

# Cleaning and Disinfection in Child Care Centres



## Cleaning:

The physical removal of visible dirt and organic matter from objects using detergent, warm water and friction. The cleaning process requires rinsing surfaces with clean water to remove detergent film. This process helps to physically remove microorganisms (germs) from surfaces, but does not kill those that may remain.

Cleaning is an important first step in removing disease-causing microorganisms from the child care environment. If surfaces are not “clean”, persistent dirt and organic matter can coat and protect germs and may result in further heat or chemical disinfection processes to be ineffective.

## Disinfection:

A process that destroys (kills) most disease-causing microorganisms on objects or surfaces using chemical solutions. Chemical disinfectants are grouped into different levels of disinfection, depending on their use.

Bleach Dilution Level	Lower Level	Higher Level
Exposure to Blood or Body Fluid	No	Yes
Concentration	200 ppm	5000 ppm
Recipes*:		
1 L solution	5 mL (1 tsp) bleach / 1 L water	10 mL bleach / 90 mL water
1 gal. solution	½ oz bleach / 1 gal. water	15 oz bleach / 1 gal. water
Contact Time	1 minute	10 minutes

\*Based on 5.25% sodium hypochlorite. Visit Public Health Ontario's online chlorine dilution calculator for making other volumes of bleach solutions or if the concentration of sodium hypochlorite you are using is different than 5.25%. <http://www.publichealthontario.ca/en/ServicesAndTools/Tools/Pages/Dilution-Calculator.aspx>

**Remember: Mix fresh bleach solutions daily and use appropriate chlorine test strips to test for the desired strength!**

### Chemical solutions must be used in accordance with manufacturer's directions on product labels.

Information required on commercial disinfectant product labels:

- Chemicals approved for use as “disinfectants” in Canada must have a Drug Identification Number (DIN)
- Name of product
- Name and address of manufacturer
- List of active ingredients
- Intended use (e.g. sinks, toilets, food contact surfaces\*)  
\*where required, products must specify that they are intended/safe for use on “food-contact surfaces”
- Check for expiry dates
- Directions for use:
  - ✓ Directions for proper dilution and application
  - ✓ Contact time required (i.e. time to achieve disinfection), generally 10 minutes for higher level disinfection
  - ✓ Requirements for cleaning prior to disinfection
  - ✓ Requirements for rinsing (i.e. for food-contact surfaces “rinse with potable water”)
  - ✓ Statement for stability of product once diluted (e.g. “prepare fresh solution for each use”)
  - ✓ Directions for disposal of cleaning materials and waste
- Precautionary statements (examples)
  - ✓ Keep out of reach of children
  - ✓ Use in ventilated area
  - ✓ Avoid contact with skin or eyes

Your public health inspector may be able to assist you in interpreting product labels.

However, for further clarification regarding appropriate applications, dilutions etc., contact the chemical manufacturer and request specific instructions in writing.

**Remember: No one chemical disinfectant may be ideal for every purpose! To ensure proper strength of diluted disinfectants/chemicals, test solution with an appropriate chemical test strip/reagent!**

References: Guidance Document: Disinfectant Drugs, Health Products and Food Branch, Health Canada, 2014.  
Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health Care Settings, Provincial Infectious Diseases Advisory Committee, Public Health Ontario, May 2012.  
O. Reg. 562 Food Premises, of R.R.O. 1990 as amended under the Health Protection and Promotion Act, R.S.O. 1990, C.H.7.



Durham Health Connection Line  
905-668-2020 or 1-800-841-2729  
[durham.ca/childcare](http://durham.ca/childcare)



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If you require this information in an accessible format, contact 905-668-2020 or 1-800-841-2729.

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