
RECOMMENDATIONS FOR THE PREVENTION AND CONTROL OF VIRAL GASTROENTERITIS OUTBREAKS IN LONG-TERM CARE FACILITIES



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Introduction

Viral gastroenteritis is an inflammation of the stomach and intestines resulting in vomiting and/or diarrhea. Outbreaks of viral gastroenteritis in long-term care facilities (LTCFs) are common and can spread if prompt control measures are not put in place. In Tennessee, outbreaks in community settings such as LTCFs primarily occur in the fall and winter. Viral gastroenteritis outbreaks are most often caused by norovirus.

Viral gastroenteritis or norovirus is spread when microscopic fecal particles are transferred from contaminated hands or objects to the mouth and ingested (fecal-oral). Norovirus can also spread via a droplet route from vomitus ([MMWR, 2011](#)). Food and water have also been implicated in transmission, but less often in LTCFs' outbreaks. Outbreaks in LTCFs can involve a combination of transmission routes.

Shedding of norovirus in the stool begins a few hours before the onset of symptoms, peaks around 24–72 hours after exposure, and can last for two to three weeks after symptom onset even if the case is no longer ill. Norovirus can survive on inanimate surfaces for up to two weeks. Transmission can occur when individuals touch contaminated surfaces or objects and then touch their mouth.

Hand hygiene (using soap and water) is critically important in controlling the spread of norovirus, but should not be relied upon as the only method in controlling an outbreak. Alcohol-based hand sanitizers are ineffective against norovirus.

Signs and symptoms:

- Usually begin 12 to 48 hours after a person has come in contact with the virus
- Can last for 1 to 3 days

Common symptoms include:

- Sudden onset of vomiting and diarrhea
- Low-grade fever
- Chills
- Abdominal cramps and nausea
- Headache and body aches

Symptoms can lead to dehydration, especially in young children, older adults, and people with other illnesses.

Outbreaks:

An outbreak of viral gastroenteritis should be suspected when 2 or more residents and/or staff develop new onset of symptoms within 48 hours of each other.

Controlling acute gastrointestinal outbreaks in LTCFs requires early recognition of symptoms by staff and prompt implementation of infection control measures. Promptly addressing outbreaks can prevent severe illnesses, hospitalizations, and deaths. The consequences of uncontrolled outbreaks can impact a LTCF for weeks with residents, staff, volunteers, visitors, and environmental contamination propagating the outbreak.

If you suspect an outbreak of viral gastroenteritis, contact your local health department or the Tennessee Department of Health (615-741-7247).

Before an Outbreak

Plan of Action:

Facilities should establish and maintain an infection prevention and control program that includes surveillance for infections common to LTCFs including viral gastrointestinal disease. The facility should identify the chain of communication needed to manage and report an outbreak. **Staff should be instructed to report any sudden onset of vomiting and/or diarrhea in staff and/or residents to a designated person such as a Director of Nursing, Infection Control Practitioner (ICP) or Staff Manager.**

Signage:

Develop information and guidance letters for various groups as well as signage addressing specific issues such as dining facility closure or hand hygiene procedures. Samples of these are available in **Appendix 1**. Furthermore, if signs need to be laminated or specially treated, they should be prepared beforehand so that they are ready to be placed immediately when an outbreak is suspected.

Staff:

Educate staff about norovirus and management of viral gastroenteritis outbreaks during new employee training and/or annually for all staff prior to the start of norovirus season (December-March). Your local or state health department can assist with organizing such trainings. It may also be useful to have a plan in place to cover employee call outs, such as cross training or on call staff.

Environmental Health:

Know what chemicals you want to use/can use on surfaces that can be damaged by chlorine like upholstery or carpet. An EPA approved list for norovirus is available in **Appendix 4**. Be sure to read the labels on these products as contact times may vary from product to product.

