



# Norwalk-Like Viruses Decontamination Guidelines for Environmental Services

*This document has been developed in accordance with current applicable infection control and regulatory guidelines. It is intended for use as a guideline only. At no time should this document replace existing documents established by the facility unless written permission has been obtained from the responsible facility manager.*

## INFECTIOUS AGENT<sup>1</sup>

**NAME:** *Norwalk virus*

**SYNONYM OR CROSS REFERENCE:** Acute viral gastroenteritis, Norwalk-like disease, epidemic viral gastroenteritis, acute infectious nonbacterial gastroenteritis, viral diarrhea, epidemic diarrhea and vomiting, winter vomiting disease, epidemic nausea and vomiting

**CHARACTERISTICS:** *Caliciviridae*; round, non-enveloped, 27-32 nm virion; single-stranded positive - sense RNA

## HEALTH HAZARD

**PATHOGENICITY:** Abrupt onset of diarrhea, vomiting, non-bloody diarrhea and abdominal cramps; 25-50% of affected persons report myalgias, malaise, headache, nausea and low-grade fever; illness usually resolves within 24-48 hours; fatality is associated with electrolyte imbalance; symptoms can persist for up to several weeks; higher risk of symptomatic infection in individuals with preexisting levels of antigen-specific antibodies have been documented

**EPIDEMIOLOGY:** Worldwide and common; affects mainly older children and adults; frequent outbreaks in camps, schools, nursing homes, cruise ships and areas with contaminated drinking and swimming water; outbreaks are limited to 1-2 weeks

**HOST RANGE:** Humans

**INFECTIOUS DOSE:** Not known

**MODE OF TRANSMISSION:** Principally by fecal-oral route; other documented sources include water, food (particularly shellfish and salads), aerosol and fomites

**INCUBATION PERIOD:** From 10-60 hours; usually 24-48 hours

**COMMUNICABILITY:** Communicable during the acute stage of the disease; up to 48 hours after resolution of symptoms; presymptomatic shedding has been implicated in epidemiological studies

## Preparation

Norwalk and Norwalk like viruses are highly contagious. Appropriate personal protection must be taken for those responsible for the decontamination of a room or area.

## Protective Barriers

1. Long Sleeve shirts

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<sup>1</sup> Office of Laboratory Security, PPHB Health Canada

2. Disposable gloves. Gloves should be changed as required, i.e., when torn, when hands become wet inside the glove.
3. Household gloves can be worn, but they must be discarded when the cleaning is complete.

## Cleaning Supplies

### Product: Virox 5 Concentrate and or Virox 5 Wipes

1. Preparation of solution - Pre-mix and label from a controlled location Virox 5 Concentrate at a ratio of 1:16. **Do not use Technical water for this purpose.**
2. Place mixed solution in either a labelled - flip top 1Litre bottle or a small hand bucket.
3. Virox 5 Wipes are ready to use.

## Product Germicidal Efficacy

Virox 5 is based upon Accelerated Hydrogen Peroxide – It has a General Virucide Claim which includes the Norwalk virus (*Caliciviridae*) Appendix 1

## Procedures Summary

Apply solution to either surface or to cloth. Clean room. Changing cloth frequently. Place used cloth in a marked plastic-lined waste receptacle. Once room has been cleaned discard all unused cleaning solution and using new solution reapply Virox 5 to surfaces for a contact time of 5 Minutes. Wipe dry. No rinsing required.

Bathrooms within a room should be cleaned last.

