

PROPER CLEANING AND DISINFECTION PRACTICES

Cleaning

- Cleaning must always be the first step to remove dirt and debris from a surface and is necessary for a disinfectant to be effective
- Clean with a detergent, water, and friction and clean from least contaminated to most contaminated areas

Disinfectants

- Disinfectants are applied to a clean surface in order to kill disease-causing germs
- Disinfectants must have a drug identification number (DIN) if approved for use in Canada (common household bleach and isopropyl alcohol are the only exceptions)
- Always follow manufacturer’s instructions for use (MIFU). Read label for direction on: dilution and mixing, personal protective equipment (PPE) needed (e.g., gloves, goggles), surfaces appropriate for use, contact time, efficacy on specific organisms, and rinsing requirements
- There are a variety of disinfectants in the market. Choose a disinfectant that is compatible with your surfaces and with contact times that fit your needs
- Check the expiry date. If a product has expired, do not use. Discard expired product safely or return to manufacturer
- Ensure the concentration of disinfectant is correct before use (i.e. use test strips)
- Toys that will be mouthed should be rinsed thoroughly with water following disinfection
- Do not use antiseptic wipes and other products intended for skin (i.e. alcohol-based hand rubs) on surfaces

Cleaning and disinfecting wipes

- Follow manufacturer’s recommendations
- Wipes may become dry (improper storage or during use) due to fast drying properties before contact time is achieved
- Wipes are not recommended as a routine cleaning/ disinfectant tool, especially for heavily soiled surfaces
- They can be used for items that cannot be soaked and for small items that must be disinfected between uses
- Ensure the surface or item remains wet with the product for the required contact time (additional wipes may be needed)
- Wipes must be kept wet and should be discarded if they become dry

Blood and body fluid spills

- Wipe spills immediately- use disposable towels to remove most of the organic matter, clean the area and then disinfect the spill area
- See the chart below for examples of disinfectants to use depending on volume of blood/ body fluid spill

When to Clean and Disinfect	Examples of Active Ingredients/ Disinfectant Products	Contact Time (minutes)	Where to Clean and Disinfect
1. Everyday use (non-outbreak) 2. Minor blood/ body fluid spill (drops of fluid) Effective against: <i>Vegetative bacteria and enveloped viruses</i> <ul style="list-style-type: none">• Staphylococcus aureus (includes MRSA)• Streptococcus• Salmonella• Vancomycin Resistant Enterococcus (VRE)• Human Immunodeficiency Virus (HIV)• Respiratory Syncytial Virus (RSV)• Influenza Virus• Pseudomonas Aeruginosa• Herpes	100 ppm bleach solution <i>(Everyday use; non-outbreak)</i>	10	Surfaces: <ul style="list-style-type: none">• Door knobs• Hand rails• Chairs• Tables• Elevator buttons• Telephones• Counter tops• Sink faucet handles• Toys• Commode chairs• Shared play equipment• Vinyl mattress covers• Floor mats• Water fountains• Diaper change stations Equipment: <ul style="list-style-type: none">• Blood pressure cuffs• Thermometers• Stethoscope
	1,000 ppm bleach solution <i>(Minor blood/ body fluid spill)</i>	10	
	Quaternary Ammonium Compounds (QUATS) <i>(i.e. Lysol®, ED- Everyday Disinfectant, Quato 78 Plus™, A-3®, Swish Clean and Green™)</i>	MIFU	
	3% Hydrogen Peroxide	10	
	70-90% Alcohol <i>(Ethyl or Isopropyl)</i> <i>(For soaking)</i>	10	
	Zochlor	MIFU	
	Benefect®	10	
1. Outbreak situation 2. Major blood/ body fluid spill 3. Confirmed viral or bacterial infection of pathogens listed below (non-outbreak situation) Effective against: <i>Mycobacteria, enveloped and non-enveloped viruses and fungi</i> <ul style="list-style-type: none">• Mycobacteria tuberculosis• Norovirus• Hepatitis A Virus• Rotavirus• Coxsackie Virus/ Hand, Foot and Mouth Disease• Rhinovirus/ Common Cold• Candida	5,000 ppm bleach solution <i>Also a sporicidal</i> <i>(see below for recipe)</i>	10	
	6% Hydrogen Peroxide	30	
	Enhanced Action Formulation Hydrogen Peroxide	MIFU	
	Zochlor	MIFU	

Note: York Region Community and Health Services does not endorse any of the examples of brand name products listed above.

Bleach (Sodium Hypochlorite) Solutions

- Use undiluted household bleach (5.25% or ~50,000 ppm) when making the solutions in the chart below
- When making bleach solutions, add bleach to water- do not add water to bleach
- Store bleach solutions in closed containers, away from heat and light
- Bleach solutions should be properly labelled
- Online dilution calculator available from Public Health Ontario at the following link:
<https://www.publichealthontario.ca/en/health-topics/environmental-occupational-health/water-quality/chlorine-dilution-calculator>

Parts per million (ppm) Concentration	Recipes (~= approximately, t= teaspoon, tb=tablespoon)
100 ppm (1:500, 0.01%)	Mix 2 ml (0.4 t) of bleach with ~1 L (4 cups) of water
1,000 ppm (1:50, 0.1%)	Mix 20 ml (4 t) of bleach with ~1 L (4 cups) of water
5,000 ppm (1:10, 0.5%)	Mix 100 ml (6 ¾ tb) of bleach with ~1 L (4 cups) of water