Note that the concentration of sodium hypochlorite will change how much bleach is added to water to prepare the solution used to disinfect norovirus. See **Appendix 2.1** for a bleach preparation guide for different sodium hypochlorite concentrations. The concentration of bleach in bleach wipes varies widely between brands and varieties. Before an outbreak, it is recommended to verify if the bleach wipes used in the facility are appropriate for disinfecting norovirus.

It is recommended to have kits or carts equipped for norovirus disinfection ready to go in the event of an outbreak. Appropriate materials for kits or carts include:

- Disposable scraper/brush with disposable dustpan
- Face masks with eye shield
- Nitrile gloves
- Waterproof shoe covers
- Hairnets
- Gowns with sleeves and thumb loops
- Absorbent disposable towels
- Garbage bags
- Appropriate chemicals
- Disposable mop heads

Food workers should be advised to practice proper hand hygiene, wash fruits and vegetables and cook seafood thoroughly, and clean and disinfect contaminated surfaces. If a food worker becomes sick with symptoms of norovirus, they should remain at home for at least 48 hours after symptoms have resolved. More information for food workers can be found [here](#).

Recognizing an Outbreak

If an outbreak is suspected, immediately institute infection control procedures and contact public health.

Do NOT wait for laboratory test confirmation.

Immediate implementation of control measures may limit spread of illness.

The Centers for Disease Control and Prevention (CDC) defines an outbreak as “two or more cases of similar illness associated with a common exposure”. For the purpose of viral gastroenteritis, **an outbreak should be suspected when 2 or more residents and/or staff develop new onset of vomiting and/or diarrhea within 48 hours of each other.**

Maintaining case logs for instances of sudden onset vomiting and/or diarrhea in patients and staff can be useful in recognizing an acute gastroenteritis outbreak. Case logs can also help track the scope of and population affected during an outbreak. An example of such a case log is provided in **Appendix 6**.

Specimens:

Norovirus is identified by special testing, available through Tennessee Department of Health Laboratory Services. Ideally, stool samples should be obtained from a minimum of 5 ill persons within 48-72 hours after the onset of symptoms. **Decisions to institute infection control measures should NOT be delayed for results.** The control measures used for norovirus will also be effective against other pathogens, so waiting for confirmation is not necessary. Decisions regarding testing for norovirus should be made after consultation with the Tennessee Department of Health.

The best specimen for diagnosis is stool. Specimens can be refrigerated at 4°C prior to testing and frozen at -20°C or -70°C for long term storage. Serum and vomit specimens are not recommended ([Specimen Collection](#)).

During an Outbreak

Note: A checklist for the recommendations below can be found in Appendix 3

Staff:

Staff with symptoms should not report to work until 48 hours after symptoms have ceased. Maintain a log of ill staff and residents to include date of illness onset, date returned to work, and symptoms reported (See **Appendix 6** for example). Staff should not float between well and ill units; furthermore, notify any sister facilities which share staff with your facility that you suspect an outbreak so that they can institute control measures. Non-essential staff and volunteers should also be excluded from the rooms of isolated ill patients.

Proper hand hygiene should be practiced by staff which includes soap and running water for at least 20 seconds. This is the most effective way to reduce norovirus contamination on the hands. **Alcohol-based hand sanitizers are not effective against norovirus and should not be considered a substitute for soap and water handwashing (MMWR, 2011).** A sample sign to promote handwashing instead of hand sanitizer is provided in **Appendix 1.1.**

Personal Protective Equipment (PPE) such as disposable gloves and gowns should be worn when entering the rooms of ill residents. Masks (surgical or procedural) and goggles and/or face shield should be worn if vomitus is present. Remove PPE and place PPE in a closed container or biomedical waste bag, tie, and dispose after each use. Be sure to practice proper hand hygiene afterwards.

