

The Southern Nevada Health District has developed these guidelines in order to provide direction for hotel/casinos in the prevention and control of norovirus outbreaks. This document does not present formal recommendations, but provides areas of consideration for properties in the prevention of outbreaks. The recommendations are made in addition to the Southern Nevada Health District regulations entitled "Regulations Governing the Health and Safety of Public Accommodation Facilities".

Proper handwashing is an effective, simple, and inexpensive method of preventing disease, and is one of the most important steps in preventing an outbreak from spreading. Because each outbreak of norovirus is unique to the circumstances and the property, it is not possible to predict which of the environmental controls would be most important in preventing the spread of disease. However, following as many of the recommendations as possible will increase the chances of preventing and/or controlling an outbreak.

During an outbreak, a number of these recommendations, as well as other items not on this list, may be formally required by the Health District. Many of the items in the recommendations will not be appropriate for a particular property, and thus would not be required. The columns labeled "SOP" and "Date Implemented" are intended to assist in complying with these requirements, allowing a facility to identify parts of the recommendations that are part of the Standard Operating Procedure (SOP) of the facility, or the date on which the item was implemented.

There are two appendices to these recommendations. The first is a list of products that are approved by the EPA as effective against norovirus. The second is a standardized illness questionnaire that can be used to track guest or employee illness.

Representatives from the Southern Nevada Health District are available to help answer any questions about norovirus, these guidelines, or the process of surveillance and outbreak investigation/control. For additional information, contact the Environmental Health Specialist assigned to your facility, or the Office of Epidemiology at 759-1300. Office of Epidemiology staff are available 24/7/365 to take reports of outbreaks.

				Date
Section 1: General Recommendations			SOP	Implemented
1.1	Increas	se employee hand washing in all employees to:		
	1.1.1	At least once per hour		
	1.1.2	Upon entering a kitchen		
	1.1.3	After using the restroom		
	1.1.4	After shaking hands or other physical contact with peers and guests		
	1.1.5	After sneezing		
	1.1.6	After touching the face		
	1.1.7	After blowing the nose		
	1.1.8	After rubbing hands on clothing and similar activities		
	1.1.9	After handling raw foods		
	1.1.10	After handling dirty kitchen utensils and kitchenware		
	1.1.11	After cleaning, sweeping, or mopping		
	1.1.12	After a break		
	1.1.13	After smoking, eating or drinking		
	1.1.14	Before handling any food, especially ready-to-eat foods and ice		
	1.1.15	After handling money (tips)		
	1.1.16	When entering and leaving the gaming floor		
	1.1.17	Before going on break		

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	1.1.18 Before starting a shift		
	1.1.19 After ending a shift		
	1.1.20 After using a common-use telephone		
1.2	Inform all employees of the need for handwashing and provide instructions on		
	proper handwashing.		
1.3	Maintain employee hand washing vigilance through active management		
	reminders and correction.		
1.4	Consider strict glove use policy for all food preparation. Ensure that gloves		
	are worn properly, changed frequently, and that hands are washed between		
	glove changes.		
1.5	Discontinue the practice of having cocktail servers handle ashtrays and used		
	drink cups. Have a designated person, who is not a cocktail, server perform		
	this task.		
1.6	Contact transportation companies affiliated with the hotel/casino to		
	implement similar clean-up and sanitizing/disinfecting procedures as those		
	implemented in the hotel properties.	_	
1.7	Regularly inspect all areas of the property (including, but not limited to,		
	elevators, bathrooms, walkways, garages and parking lots, casino floor, and		
	employee break rooms) for evidence of biohazardous accidents. Any accidents		
4.0	should be cleaned up following the procedures as outlined in Section 8.		
1.8	Use single-use ticket system for automobile valet check-in and pick-up, in		
1.0	place of using tickets that are reused multiple times.		
1.9	Switch to auto-dispensing paper towel dispensers throughout the hotel,	Ц	<u> </u>
	including all patron restrooms, employee restrooms, kitchens, and locker		
1.10	rooms.		
1.10	Use disposable ice buckets and drink cups in all guest rooms, and discard when visibly soiled and between guests.	Ш	
1.11	Review existing SOPs and protocols for general cleaning to ensure that they		
1.11	are consistent with these guidelines.	Ш	
1.12	Ensure that the SOPs and protocols are being properly implemented by staff		
1.12	through observation and training.	_	
1.13	Provide and encourage use of ethanol hand towelettes on the casino floor.		
1.14	Install hand sanitizer stations in dining facilities and restaurants, restrooms,		
	break areas, and on the casino floor.	_	
1.15	Install polite reminders in all restrooms on the need for proper hand washing.		
			Date
Section	n 2: Basic Clean-up and Sanitization Recommendations	SOP	Implemented
2.1	Implement recommendations in addition to routine cleaning activities.		
2.2	Increase frequency of cleaning and sanitizing/disinfecting the handles of hand		
	sinks and doors in public restrooms, employee restrooms and throughout all		
	kitchens to at least once per hour during periods of frequent use.		
2.3	Increase frequency of cleaning and sanitizing/disinfecting employee restrooms		
	to at least once per hour during periods of frequent use.	_	
2.4	Use disposable cleaning cloths and mop heads for all cleaning and		
	sanitizing/disinfection.		

