



Interior Health

Health and well-being for all

Quality | Integrity | Compassion | Safety

PREVENT THE SPREAD OF GERMS IN CHILD CARE SETTINGS



Interior Health would like to recognize and acknowledge the traditional, ancestral, and unceded territories of the Dākelh Dené, Ktunaxa, Nlaka'pamux, Secwépemc, St'át'imc, Syilx, and Tšilhqot'in Nations where we live, learn, collaborate and work together

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Purpose

This handout explains how germs are spread and how you can help reduce the spread of germs in child care facilities. The differences between cleaning, sanitizing, and disinfecting are explained, and appropriate types of disinfectants and sanitizers are provided.

Glossary of Terms

Cleaning – removal of “contaminants” such as dirt, food residue, vomit and stool with soap and hot water.

Contact Time – the amount of time required for a specific concentration of sanitizer or disinfectant to kill germs.

Disinfecting – killing micro-organisms on non-food contact surfaces such as toys, diaper change tables and door handles. We use disinfectants to do this.

Germs – micro-organisms, such as bacteria, viruses, fungi and parasites which can cause disease.

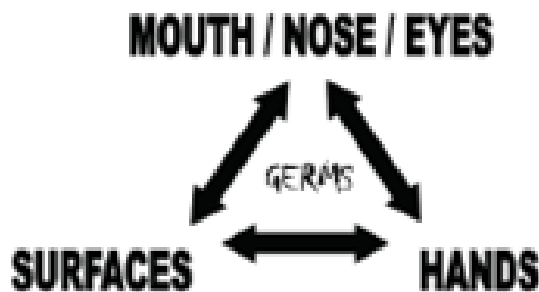
Infectious – means a disease which can spread from person to person.

Ppm – means “parts per million” and refers to the concentration of a substance (e.g. disinfectant or sanitizer). In metric terms, it refers to the number of milligrams of a substance in a litre of water.

Sanitizing – this is basically the same as disinfecting but it is done on food contact surfaces such as cutting boards, counters, and dishes. We use food-safe sanitizers to do this.

How are Germs Spread?

Child care facilities may serve as settings for the spread of infectious diseases. The spread of disease can occur through poor handwashing practices; poor food safety practices; or by touching contaminated surfaces or objects (poor cleaning, sanitizing, and disinfecting practices).



Germs can cause foodborne illness and gastroenteritis (sometimes called "stomach flu" or "24 hour flu"), colds, influenza and pinkeye to name a few.

Approved disinfectants and sanitizers have been proven to reduce germs to a level considered safe from a public health viewpoint.

How You Can Reduce the Spread of Germs and Disease

A. Separation and Isolation

When a person is ill, they can spread germs. Be aware that germs can be spread several days after symptoms have ended:

- 1) Ill staff and children should stay home at least 48 hours after symptoms stop. If a staff member becomes ill at work, they should leave work immediately.
- 2) If a child becomes ill at the facility, they should be kept separate from the other children until their parent/guardian is able to pick them up.

B. Hand washing

Washing your hands is the single most important thing you can do to prevent the spread of disease. You should wash your hands whenever they may become contaminated, after using the washroom, assisting with diapering, when illness is identified in the child care setting and before handling food:

- 1) Wet your hands with running water.
- 2) Using liquid soap, lather well for 15 seconds, cleaning fingertips, between fingers and under your nails.
- 3) Rinse well for 15 seconds.
- 4) Dry your hands using a paper towel.
- 5) Turn off the tap and open the door using the paper towel.



[Multi-Language Wash Your Hands Poster](#)

[6 Step Wash Your Hands Poster](#)

C. Cleaning and Disinfecting/Sanitizing Surfaces

Non-Food Contact Surfaces – toys, cupboard doors, diapering stations, door handles, shelving units, chairs, and sleep mats.

Food Contact Surfaces – counters, cutting boards, dishes and eating tables.

Toys that children may put into their mouths should be treated as food contact surfaces.

- 1) Wipe down surfaces that need cleaning with a cloth or scrub brush.
- 2) Wash with warm/hot water and soap.
- 3) Rinse with warm/hot water.
- 4) Prepare a fresh solution (use test strips to verify concentration).

A) FOR SANITIZING DISHES and GENERAL HOUSEKEEPING		
Chlorine (Bleach)	100 ppm	2 ml bleach to 1 litre water
Quaternary Ammonium (quats)	200 ppm	Follow manufacturer's directions
Iodine	12.5-25 ppm	Follow manufacturer's directions

B) FOR MORE CONTAMINATED SURFACES			
Chlorine (Bleach)	1000 ppm	20 ml bleach to 1 litre water	<i>NOT SAFE FOR FOOD CONTACT SURFACES*</i>
0.5% Accelerated Hydrogen Peroxide (AHP)		Follow manufacturer's directions	

C) FOR A VOMIT OR DIARRHEA EVENT			
Chlorine (Bleach)	5000 ppm	100 ml bleach to 1 litre of water	<i>NOT SAFE FOR FOOD CONTACT SURFACES*</i>
0.5% Accelerated Hydrogen Peroxide (AHP)		Follow manufacturer's directions	

These concentrations are not food safe. If required to use on a food contact surface (e.g. sudden outbreak of vomiting or diarrhea), **rinse thoroughly with warm/hot water after the appropriate contact time.*

Disinfecting non-food contact surfaces:

- a) Wet the surface down with the solution.
- b) Let the solution sit for the appropriate contact time (follow manufacturer's instructions).
If using bleach: 10 seconds at 100 ppm or 1 minute at 1000 - 5000 ppm.
- c) Allow surfaces to air dry.