Medical equipment used for care of norovirus infected patients should either be dedicated to that room for the duration of isolation or be thoroughly disinfected upon removal from the room. **Carts/trays/portable monitors/etc. should be cleaned and disinfected outside food and drug preparation areas before and after entry/exit to each room where they are used.**

Residents and Visitors:

Ill patients should be isolated and on contact precautions for a minimum of 48 hours after symptoms have resolved. The following guidelines are recommended:

- If patients with norovirus cannot be accommodated in single occupancy rooms, separate them from asymptomatic patients
- Consider closing admissions to new residents until no new cases have been identified for at least 48 hours after last case's symptoms have resolved
- If new patients must be admitted, admit new patients only to unaffected buildings or units until outbreak is resolved
- Postpone transfers out to other facilities such as hospice while the outbreak is occurring
- Notify the transfer facility of the outbreak if a patient needs to be transferred out of the building

Discontinue all communal activities, including closing common dining facilities until 48 hours after last case's symptoms have resolved. Consider use of anti-emetics in patients with vomiting. Discourage visits from non-resident family and friends, *e.g.* by posting signage such as that in **Appendix 1.3** or website/social media messages. If visitation is necessary, visitors should wear PPE and be shown how to properly put it on and take it off to avoid contamination.

Food Service:

If particular floors in communal dining areas or units are affected, consider delivery of all meals to that floor or unit by one staff member. Distribution of food to each resident on the floor might then be tasked to the staff member (who is NOT a food handler) dedicated to the care of residents of that floor or unit. **Clean and disinfect food carts outside the food or drug preparation areas before and after each use.** Discontinue self-service, family-style dining, and hydration stations. Consider serving food on disposable dinnerware.

Non-food service personnel should be excluded from food preparation and service areas. Emphasis should be placed on strict handwashing regimes by food service personnel. Hand sanitizers are not effective against norovirus and should be strongly discouraged in favor of handwashing with soap and water for food service personnel and any staff or patients interacting with food service areas. Norovirus can survive up to a temperature of 140°F and

during quick steaming processes such as those used to cook shellfish. Some products listed in EPA's approved list for norovirus disinfection (included in **Appendix 4**) may not be approved for use in food service areas.

Environmental Health:

Enhanced cleaning and disinfection practices, especially in living areas or bathrooms, should be continued for at least 96 hours after last case's symptoms resolve.

Minimize transmission by removing nonessential items such as candy or fruit bowls and reducing air circulation as this can disperse aerosols.

Do NOT vacuum contaminated carpets or buff hardwoods floors as this can re-circulate viral particles.

The most effective cleaning agent is chlorine bleach (1000 ppm dilution for less soiled areas but up to 5000 ppm for more soiled areas such as vomit and fecal spills). (**Appendix 2.1**) Clean and disinfect vomit and fecal spills promptly using 5000 ppm chlorine bleach solution. Wear PPE (disposable gown, gloves, and surgical or procedural masks) when cleaning and disinfecting. It is recommended that areas are cleaned sequentially, from areas with lower likelihood of norovirus contamination to areas with higher likelihood.

When preparing disinfection solution, it is best to use an unopened bottle of bleach as open bottles of concentrated chlorine loss effectiveness after 30 days. Cleaning solution should be prepared daily or can be stored in a dark (light-resistant) bottle for up to 30 days. Mop heads are to be changed whenever a new bucket of cleaning solution is prepared or after cleaning large spills of vomit or fecal material. The use of disposable mop heads is recommended.

Do NOT shake soiled linens and laundry as this can disperse aerosols.

Clean and soiled laundry should be separated and staff handling soiled laundry should be minimal. Soiled laundry should be washed with detergent and hot water at the maximum available cycle length then machine dried at the highest heat setting. It is recommended that laundry be done at a half load as this is the best dilution for decontamination. The CDC recommends leaving washing machines open to air when not in use to allow the machine to dry completely and to prevent growth of microorganisms in wet, potentially warm environments.

Heat disinfection (*i.e.* pasteurization to 140°F) has been suggested and used successfully under laboratory conditions for items that cannot be subjected to chemical disinfectants such as chlorine bleach. Cleaning procedures NOT shown to effectively destroy norovirus include ozone mists, fogging, and UV irradiation.