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2.5	Frequently clean and sanitize/disinfect high-touch surfaces such as (but not	
	limited to):	
	2.5.1 ATM machines	
	2.5.2 Slot and video machine buttons and handles	
	2.5.3 Coin trays	
	2.5.4 Self-serve coin redemption kiosks	
	2.5.5 Drinking fountains	
	2.5.6 Door handles and push plates (both in public areas and staff areas)	
	2.5.7 Escalator roller bars	
	2.5.8 Elevator buttons and panel (service and public)	
	2.5.9 Stair rails	
	2.5.10 Balcony rails	
	2.5.11 Bar rails	
	2.5.12 Validation and time clocks	
	2.5.13 Public telephones, courtesy phones, and common-use phones in	
	employee areas	
	2.5.14 Light switches	
	2.5.15 Restaurant menus	
	2.5.16 Casino cage counters	
	2.5.17 Gaming chair backs	
	2.5.18 Contact areas of gaming tables	
	2.5.19 Table game cup holders	
	2.5.20 Counters in public areas (e.g. Registration, Bell Desk, Concierge)	
	2.5.21 Counters in staff areas (e.g. Assignment Desks, Uniform Counters)	
2.6	Spray or hand wipe as applicable the entire casino gaming area including high	
	frequency human contact equipment and employee areas with an appropriate	
	sanitizer at least daily. Carefully follow all manufacturer instructions on	
	cleaning, rinsing, and sanitizing/disinfecting equipment being careful not to	
	damage sensitive electronic components. Although this is a labor intensive	
	effort, it is essential to breaking the chain of environmental contamination by	
	ill guests and employees over time.	
2.7	Clean and sanitize/disinfect the inside of all dish and glass washers once per	
	shift. The currently recommended sanitizers for non-high-temperature	
	dishwashers are not effective against norovirus. Therefore if any contaminated	
	item has been placed in the dishwasher, the equipment may be contaminated	
	with Norovirus.	
2.8	Discontinue the use of any dish or glass washing machine for ashtray	
	cleaning/sanitizing unless the machine is dedicated solely for that purpose.	
2.9	Clean and sanitize floor surfaces in all public areas at least once per shift.	
2.10	Wash, rinse, and then sanitize/disinfect coin cups daily (if applicable).	
2.11	Discard the ice in all ice machines once per week throughout all kitchen	
	facilities followed by thorough cleaning and sanitizing/disinfection of the	
	machine. Discard ice stored in bins, sinks used to store ice, and other	
	associated equipment once per day followed by a thorough sanitizing of the	
	bin or sink. Sanitize/disinfect all such bins and sinks again prior to use.	