## Recommended Procedures for Housekeeping Activities Detailed Activity.

Areas / Surfaces	Ratio	Tools / Utensils	Procedures
Toilet Bowls	.5%	Brush	<ol style="list-style-type: none"> <li>1. Pour solution inside surface of Toilet bowl. Leave on for 5 minutes.</li> <li>2. Scrub with brush</li> <li>3. Flush toilet</li> </ol>
Showers	.5%	Spray Bottle Brush	<ol style="list-style-type: none"> <li>1. Spray surfaces of shower stall with solution</li> <li>2. Use brush to scrub surfaces</li> <li>3. Spray Shower curtain making sure to cover the seams</li> <li>4. After 5 minutes, rinse all areas with water.</li> </ol>
Hand washing sinks	.5%	Spray bottle Clean Rag or Sponge	<ol style="list-style-type: none"> <li>1. Spray the surface of the sink and adjacent counter</li> <li>2. Use clean rag or sponge to swipe surface clean.</li> <li>3. After 5 minutes, rinse with water.</li> </ol>
Bathrooms – routine maintenance	.1% – Floors .5% Spray Wipe/Toilets	Mop and Bucket Spray bottle Clean rag or Sponge	<ol style="list-style-type: none"> <li>1. Spray .5% around the base of the toilet bowl. Leave on for 5 minutes, flush.</li> <li>2. Spray .5% solution on walls of bathroom including doors and door handles.</li> <li>3. Use clean rags or sponge to swipe the walls and doors to clean.</li> <li>4. Make sure to swipe the door handles to clean.</li> <li>5. Mop Floor with .1% solution.</li> <li>6. Air dry, do not rinse.</li> </ol>
Bathrooms when guest is sick	.5%	Mop and Bucket Spray bottle Clean rag or Sponge	<ol style="list-style-type: none"> <li>1. Spray around the base of the toilet bowl using. Leave on for 5 minutes, flush.</li> <li>2. Spray solution on walls of bathroom including doors and door handles.</li> <li>3. Use clean rags or sponge to swipe the walls and doors to clean.</li> <li>4. Make sure to swipe the door handles to clean.</li> <li>5. Mop Floor with solution keep wet for 5 Min. Change bucket solution and fresh water mop to remove excess solution.</li> </ol>

			6. Air dry, do not rinse.
Bedrooms – routine maintenance	.5%	Spray bottle Clean rags or Sponge	<ol style="list-style-type: none"> <li>1. Spray solution onto rag or sponge until is wet.</li> <li>2. Wipe wall surfaces.</li> <li>3. Wipe Telephone hand set and TV remote</li> <li>4. Wipe furniture surfaces</li> <li>5. Wipe arms and backs of chairs</li> <li>6. Wipe Life belts</li> <li>7. Allow to air dry</li> </ol>
Bedrooms – when guest is sick.	.5%	Directional Fogger Spray bottle Clean Rags or Sponge	<ol style="list-style-type: none"> <li>1. Spray solution onto rag or sponge until is wet.</li> <li>2. Wipe wall surfaces including doors and door handles.</li> <li>3. Wipe Telephone hand set and TV remote.</li> <li>4. Wipe furniture surfaces.</li> <li>5. Wipe arms and backs of chairs.</li> <li>6. Fog Room with electric fogger.</li> <li>7. Allow to air dry.</li> </ol>
Hand Railings	.5%	Spray bottle Rags or Sponge	<ol style="list-style-type: none"> <li>1. Spray solution onto rag or sponge until is wet.</li> <li>2. Thoroughly swipe hand railings to clean.</li> <li>3. Allow to air dry.</li> </ol>
Door Handles	.5%	Spray bottle Rags or Sponge	<ol style="list-style-type: none"> <li>1. Spray solution into rag or sponge until is wet.</li> <li>2. Thoroughly swipe door handles to clean.</li> <li>3. Allow to air dry.</li> </ol>
Gym	.5%	Spray bottle Rags or Sponge	<ol style="list-style-type: none"> <li>1. Spray solution on all surfaces of exercise apparatuses.</li> <li>2. Wipe with Clean Rags or Sponge</li> <li>3. Spray solution on Rags until wet.</li> <li>4. Wipe all surfaces of free weights.</li> <li>5. Spray solution on exercise mats.</li> <li>6. Wipe with clean rags or sponge to clean</li> <li>7. Allow to air dry.</li> </ol>
Furniture	.5%	Spray bottle Rags or Sponge	<ol style="list-style-type: none"> <li>1. Spray solution on rags until wet.</li> <li>2. Wipe Furniture 's surfaces</li> <li>3. Allow to air dry</li> </ol>
Chairs/Upholstery	.5%	Spray bottle Rags or Sponge	<ol style="list-style-type: none"> <li>1. Spray solution on rags or sponge.</li> <li>2. Wipe chairs' armrest, seats and backs if wooden or hard surfaced.</li> <li>3. Spray fine mist on armrest, seat and backs if cloth.</li> <li>4. Allow to air dry.</li> </ol>
Carpet	.5%	Pressure Sprayer Spray bottle Rake- for large areas Brush-for small areas Wet Carpet cleaning machine with Wand.	<ol style="list-style-type: none"> <li>1. Large areas: <ol style="list-style-type: none"> <li>a. Spray carpet with solution with pressure sprayer.</li> <li>b. Rake surface of carpet to spread evenly.</li> <li>c. Allow 5 minutes of contact.</li> <li>d. Rinse with clean water in carpet cleaning machine using wand.</li> </ol> </li> <li>2. Small areas: <ol style="list-style-type: none"> <li>a. Spray area of carpet with fine mist of product using spray bottle.</li> </ol> </li> </ol>