Sanitizing food contact surfaces:

- a) Submerge dishes or wet counters/tables with the sanitizer solution
- b) Soak for the appropriate contact time (follow manufacturer's instructions). If using 100 ppm bleach, let it sit for 10 seconds.
- c) Allow to air dry. Dishes should be air dried on a clean, non-absorbent surface (e.g. dish rack).

If these surfaces become more contaminated (e.g. vomit/diarrhea), a stronger level of disinfection will be required (as provided on page 5), and surfaces will need to be rinsed thoroughly after the appropriate contact time.

[4 Step Dishwashing Poster](#)

Never mix bleach & ammonia (quats) – it will cause deadly fumes!

Disinfectant/Sanitizer Information

There may be other types of disinfectants or sanitizers that could be appropriate for use. When choosing your product, make sure:

- The products are intended to be used as a disinfectant or sanitizer.
- The product must not be expired and is used in strict accordance with manufacturer's instructions. If using on food contact surfaces, the product label must claim it is safe for use on food contact surfaces without rinsing. Use test strips to verify concentration.
- The product has a Drug Identification Number (DIN). A DIN assures the user that any claims made on the label are accurate. Products without a DIN have not been tested for their ability to kill germs.
- When Norovirus is suspected, the product must have a specific label claim against Norovirus, Feline Calicivirus or Murine Norovirus.
- Wear personal protective equipment (PPE) such as gloves, gowns or masks as per manufacturer's instructions, and to assist in preventing transmission. Please note that the use of gloves does not replace the importance of handwashing.
- If unsure, please contact *Environmental Health Direct* at EHDirect@interiorhealth.ca for more information.

Information on disinfectants/sanitizers should be readily available at the child care facility. The information should provide instruction on:

- Precautionary information on safe handling procedures.
- Requirements for cleaning of surfaces prior to disinfection/sanitation.
- Appropriate product type, dilutions and application procedures.
- Requirements for contact time and rinsing.
- Stability of product (e.g. daily mixing).
- Disposal of waste materials.

Look for first aid instructions on the label and ensure products are stored safely away from children!

Questions and Answers

Q: Why is bleach generally recommended over other products?

A: Bleach is recommended over other products because it is inexpensive, strong, and relatively simple to mix. Bleach is safe to use in child care settings in the concentrations recommended. The compound breaks up very quickly and the reactive part is only available for a brief period of time and then forms products (salt and water) that are no longer reactive and are safe if ingested, and safe for the environment.

Q: How long can I keep bleach?

A: Bleach is easily broken down by light; that is why bleach is sold in solid colour bottles and **new solutions must be made every day**. Once the bleach is broken down by light and has lost its colour and odour it is no longer useful.

Q: If a product such as a pine fluid or phenols (i.e. Pine Sol, Lysol) states it kills 99.9% germs or bacteria, is it acceptable to use instead of bleach?

A: Appropriate products should be able to reduce germs by 99.999%, not just 99.9%. Follow the information provided above in "[Disinfectant/Sanitizer Information](#)" or contact *Environmental Health Direct* at EHDirect@interiorhealth.ca for more information

Q: Bleach has damaged staff and children's clothing. Is there a product that is safer for clothing?

A: Quaternary ammonium is safer for clothing but it is not typically effective against Norovirus. Check the label claims on the product.

Q: I find bleach has an unpleasant odour. Is there a disinfectant that is odourless?

A: Consider how you are mixing the solution. Bleach, when mixed appropriately, should only have a mild odour.

Q: Are there any natural cleaning products that will sanitize?

A: No.

Q: I heard that dirt and dish soap neutralize bleach and make it ineffective as a sanitizer. Is this true?

A: Yes, this is why dishes must first be washed and rinsed before being submerged in a bleach solution and air dried. Air drying is required to ensure bleach has a sufficient contact time to kill germs.

Q: Where can I get more information on choosing the correct disinfectant for my facility?

A: Follow the information provided above in "[Disinfectant/Sanitizer Information](#)" or contact *Environmental Health Direct* at EHDirect@interiorhealth.ca for more information. Additional helpful resources are also provided below.

Other Helpful References

- **Quick Guide to Common Childhood Diseases**
BC Centre for Disease Control & Provincial Health Services Authority
http://www.bccdc.ca/schools/Documents/EN_Guide_Childhood_Diseases.pdf
- **Preventing Illness in Child Care Settings**
BC Health Planning
<https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/child-day-care/preventingillness.pdf>
- Ministry of Health
www2.gov.bc.ca/gov/content/health
- British Columbia Centre for Disease Control
www.bccdc.ca
- Health Files
www.healthlinkbc.ca

