

For more information on norovirus or to report individuals with vomiting, diarrhea, or fever associated with food consumption, contact:
 Email: epidemiology.fhd@sdcounty.ca.gov
 Phone: 858-505-6814
 Website: www.sdcdeh.org



NOROVIRUS CLEANING AND DISINFECTION

Norovirus causes a highly contagious gastrointestinal infection. It is easily spread through contact with contaminated surfaces. Any surface can become contaminated if touched by the hands of an infected individual. Surfaces in direct contact with vomit or fecal material from an infected person are of highest concern. Such areas should be treated immediately. Disinfect as a matter of urgency. See below for directions. Surfaces that are frequently touched should be cleaned and sanitized often:

- Bathroom Surfaces
- Kitchen Surfaces
- Doorknobs
- Recreation Equipment
- Light Switch Plates
- Phones
- Computer Keyboards
- Railings
- Toys & Games
- Tables & Chairs
- Wheelchairs & Walkers
- Remote Controls

Disinfectants Effective Against Norovirus

- **Fresh Chlorine Bleach:** Allow 10-20 minutes of contact time, then rinse with water
 - **200ppm** (parts per million): 1 tablespoon in 1 gallon water
Use for stainless steel, food/mouth contact items, toys
 - **1000ppm:** 1/3 cup in 1 gallon water
Use for nonporous surfaces, tile floors, counters, sinks, toilets
 - **5000ppm:** 1-2/3 cups bleach in 1 gallon water
Use for porous surfaces, wooden floors
- **Glutaraldehyde (0.5%):** Mix and apply according to the manufacturer's recommendations
- **Iodine (0.8%):** Mix and apply according to the manufacturer's recommendations
- EPA website for registered products effective against norovirus: <http://www.epa.gov/oppad001/chemregindex.htm>

Disinfectants Not Effective Against Norovirus

- Quaternary, ethanol, and anionic compounds are not effective

Cleaning Spills of Vomit or Feces

- Use personal protective equipment (PPE = gloves, masks, gowns).
- Cordon off area immediately.
- Clean up visible debris using disposable absorbent material (paper towels or other disposable cloths), minimizing aerosolization.
- Discard soiled items carefully in an impervious plastic bag.
- Liberally clean and disinfect area and objects surrounding the contamination with an appropriate effective disinfectant. Use 5000ppm solution of bleach to clean up vomit and feces.
- Take off gloves, gown, and mask, in that order, and discard before exiting contaminated clean-up area.
- Place discarded PPE in an impervious plastic bag.
- Re-glove and transport bag to a secure trash container; do not allow the bag to come into contact with clothing.
- Always wash hands after handling any biohazardous material, trash, or waste.

Specific Cleaning Methods

- **ALWAYS wear gloves and protect clothing**
- **Hard Surfaces**
 - Disinfect with bleach; then rinse with water if in food preparation area.
- **Carpet and Upholstered Furniture**
 - Visible debris should be removed with disposable absorbent materials and discarded in an impervious plastic bag. Handle carefully to minimize aerosols.
 - Carpet should be cleaned by heat inactivation using steam: 158°F for 5 minutes or 212°F for 1 minute (disinfecting with bleach may discolor carpet).
- **Linens, Clothing, and Textiles**
 - Remove visible debris from items before washing.
 - Handle contaminated items with gloves.
 - Keep contaminated items away from uncontaminated items.
 - Wash contaminated items in a pre-wash cycle followed by a regular wash cycle.
 - Use HOT water. Use detergent and bleach. Use oxygenated detergent alone when bleach cannot be used.
 - Dry contaminated items separately from uncontaminated items at a temperature of 170° F or above.
- **Surfaces Corrodible or Damageable by Bleach**
 - Use registered products effective against norovirus
EPA website: <http://www.epa.gov/oppad001/chemregindex.htm>

Proper Handling

- Manage waste safely and dispose to a secure trash container.
- Use chemicals in well-ventilated areas.
- Avoid contact between incompatible chemicals.
- Prevent chemical contact with food during cleaning.
- Handle contaminated material as little as possible and with minimal agitation to reduce aerosols.