# 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 |

**For more information, please contact Algoma Public Health at 705-759-5286 OR 1-866-892-0172**

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<table>
<tr><th colspan="4">Disinfection Chart</th></tr>
<tr><th>When to Clean and Disinfect</th><th>Examples of Active Ingredients/Disinfectant Products</th><th>Contact Time (minutes)</th><th>Where to Clean and Disinfect</th></tr>
<tr><td rowspan="8">1. Everyday use (non-outbreak)<br>2. Minor blood/body fluid spill (drops of fluid)<br>Effective against:<br>Vegetative bacteria and enveloped viruses<br>• Coronavirus (includes COVID-19)<br>• Herpes<br>• Human Immunodeficiency Virus (HIV)<br>• Influenza Virus<br>• Pseudomonas Aeruginosa<br>• Respiratory Syncytial Virus (RSV)<br>• Salmonella<br>• Staphylococcus aureus (includes MRSA)<br>• Streptococcus<br>• Vancomycin Resistant Enterococcus (VRE)</td><td>100 ppm bleach solution<br>(everyday use; non-outbreak</td><td>10</td><td rowspan="13">Surfaces:<br>• Door knobs<br>• Hand rails<br>• Chairs<br>• Tables<br>• Elevator buttons<br>• Telephones<br>• Counter tops<br>• Sink faucet handles<br>• Toys<br>• Commode chairs<br>• Shared play equipment<br>• Vinyl mattress covers<br>• Floor mats<br>• Water fountains<br>• Diaper change stations<br><br>Equipment:<br>• Blood pressure cuffs<br>• Thermometers<br>• Stethoscope</td></tr>
<tr><td>1,000 ppm bleach solution<br>(Minor blood/body fluid spill)</td><td>10</td></tr>
<tr><td>Quaternary Ammonium Compounds<br>(QUATS)<br>(i.e. Lysol ®, ED- Everyday Disinfectant, Quato 78 Plus™, A-3 ®, Swish Clean and Green™)</td><td>MIFU*</td></tr>
<tr><td>3% Hydrogen Peroxide</td><td>10</td></tr>
<tr><td>70-90% Alcohol<br>(Ethyl or Isopropyl)<br>(For soaking)</td><td>10</td></tr>
<tr><td>Zochlor</td><td>MIFU*</td></tr>
<tr><td>Benefect®</td><td>10</td></tr>
<tr><td rowspan="5">1. Facility outbreak situation<br>2. Major blood/body fluid spill<br>3. Confirmed viral or bacterial infection of pathogens listed below<br>Effective against:<br>Mycobacteria, enveloped and non-enveloped viruses and fungi<br>• Mycobacteria tuberculosis<br>• Norovirus<br>• Hepatitis A Virus<br>• Rotavirus<br>• Coxsackie Virus/Hand, Foot and Mouth Disease<br>• Rhinovirus/Common Cold<br>• Candida</td><td>5,000 ppm bleach solution<br>Also a sporicidal (see below for recipe)</td><td>10</td></tr>
<tr><td>6% Hydrogen Peroxide</td><td>30</td></tr>
<tr><td>Enhanced Action Formulation Hydrogen Peroxide</td><td>MIFU*</td></tr>
<tr><td>Zochlor</td><td>MIFU*</td></tr>
</table>

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

***MIFU = Manufacturer's Instructions For Use**

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