A chart summarizing procedures for cleaning norovirus on various types of surfaces is included in **Appendix 2.2**. These can be placed in cleaning closets, on cleaning carts, and any other appropriate place for quick access by staff.

Resolution of an Outbreak:

Infection control procedures should be maintained until an outbreak is over.

An outbreak is typically declared over after 2 or more incubation periods (the period between exposure to an infection and the appearance of the first symptoms) have passed after the last case's symptoms have resolved and without new cases. For norovirus, this is around 4 days.

Though a norovirus outbreak is unfortunate, the experience can and SHOULD be used as a learning opportunity. Using the case log provided in **Appendix 6** should be useful in both preparing to debrief and identifying the source of the outbreak. At the completion of an outbreak, please provide a final number of cases to your local or regional health department.

References

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3. CDC Specimen Collection for Norovirus. <https://www.cdc.gov/norovirus/lab/specimen-collection.html>
4. Norovirus: Facts for Food Workers. <https://www.cdc.gov/norovirus/downloads/foodhandlers.pdf>
5. Guidelines for Laundry and Bedding in Infection Prevention Control. <https://www.cdc.gov/infectioncontrol/guidelines/environmental/background/laundry.html>
6. MMWR/ Recommendations and Reports/March 04, 2011/Vol. 60/No. 3. https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6003a1.htm?s_cid=rr6003a1_w
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10. Michigan Department of Community Health. Viral Gastroenteritis: Norovirus: Local Health Department Guidelines for Environmental Cleaning and Disinfection of Norovirus. October 7, 2017. https://www.michigan.gov/documents/Guidelines_for_Environmental_Cleaning_126234_7.pdf

Appendices

Appendix 1: Sample Signage

1.1 Handwashing Signage:



MAKE SURE TO USE
SOAP AND WATER TO
CLEAN YOUR HANDS



Hand sanitizer may be applied after hand washing.

1.2 Visitors:

ATTENTION ALL VISITORS!



- Some residents in this facility are currently sick with diarrhea. You may want to visit another time.
- If you do choose to visit, please wash your hands **BEFORE, DURING, and AFTER** your visit and anytime your hands may be contaminated.
- Please stop at the nurses' station or reception desk before visiting any residents.

Appendix 2: Cleaning Guidance

2.1 Bleach Prep:

Recommended Bleach Preparation Quantities		
5.25% Sodium hypochlorite		
		Bleach per gallon of water
Bleach (Free Chlorine) Concentration	1000 ppm	1/3 cup
	5000ppm	1 2/3 cup

Recommended Bleach Preparation Quantities		
8.25% Sodium hypochlorite		
		Bleach per gallon of water
Bleach (Free Chlorine) Concentration	1000 ppm	3 TBSP
	5000ppm	1 cup

2.2 Cleaning Surfaces:

Type of Surface	Examples	How to Clean
High-Touch Surfaces	Door handles, hand rails, light switches, toilets, faucets, tables, counters, chairs, walls, toys, phones, recreation/gym equipment, mats, blankets, sheets, keyboards, and shared items.	Carefully remove any vomit and diarrhea, and clean contaminated objects and surfaces with soap and water. Be sure to clean nearby objects that may also have been contaminated by vomit or diarrhea. This should be done multiple times a day if possible.
Non-Porous (Hard) Surfaces	For toilets, sinks, furniture, walls, floors	Carefully remove vomit and diarrhea, and clean contaminated objects and surfaces with soap and hot water. Then, disinfect with the bleach solution.
Porous Surfaces (Carpets/Upholstery)	For carpets, upholstery	DO NOT VACUUM. Carefully remove as much vomit and diarrhea as possible, and clean with soap and hot water. Then, steam clean at a temperature of 158°F for five minutes or 212°F for one minute.
Food/Mouth Contact Items	Objects that may come in contact with food or the mouths of people (such as toys or dishes)	Carefully remove vomit and diarrhea. Then, disinfect with the bleach solution. Rinse thoroughly with clean water afterwards. Dishes, utensils, and cups can be cleaned with a dishwasher (using hot water and dishwasher detergent) immediately after use.
Cloth and Plush Items	For clothing/linens/textiles and plush items, including stuffed animals, bedding, curtains, and mattress covers	Carefully remove as much vomit and diarrhea as possible. Then, wash items in a pre-wash cycle with detergent. Dry items at a temperature greater than 170°F. Do not mix contaminated and uncontaminated items in one load; it is better to discard soiled materials than to risk exposure during cleaning. If there are no on-site laundry facilities, double wrap soiled items in plastic bags, and take them to an off-site facility to be washed and dried. If soiled items are sent home, be sure to provide guidance on proper washing and drying

