

COVID-19 CLEANING VS. DISINFECTING

CUPE

To prevent illness from a biological hazard, we need to prevent workers from being exposed in the first place. This includes proper cleaning and sanitizing. It's important to make the distinction between the terms cleaning, disinfecting, and sanitizing.

The U.S. Centers for Disease Control defines them as follows:

Cleaning removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove germs from surfaces. This process does not necessarily kill germs, but by removing them it lowers their numbers and decreases the risk of spreading infection. Coronaviruses are encased by a layer that is highly susceptible to the properties of soap. So washing hands/surfaces properly with a surfactant is ideal.

Disinfecting uses chemicals to kill germs (bacteria, viruses, and molds) on surfaces or objects. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection. Objects must be cleaned first for proper disinfection to take place.

Sanitizing lowers the number of germs on surfaces or objects to a safe level, as judged by public health standards or requirements. This process works by either cleaning or disinfecting surfaces or objects to lower the risk of spreading infection.

DISINFECTING TAKES TIME

The process of disinfecting is very precise. It is directly related to the four C's listed below. The four C's will be precisely described in the usage instructions on all disinfecting products:

Chemistry – The type of chemical that is being used for destroying or inactivating the germ.

Concentration – The level at which that chemical is diluted in water.

Contact time – The amount of time it takes for the disinfectant to sit on a surface before a certain pathogen is inactivated. For example, bleach can take 30 seconds to render a surface free of active E. coli or three minutes for C. difficile spores.

Coverage – The amount of surface area that the disinfectant covers after it's applied. Ideally this is 100 percent.

DISINFECTING CHEMICALS

According to Health Canada, chemical disinfectants that are effective against viruses (like the coronavirus) are also suitable for decontamination of SARS-CoV-2 virus. These include:

- 5.25–6.15 per cent sodium hypochlorite (bleach)
- Alcohol-based disinfectant (60–80 percent ethanol or 60–75 percent isopropanol)
- 0.5 percent hydrogen peroxide
- quaternary ammonium compounds, and phenolic compounds (common in many household cleaners, see ingredients on package).

A full listing of Health Canada-approved hard-surface disinfectants and hand sanitizers for COVID-19 can be found [here](#).

IMPORTANT: *Under WHMIS regulations, employers must provide information and training on the hazards, safe handling, use, storage and disposal of any new or existing chemical or hazardous product in the workplace. Refer to supplier label and the safety data sheet for additional information. More information on WHMIS can be found [here](#).*

SOURCES

<https://www.cdc.gov/flu/school/cleaning.htm>

<https://www.kinnos.us/blog/2017/7/5/7-the-four-cs-of-disinfectants>

<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html>