

Fact Sheet: Cleaning and Disinfecting

Best practices to help keep your home safe, clean, and healthy

Choosing Cleaning Products

Chemical components and fragrances in many cleaning products can cause headaches, skin irritation, and can cause or exacerbate asthma. Some chemicals can even disrupt hormones and cause cancer. In addition, these cleaners are bad for the environment, contributing to water, land, and air pollution. “Green cleaning” is simply cleaning with products that reduce negative health and environmental impacts. Green cleaners release less indoor air pollution, have fewer air contaminants, and are generally safer for public health and the environment, when used correctly. Beware of false claims on product labels—not all products marketed as ‘green’ cleaners are actually better for you and the environment. It’s important to look for third party certifications such as [Green Seal](#)¹ and [EPA Safer Choice](#)² on the label to make sure you are choosing proven, effective, and safe products.

Safe and Proper Cleaning and Disinfecting

Step 1 : Clean!

Cleaning is the removal of dirt and impurities. Cleaning physically removes dirt and germs but may not kill all germs. This is an important first step! In order to have effective disinfection of surfaces, you must clean the surface first and remove all residues.

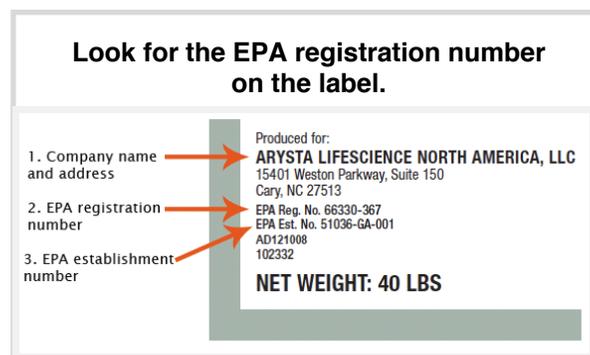
- **Wash the surface**
 - Use **hot, soapy water and a microfiber cloth** to dislodge dirt and germs. For cleaning on the go, fill a spray bottle with hot, soapy water. Scrub the surface thoroughly, wiping in a grid pattern to ensure the entire surface is covered. Dishwashing liquid is an excellent degreaser and cleaner. Make sure to choose a fragrance and dye free dishwashing liquid.
 - If you stop here and let the surface dry, you will leave a biofilm of dead germs, dirt, and soap residue on your surface. Keep going!
- **Rinse the surface**
 - Using a second microfiber cloth with warm water, rinse the surface, wiping in a grid pattern to ensure the entire surface is covered.
- **Dry the surface**
 - Use a third microfiber cloth to dry the surface. The surface is now clean, residue-free, and ready for disinfecting.



Step 2: Disinfect!

Disinfectants destroy or inactivate germs remaining on a surface after cleaning by using chemicals. Using a disinfectant by itself does not remove dirt or germs from a surface and disinfectants are less effective on dirty surfaces. It is important to first clean the surface before applying a disinfectant.

- **Choose a safer disinfectant**
 - All disinfectants are ‘antimicrobial pesticides’ and must be registered with the [Environmental Protection Agency \(EPA\)](#)³. EPA verifies the product’s safety, marketing claims, and effectiveness. Look for the EPA Registration Number on the product label, without this number, the product is not approved for use. Also, make sure the product is appropriate for the type of germ you are trying to eliminate. For example, a product label stating “kills influenza” with an EPA registration number will be



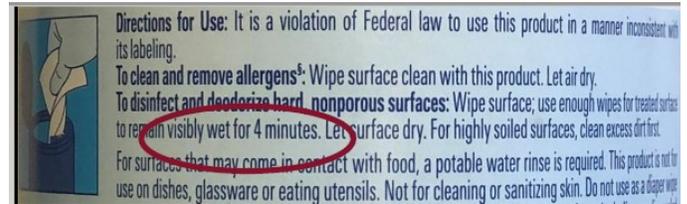
effective at killing flu-causing germs.

- Look for [EPA's Design for the Environment](#)⁴ logo on antimicrobial pesticides which identifies disinfectants with safer ingredients. Hydrogen peroxide, isopropyl alcohol, citric acid, and lactic acid are active ingredients which meet the safer choice standards and are unlikely to have negative health effects such as causing asthma.



- **Read the label!**

- Look for contact time or dwell time! No disinfectant kills germs instantly upon contact. Follow the label instructions exactly to make sure the product is most effective. Most disinfecting wipes require the surface to remain visibly wet for 4 minutes. Bleach solutions typically need 2 minutes of contact time. If a disinfectant is wiped or rinsed off before the required dwell time, the disinfectant did not effectively kill the germs you were trying to target.
- Pay attention to warnings, precautions, and required personal protective equipment. These are not recommendations, they are required to adequately protect your and your family's health.



- **Take precautions to protect your health!**

- Open windows to ventilate.
- Wear personal protective equipment such as gloves and safety glasses.

- **Make sure your surface is clean first!**

- Disinfectants will not work well on a surface with dirt, debris, and cleaner residue. (see Step #1)

- **Follow instructions carefully to apply the disinfectant!**

- Spray disinfectant directly onto the surface. Always spray below and away from your face.
- Leave the surface visibly wet for the required contact time.
- Never spray a disinfectant into the air and avoid aerosol cans — using aerosols creates harmful indoor air pollution and does nothing to disinfect your home because there is not sufficient contact or dwell time to effectively kill the germs.

- **Clean up!**

- Remove and discard wipes and gloves in the trash.
- For surfaces that may come into contact with food, a potable water rinse is needed to remove the dried disinfectant from the counter.
- Refer back to the label. Some products must be rinsed off to prevent corrosive damage to the surface and to prevent people from touching the residual disinfectant.
- Wash and dry your hands.

References and Links:

- 1.Green Seal Certification—www.greenseal.org
- 2.EPA Safer Choice—www.epa.gov/saferchoice
- 3.EPA Pesticides—<https://www.epa.gov/pesticides>
- 4.Design for the Environment Logo for Antimicrobial Pesticide Products and Product List—<https://www.epa.gov/pesticide-labels/design-environment-logo-antimicrobial-pesticide-products>
- 5.SF Environment—Safer Products and Practices for Disinfecting and Sanitizing Surfaces—https://sfenvironment.org/sites/default/files/fliers/files/sfe_th_safer_products_and_practices_for_disinfecting.pdf