



## Natural Life Consulting, LLC

7 Hodges Street, North Andover, MA 01845

339-368-7551 fax: 978-409-1269

<http://NaturalLifeConsulting.com>

### **The basics: cleaning, sanitizing, and disinfecting with conventional chemicals**

“Cleaning” should always be the first step to remove dirt and germs and is very important. This can be done with water, soap/detergent, and scrubbing. This process by itself removes dirt and most germs (e.g., viruses, bacteria, parasites, or fungi) and reduces the risk of infection. This must be the first step before sanitizing or disinfecting to make it easier for the chemicals in those products to kill germs.<sup>1</sup>

“Sanitizing” is a process which reduces germs to levels considered safe by public health codes. Clean objects and surfaces before sanitizing. Sanitizing is typically done using regular unscented household bleach and water. The bleach should be 5-9% sodium hypochlorite. Mix one tablespoon of bleach with one gallon of room temperature water. After application, allow to air dry (rinse with clean water and then allow to air dry for surfaces that may come into contact with food). This sanitizing step may not be necessary if surfaces and objects are properly cleaned after use.<sup>2</sup>

However, bleach is highly corrosive, and toxic to contact and to smell. When coming into contact with the skin, bleach can cause skin irritation and chemical burns.<sup>3</sup> Repeated exposure to bleach-based products can cause respiratory damage such as worsening asthma or cause asthma in previously healthy individuals.<sup>4</sup>

“Disinfecting” kills most germs on surfaces and objects. Clean objects and surfaces before disinfecting. As with sanitizing, this can be accomplished using regular unscented household bleach and water. The bleach should be 5-9% sodium hypochlorite. Mix one third cup bleach with one gallon of room temperature water. The bleach solution should remain on the surface for at least one minute before wiping (rinse with clean water and then allow to air dry for surfaces that may come into contact with food). Disinfecting can also be done with an EPA-registered disinfecting product.<sup>5</sup>

### **Considerations when using household conventional cleaning, sanitizing, and disinfecting products**

All of these products contain chemical ingredients. Some chemicals are skin irritants and may cause a rash, and corrosive chemicals can burn the skin or eyes. Other chemicals may cause or trigger respiratory issues such as asthma.<sup>6</sup> Read the product label (or the product Safety Data Sheet) for safety information before using them. Pick the right product for the job! “Cleaners” are generally less hazardous than sanitizers or disinfectants.

---

<sup>1</sup> <https://www.cdc.gov/hygiene/cleaning/cleaning-your-home.html>

<sup>2</sup> <https://www.cdc.gov/disasters/bleach.html>

<sup>3</sup> <https://burncenters.com/community/what-does-bleach-do-to-your-skin-the-dangers-of-this-common-cleaning-product/>

<sup>4</sup> [https://www.ewg.org/guides/cleaners/content/cleaners\\_and\\_health](https://www.ewg.org/guides/cleaners/content/cleaners_and_health)

<sup>5</sup> <https://www.cdc.gov/hygiene/cleaning/disinfecting-bleach.html>

<sup>6</sup> [Protecting Workers Who Use Cleaning Chemicals \(osha.gov\)](http://www.osha-slc.gov/Protecting-Workers-Who-Use-Cleaning-Chemicals)