water will clean the mask and kill any coronavirus,” says Laumbach, who advises that bleach is not needed to disinfect a cloth face mask.

But, the CDC says it's okay to hand wash a cloth mask in a diluted solution of bleach. They recommend 4 teaspoons household bleach per quart of room temperature water, soaking the mask for 5 minutes, and then thoroughly rinsing and drying it. Or, CDC says you can use the washing machine: “Use regular laundry detergent and the warmest appropriate water setting for the cloth used to make the face covering.”

Also of Interest

---

## Can You Catch the Coronavirus Through Your Eyes?

---

Experts say it's not a big concern, but there are ways to lower your risk

---

by Barbara Stepko, AARP, June 10, 2020 |

Getty Images

En español | By now, face masks have become a part of our daily wardrobe, offering a sense of security by denying potentially deadly airborne virus particles entry into our nose and mouth.

But a recent bit of news has become something of an eye-opener: A few weeks ago, virologist and epidemiologist Joseph Fair, appearing on NBC's *Today* show from a hospital bed, claimed he had contracted COVID-19 through his eyes. Fair said he'd been aboard a packed flight from New York City to New Orleans and believed he was taking

“max precautions” — wearing a mask and gloves, and diligently wiping down his seat.



But his eyes were exposed. “You can still get this virus through your eyes,” Fair asserted, “it's the best guess I have of probably how I got it.”

---

**For the latest coronavirus news and advice go to [AARP.org/coronavirus](https://www.aarp.org/coronavirus).**

---

Four months earlier, Wang Guangfa, a respiratory specialist at Peking University, was infected by the coronavirus after coming into contact with patients in the Chinese city of Wuhan, with a mask covering his mouth and nose but without eye protection.

All of which begs the question: Are we putting ourselves at risk by leaving our eyes exposed? Can we actually catch the coronavirus through our eyes? It may be possible, says John Brooks, M.D., chief medical officer for the Centers for Disease Control and Prevention (CDC) COVID-19 response. “The virus could enter the body through mucous membranes that cover the white parts of our eyes,” says Brooks, “but it would be very hard to prove.”

To be sure, infectious diseases, in general, can be transmitted through various routes, the eyes included. When a person who is infected coughs, sneezes or talks, the virus can travel in tiny particles from their mouth or nose into another person's face. “These droplets are most likely to be inhaled through your nose or mouth, but they can also enter the body through the eyes,” says Viral Juthani, M.D., assistant professor of



ophthalmology and visual sciences at the Albert Einstein College of Medicine in New York City. “You can also become infected if you touch a contaminated surface that has coronavirus on it, like a handle or doorknob, and then touch your eyes.”

What's more, says Sonal Tuli, M.D., associate professor of ophthalmology at the University of Florida, and a clinical spokesperson for the American Academy of Ophthalmology, “We know that many other viruses, such as the influenza virus, can cause both respiratory symptoms and ocular symptoms. You can be coinfectd.”

This is not all that surprising, since our eyes, nose and throat are connected by a nifty bit of plumbing, known as the nasolacrimal system, that carries tears from the ocular surface to the nasal cavity and down the back of the throat. When we cry, our nose runs; put medicine in your eyes and you'll often feel and taste it in the back of the throat.

For the most part, however, health experts believe we're probably more likely to become infected via our nose and mouth, than through our eyes, in part, says Tuli, “because our nose and mouth provide a direct passageway to the lungs,” whereas infectious particles that enter through our eyes have to take a more roundabout route.

Also, notes James Cherry, M.D., a distinguished research professor and infectious disease expert at the David Geffen School of Medicine at UCLA, our tears contain antibodies that can help detect and latch onto unfriendly antigens, such as bacteria and viruses, and destroy them.



**Save 25% when you join AARP and enroll in Automatic Renewal for first year.** Get instant access to discounts, programs, services, and the information you need to benefit every area of your life.

---

More reassurance: The low rate of eye complications — most notably, viral conjunctivitis (or pink eye) — in coronavirus patients. Health officials believe that conjunctivitis develops in just 1 to 3 percent of people with coronavirus. A study of hospitals in China published in the *New England Journal of Medicine* found “conjunctival congestion” in only 0.8 percent of patients with a confirmed diagnosis of COVID-19. What's more, says Tuli, “You have to wonder: Was the eye the initial source of the infection, or did the infection travel backwards to the eye?”

By the way: If you start to notice the telltale symptoms — redness, irritation, watery discharge — don't panic. There are a host of different causes for conjunctivitis.