Appendix 3: Outbreak Checklist

Staff

- Notify local health department or the Tennessee Department of Health of an outbreak or suspected outbreak of viral gastroenteritis
- Exclude ill staff from work until 48 hours after symptoms have resolved
- Maintain a log of ill staff and residents to include date of onset, date returned to work, and symptoms
- Do not allow staff to float between units
- Notify “sister” facilities which share staff that you suspect an outbreak
- Exclude non-essential staff
- Post signs to encourage staff to wash hand regularly and with outbreak precaution guidance
- Wash with soap and water NOT hand sanitizer for 20 seconds before and after leaving patient rooms, and after visiting common areas, dining facilities, and using the restroom
- Personal Protective Equipment (PPE)
 - Are to be worn when entering the rooms of symptomatic residents
 - Masks and goggles and/or face shield are to be worn if vomitus is present
 - Remove PPE immediately upon leaving room and dispose appropriately.
- Dedicate medical equipment for ill patient that is sanitized appropriately (see [Appendix 2](#)) before re-use
- Clean and disinfect carts/trays/ and portable monitors outside the food and drug preparation areas before and after each use

Residents and Visitors

- Ill patients are to be isolated and on contact precautions for a minimum of 48 hours after symptoms have resolved
- Do not admit new residents until no new cases have been identified for at least 48 hours after last case’s symptoms have resolved.
 - If accepting new admissions, only admit patients to unaffected buildings/units.
- Postpone transfers out to other facilities such as hospice while outbreak is occurring.
 - If transferring patients, notify the transfer facility of the outbreak.
- Discontinue all communal activities including closure of common dining facilities until 48 hours after last case’s symptoms resolve
- Consider use of anti-emetics for patients with vomiting
- Post signs alerting residents and visitors to the presence of gastrointestinal illness in the facility (e.g. [Appendix 2](#))
- Discourage visits from non-resident family and friends, e.g. by posting signage
 - If visitation is necessary, visitors should wear PPE and be shown how to properly put it on and take it off to avoid contamination.

Food Service

- Close communal dining areas during an acute gastrointestinal outbreak
- Delivery of all meals to that floor or unit are to be done by one staff member

- Distribution of food to each resident on the floor might then be tasked to the staff member dedicated to the care of residents of that floor or unit
- ❑ Clean and disinfect food carts outside the food and drug preparation areas before and after each use
- ❑ Serve food on disposable dinnerware for the duration of the outbreak
- ❑ Discontinue self-service or family-style dining in dining rooms
- ❑ Discontinue 'hydration stations' or any other self-service or communal food/beverages
- ❑ Emphasis should be placed on strict hand washing regimes by food service personnel.
- ❑ Exclude non-food service personnel from food preparation and service areas
- ❑ Make sure products used from EPA's approved list for norovirus disinfection are also approved for use in a food service area

