PROPER CLEANING AND DISINFECTION PRACTICE

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 **Disinfecting**
 - 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
- They can be used for items that cannot be soaked and for small items that must be disinfected between uses
- 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
- 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 disinfection chart for examples of disinfectants to use depending on volume of blood/body fluid spill

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	Recipe Ratios	
100 ppm (1:500, 0.01%)	Mix 2.5 ml (1/2 tsp) of bleach with 1 L (4 cups) of water	
1,000 ppm (1:50, 0.1%)	Mix 20 ml (4 tsp) of bleach with 1 L (4 cups) of water	
5,000 ppm (1:10, 0.5%)	Mix 100 ml (6 ¾ tbsp) of bleach with 1 L (4 cups) of water	



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Disinfection Chart				
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: Vegetative bacteria and enveloped viruses • Coronavirus (includes COVID-19) • Herpes • Human Immunodeficiency Virus (HIV) • Influenza Virus • Pseudomonas Aeruginosa • Respiratory Syncytial Virus (RSV) • Salmonella • Staphylococcus aureus (includes MRSA) • Streptococcus • Vancomycin Resistant Enterococcus (VRE)	100 ppm bleach solution (everyday use; non-outbreak 1,000 ppm bleach solution (Minor blood/body fluid spill) Quaternary Ammonium Compounds (QUATS) (i.e. Lysol ®, ED- Everyday Disinfectant, Quato 78 Plus [™] , A-3 ®, Swish Clean and Green [™]) 3% Hydrogen Peroxide 70-90% Alcohol (Ethyl or Isopropyl) (For soaking) Zochlor Benefect®	10 10 MIFU* 10 10 MIFU*	Surfaces:	
Facility outbreak situation Major blood/body fluid spill Confirmed viral or bacterial infection of pathogens listed below Effective against: Mycobacteria, enveloped and non-enveloped viruses and fungi Mycobacteria tuberculosis	5,000 ppm bleach solution Also a sporicidal (see below for recipe) 6% Hydrogen Peroxide Enhanced Action Formulation Hydrogen	10 30 MIFU*		
 Norovirus Hepatitis A Virus Rotavirus Coxsackie Virus/Hand, Foot and Mouth Disease Rhinovirus/Common Cold Candida 	Peroxide Zochlor	MIFU*		

*Note: Algoma Public Health does not endorse any of the examples of brand name products listed above.

*MIFU = Manufacturer's Instructions For Use