Regular handwashing (at least 20 seconds with soap and warm water), social distancing and covering your mouth and nose can go a long way toward lowering our risk for infection, says Brooks.

A few more ways to keep your eyes safe:

- **Don't touch your eyes.** Research from the National Institutes of Health found that people touched common objects an average of 3.3 times per hour and their faces an average of 3.6 times per hour. If you feel an urge to itch, rub or simply adjust your glasses, use a tissue. Dry eyes, in particular, can lead to rubbing. “You can use moisturizing drops so you're less likely to rub,” says Tuli. If allergies are behind the rubbing, consider over-the-counter antihistamine eye drops. In general, “be aware of what you're doing,” says Tuli, who was amazed at how often she touched her face when watching herself during Zoom calls. And, yes, there's an app for that: A new Fitbit Ionic app, JalapeNO! (“Treat your hands as if you have been chopping jalapeno peppers for a family of seven billion people,” says the site), trains you to keep your mitts away from your eyes, nose and mouth by vibrating every time your hands venture northward.
- **Consider wearing glasses.** “For people who are in close contact with infected patients, like healthcare workers, eye protection such as safety goggles or a face shield are recommended,” says Juthani. “For others who are practicing social distancing, additional eye protection is not universally recommended,” though if you're still concerned, you can slip on eye protection for an extra layer of safety. “Someone told me, ‘I've got an elderly mother. I want to do everything possible to protect her,’” says Tuli. “Well, in that case, glasses might not be a bad idea.” What's more, glasses will discourage you from touching your eyes. Wraparound styles will offer the best protection, since respiratory droplets sprayed in your direction can reach your eyes through the exposed sides, tops and bottoms of traditional specs.
- **Be careful with the contacts.** Contact lenses in and of themselves do not increase your risk of infection — as long as you're careful, says Tuli. “The reason people get into trouble is because they don't wash their hands before they put them in and take them out.” Now is the time to get really good about contact lens hygiene. “Clean your contacts regularly,” says Tuli. “Or, if you can, consider switching to one-day disposable contacts. Doing all of these things is probably enough.” And it goes without saying: Definitely take a break from wearing contact lenses if you have pink eye.

# Premature Deaths From Cancer Costly to African Americans

---

## Study finds racial disparity in 'lost earnings' between blacks and whites

---

by Peter Urban, [AARP](#), June 9, 2020 |



Getty Images

Just in 2015, racial disparities in cancer mortality rates cost the African American community an additional \$3.2 billion in lost earnings compared with whites, according to a report released in June from the American Cancer Society.

The study, led by the organization's public health researcher, Jingxuan Zhao, used [national cancer death](#) and life expectancy data from 2015 to determine “person-years of lost life” by race. Researchers then used federal statistics on annual median earnings to calculate lost earnings.

For [African Americans](#) on average, each cancer death resulted in 19.7 years of lost life and \$232,600 in lost earnings. For whites, the average was 17.2 years of lost life and \$175,600 in lost earnings. In 2015, the disparity meant the African American community



had an additional 241,334 person-years of lost life and \$3.2 billion more in lost earnings than the white community, according to the study.

---



**Save 25% when you join AARP and enroll in Automatic Renewal for first year.** Get instant access to discounts, programs, services, and the information you need to benefit every area of your life.

---

"Since the 1960s, black men and women have had higher cancer mortality rates than their white counterparts," says the study, published June 3 in the medical journal *JNCI Cancer Spectrum*. "Cancer disparities by race/ethnicity [also] vary at the regional level in the United States, illustrating the importance of state and local policies."

To address the disproportional economic burden that African Americans face, the study suggests the importance of improving equal access to effective cancer prevention, screening and treatment.

A higher percentage of white females undergo a mammography for breast screening compared with black females, the study noted. Black and Hispanic women diagnosed with breast cancer are at greater risk of having a one- to three-month delay in the start of treatment. And black women were less likely to receive radiation therapy after undergoing breast-conserving surgery.

The study also noted the importance of bringing more racial and ethnic diversity into the workforce that specializes in oncology and increasing health insurance coverage to minority populations.

"The burden of many of these cancers could be reduced through improving access to effective, high quality and targeted cancer prevention, screening and treatment for these vulnerable populations," the researchers say. "Broad, equitable application of strategies to address these issues will be essential for reducing the economic burden associated with racial/ethnic cancer disparities."

More on Health

---

## 10 Things You Can Do Right Now to Help Prevent Cancer

---

[GO TO THIS ARTICLE](#)