			b. Rake surface of carpet area. c. Allow to air dry.
Curtains	.5%	Spray bottle Rags or Sponge	1. Spray fine mist of solution on curtains. 2. Allow to air dry.
Hard Floors	.1%	Mop and Bucket	Fill bucket with solution. 1. Use clean mop to swipe floors clean. 2. Change the solution when dirty. 3. Allow to air dry.
Tables	.5%	Spray bottle Rags or Sponge	1. Spray fine mist of solution on table surfaces. 2. Swipe with clean rags or sponge to clean surfaces. 3. Allow to air dry.
Counters	.5%	Spray bottle Rags or Sponge	1. Spray counter with fine mist of solution. 2. Swipe with clean rags or sponge to clean surfaces. 3. Allow to air dry.

### Recommendations for Cleaning Spills

1. Appropriate personal protective equipment should be worn for cleaning up a body fluid spill. Gloves should be worn during the cleaning and disinfecting procedures. If the possibility of splashing exists, the worker should wear a face shield and gown. For large spills, overalls, gowns or aprons as well as boots or protective shoe covers should be worn. Personal protective equipment should be changed if torn or soiled, and always removed before leaving the location of the spill, and then wash hands.

Vomit	.5%	Brush Scupper Spray Bottle Clean Rags	<p><b>Hard Surface</b></p> <ol style="list-style-type: none"> <li>The spill area must be cleaned of obvious organic material before the disinfecting step. Apply solution to spill wait 5 min.</li> <li>After 5 min remove fluid capable of transmitting infection with disposable towels. Discard the towels in a plastic-lined waste receptacle.</li> <li>After cleaning, reapply solution to spill areas and allow wet contact for at least 5 Minutes. Reapply solution to ensure a wet contact. Wipe dry and discard the cloth in a plastic-lined waste receptacle.</li> </ol> <p><b>Carpeted areas</b></p> <ol style="list-style-type: none"> <li>The spill area must be cleaned of obvious organic material before the disinfecting step. Apply solution to spill wait 5 min.</li> <li>After 5 min remove fluid capable of transmitting infection with disposable towels. Discard the towels in a plastic-lined waste receptacle</li> <li>After cleaning, reapply solution to spill areas and allow wet contact for at least 5 Minutes Ensure deep saturation of solution into carpet</li> <li>Rinse carpet using clean water:             <ol style="list-style-type: none"> <li>Pour water on carpet.</li> <li>Blot area with clean rag</li> <li>Repeat twice.</li> </ol> </li> </ol>
Body fluids	.5%	Brush Scupper Spray Bottle Clean Rags	<p><b>Hard Surface</b></p> <ol style="list-style-type: none"> <li>The spill area must be cleaned of obvious organic material before the disinfecting step. Apply solution to spill wait 5 min.</li> </ol>

			<ol style="list-style-type: none"> <li>5. After 5 min remove fluid capable of transmitting infection with disposable towels. Discard the towels in a plastic-lined waste receptacle.</li> <li>6. After cleaning, reapply solution to spill areas and allow wet contact for at least 5 Minutes. Reapply solution to ensure a wet contact. Wipe dry and discard the cloth in a plastic-lined waste receptacle.</li> </ol> <p><b>Carpeted areas</b></p> <ol style="list-style-type: none"> <li>5. The spill area must be cleaned of obvious organic material before the disinfecting step. Apply solution to spill wait 5 min.</li> <li>6. After 5 min remove fluid capable of transmitting infection with disposable towels. Discard the towels in a plastic-lined waste receptacle</li> <li>7. After cleaning, reapply solution to spill areas and allow wet contact for at least 5 Minutes Ensure deep saturation of solution into carpet</li> <li>8. Rinse carpet using clean water:       <ol style="list-style-type: none"> <li>a. Pour water on carpet.</li> <li>b. Blot area with clean rag</li> <li>a.</li> </ol> </li> </ol>
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**Disposal of Infectious Material**

All cleaning cloths gloves and handled tools used for the decontamination of a suspected Norwalk like virus case must be placed in a clearly marked plastic lined waste receptacle. Decontaminate all wastes before disposal; steam sterilization, chemical disinfection and or incineration.