Environmental Health

- ❑ Wear PPE when cleaning, disinfecting, and handling and cleaning soiled laundry
- ❑ Increase frequency of environmental cleaning of residents' living areas and bathrooms.
- ❑ Post cleaning procedures for various surfaces on key locations (i.e. cleaning closets, cleaning carts)
- ❑ Clean and disinfect vomit and fecal spills promptly using 5000 ppm chlorine bleach solution
 - Do NOT use vacuums, ozone mists, fogging, or UV irradiation for cleaning
- ❑ Use unopened bottles of bleach when preparing disinfecting solution
- ❑ Clean areas starting from areas with lower likelihood of norovirus contamination to areas with highly contaminated surfaces
- ❑ Change mop heads when a new bucket of cleaning solution is prepared or after cleaning large spills of vomit or fecal material
- ❑ Heat disinfection (i.e., pasteurization to 140°F) for items that cannot be subjected to chemical disinfectants such as chlorine bleach.
- ❑ Do NOT shake soiled linens and laundry
- ❑ Place soiled linens in a bag for transport to cleaning area and minimize number of staff handling soiled laundry
- ❑ Segregate clean and soiled laundry
- ❑ Use a half load for laundry
- ❑ Minimize air currents generated by open windows, fan, or air conditioning as these can disperse aerosols widely
- ❑ Continue enhanced cleaning and disinfection practices for at least 72 hours after last case's symptoms resolve.

Appendix 4: EPA Registered Products Effective Against Norovirus

List G: EPA’s Registered Antimicrobial Products Effective Against Norovirus	
EPA REGISTRATION NUMBER	PRIMARY PRODUCT NAME
777-99	BRACE
1677-21	MIKRO-QUAT
1677-216	EXSPOR BASE CONCENTRATE
1677-226	VIRASEPT
1677-233	Multi-Purpose Disinfectant Cleaner
1677-237	FF-ATH
1677-238	PEROXIDE MULTI SURFACE CLEANER AND DISINFECTANT
1677-241	HYDRIS
1839-79	NP 4.5 DETERGENT/DISINFECTANT
1839-81	NP 9.0 DETERGENT/DISINFECTANT
1839-83	DETERGENT DISINFECTANT PUMP SPRAY
1839-94	NP 3.2 (D & F) DETERGENT/DISINFECTANT
1839-95	NP 4.5 (D & F) DETERGENT/DISINFECTANT
1839-96	NP 9.0 (D & F) DETERGENT/DISINFECTANT
1839-211	SC-AHD-64
1839-212	SC-AHD-256
1839-213	SC-AHD-128
1839-220	SC-RTU DISINFECTANT CLEANER
1839-100	VETERINARIAN TYPE DISINFECTANT
1839-174	STEPAN TOWELETTE
1839-188	AEROSOL SDAS
1839-225	SC-RTU-TB
3573-54	Comet Disinfecting [Sanitizing] Bathroom Cleaner
3573-77	CSP-3002-3; Comet Disinfecting Cleaner with Bleach
37549-1	MICRO-KILL BLEACH GERMICIDAL BLEACH WIPES
37549-2	Micro-Kill Bleach Germicidal Bleach Solution
5741-28	TUMULT 5813-21 Tackle
5813-99	Wave
5813-102	CGB1
5813-103	CGB3
5813-104	CBG4
5813-105	HBL
5813-106	Axl
5813-100	PUMA
6659-3	SPRAY NINE
6836-77	LONZA FORMULATION S-18
6836-78	LONZA FORMULATION R-82

List G: EPA’s Registered Antimicrobial Products Effective Against Norovirus	
EPA REGISTRATION NUMBER	PRIMARY PRODUCT NAME
6836-139	LONZA FORMULATION R-82F
6836-140	LONZA FORMULATION S-21F
6836-152	LONZA FORMULATION DC-103
6836-245	CSP-46
6836-266	BARDAC 205M-10
6836-333	MMR-4U
6836-346	LONZAGARD RCS-256
6836-347	LONZAGARD RCS-128
6836-348	LONZAGARD RCS-128 PLUS
6836-349	LONZAGARD RCS-256 PLUS
9480-8	PDI SANI-CLOTH BLEACH WIPES
10324-58	MAQUAT 128
10324-59	MAQUAT 64
10324-81	MAQUAT 7.5-M
10324-93	MAQUAT 64 PD
10324-115	MAQUAT 750-M
10324-117	MAQUAT 710-M
10324-177	MAQUAT 705-M
10324-198	MAQUAT 702.5-M
10324-214	MAGUARD 5626
10325-105	MAQUAT 128 PD
11346-2	Clorox HL
11346-3	Clorox HW
11346-4	Clorox QS
11346-6	Clorox HS
34810-36	CLEAN-CIDE WIPES
46781-12	CAVICIDE 1
56392-7	DISPATCH HOSPITAL CLEANER DISINFECTANT WITH BLEACH
56392-8	Dispatch Hospital Cleaner Disinfectant Towels with Bleach
61178-5	CCX-151
65402-3	VIGOROX SP-15 ANTIMICROBIAL AGENT
67619-38	CLOROX COMMERCIAL SOLUTIONS® CLOROX TOTAL 360™ DISINFECTANT CLEANER1 (BASIC NAME: PUFF)
67619-8	CPPC Ultra Bleach 2
67619-12	CPPC TSUNAMI
67619-13	CPPC STORM
67619-17	SHIELD
67619-20	REX

List G: EPA's Registered Antimicrobial Products Effective Against Norovirus	
EPA REGISTRATION NUMBER	PRIMARY PRODUCT NAME
67619-21	CARB
67619-24	BLONDIE
67619-25	DAGWOOD
67619-26	BORIS
67619-27	BUSTER
67619-28	MILO
67619-30	GNR
67619-32	PPD Puma
70060-19	ASEPTROL S10-TAB
70271-13	PURE BRIGHT GERMICIDAL ULTRA BLEACH
70271-24	TECUMSEH B
70590-1	HYPE-WIPE
70590-2	BLEACH-RITE DISINFECTING SPRAY WITH BLEACH
70627-56	OXIVIR TB
70627-58	OXY-TEAM DISINFECTANT CLEANER
70627-60	OXIVIR WIPES
70627-62	PHATO 1 :64 Disinfectant Cleaner
71654-7	VIRKON
71847-2	KLOR-KLEEN
71847-6	KLORSEPT
71847-7	KLORKLEEN 2
72977-3	AXEN(R) 30
72977-5	SDC3A
73232-1	ALPET D2
74559-1	ACCEL TB
74559-8	Accel 5 RTU
74986-4	SELECTROCIDE 2L500
82972-1	VITAL-OXIDE
84198-1	PEROXY HDOX
84368-1	URTHPRO
84526-1	SANOSIL S010
84683-3	Benefect® Botanical Daily Cleaner Disinfectant Spray
87508-3	PERFORMACIDE
87518-1	HSP20
88089-4	PERIDOX RTU (TM)
88494-2	WEDGE DISINFECTANT WIPES
90150-2	BINARY IONIZATION TECHNOLOGY® (BIT®) SOLUTION
90643-1	MULTIMICRO SALT
91399-2	BIOTAB7

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Appendix 5: Fact Sheet

Healthcare Facilities Fact Sheet



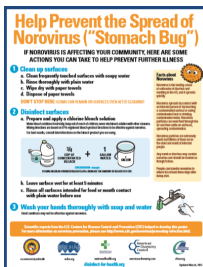
Norovirus is a contagious virus that causes diarrhea and vomiting. Norovirus outbreaks can be especially problematic in healthcare facilities as they are difficult to control and the virus lasts a long time in the environment. Bleach solution or EPA-approved products are best for disinfection as these can eliminate most pathogens.

Prevention and control of **norovirus** should focus on limiting direct contact with infected persons and contact with contaminated surfaces. Handwashing is recommended because alcohol-based hand sanitizer is NOT effective against norovirus.



If you suspect an outbreak, contact your local health department or the Tennessee Department of Health (615-741-7247) for assistance and guidance on cleaning and response. The Health Department might ask about the number and location of ill patients and staff as well as details about the facility.

(CTRL-click posters for larger versions)



Prevention resources can be found here: <https://www.cdc.gov/norovirus/multimedia.html>

Norovirus Prevention Guidance: https://www.tn.gov/content/dam/tn/health/documents/LTCF_guidelines.pdf