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				Date
Section	on 3: Ro	outine Guest Room Cleaning Procedure	SOP	Implemented
3.1	Use d	isposable cleaning cloths.		
3.2	Use o	ne cloth for cleaning and a new cloth for sanitizing/disinfecting surfaces.		
3.3	Use se	eparate colored cleaning cloths in toilet areas.		
3.4	Use a	new set of cleaning cloths for each guest room.		
3.5	Clean	and sanitize/disinfect high touch areas such as taps, faucets, door and		
	drawe	r handles, door latches, toilet or bath rails, telephones, rails on balconies,		
	light a	nd lamp switches, thermostats, remote controls, curtain pulls and wands,		
		s on guest information books, alarm clocks, hair dryers, irons, and pens.		
				Date
Section	on 4: Gւ	nest Room Cleaning Procedures for Rooms with Known Ill Guests	SOP	Implemented
4.1	Treat	all areas of rooms with known ill guests as if they are contaminated with		
	a high	ly infectious organism.		
4.2	Staff e	entering the room should wear appropriate personal protective		
	equip	ment (PPE), including a disposable mask, gloves, eye shield, disposable		
		overs, and plastic disposable apron.		
4.3	Emetic or fecal accidents should be reported and cleaned as per Section 8.			
4.4	Once the ill guest has checked out, treat the room as a "hot room" and deep			
	clean	to ensure that any contamination has been removed.		
	4.4.1	Consideration should be given to having a specially trained team		
		available for cleaning of rooms with known ill guests.		
	4.4.2	Discard all disposable paper products (e.g. tissues or toilet paper).		
	4.4.3	Remove all towels, linens, pillows, bedspreads, and blankets, and		
		launder in accordance with Section 9.1.		
	4.4.4	Examine the mattresses for fecal or emetic accidents, and discard in		
		accordance with Section 9.3 if visibly soiled.		
	4.4.5	Clean and sanitize/disinfect all high touch surfaces throughout the		
		room as described in Section 3.5.		
	4.4.6	Clean the carpet in accordance with Section 9.4.		
	4.4.7	Use an aerosol or fogging device to sanitize/disinfect all surfaces in the		
		room.		

Note: A sample response plan can be found in the Southern Nevada Health District regulations entitled "Regulations Governing the Sanitation and Safety of Public Accommodation Facilities 2006 Appendix G: Example Guest Room Clean-up Standard Operating Procedure (SOP)"

			Date
Sectio	n 5: Surveillance for Employee and Guest Illness	SOP	Implemented
5.1	Monitor employee illness logs and interview employees to identify potential cases of norovirus.		
5.2	Have managers look for obvious signs of employee illness such as increased frequency of restroom use. Send ill employees home as per the recommendations in Section 7.		
5.3	Use a standardized illness questionnaire (Appendix B) to collect information		

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5.45.55.6	on employee and guest illness symptoms. Use room service orders to identify potentially ill guests. Provide a questionnaire to any guest reporting not feeling well or ordering items such as ginger ale, broth, or dry toast. Distribute illness questionnaires to guests purchasing medications for gastroenteritis (e.g. anti-diarrheals, antacids, upset stomach relief) at gift shops. Monitor gift shop sales of over the counter medications for gastroenteritis (e.g. anti-diarrheals, antacids, upset stomach relief) and beverages such as ginger ale to identify potential outbreaks.		
Section	a 6: Dealing with Guests During Outbreaks	SOP	Date Implemented
6.1	Provide information* to guests upon check-in, in guest rooms and through signs on: 6.1.1 The symptoms and transmission of norovirus 6.1.2 Prevention of norovirus, including proper handwashing 6.1.3 The procedure for reporting illness to the hotel and or health district 6.1.4 How to obtain medical assistance, if necessary * Southern Nevada Health District staff are available to work with hotel management to develop appropriate messages for guests, and to assist in the development of educational materials. Encourage ill guests to stay in their rooms if they become ill by: 6.2.1 Staff taking illness reports should request that ill guests stay in their rooms while symptomatic. 6.2.2 Send a room service tray containing fluids (hot tea, water, electrolyte maintenance solutions such as Pedialyte®) and foods such as crackers, dry toast, and/or broth to any person reporting an ongoing illness. 6.2.3 Provide a mechanism by which ill guests can get items from the gift shop (newspapers, magazines, light snacks, over-the-counter		Imperience
6.3	medications, etc.) without leaving their rooms. Where appropriate, and space permitting, relocate non-ill guests sharing the room with the ill guest to a different room		
			Date
	7: Dealing with Employees During Outbreaks	SOP	Implemented
7.1	During an outbreak, provide regular updates to employees, providing: 7.1.1 The status of the outbreak response 7.1.2 Talking points to be used in dealing with guests 7.1.3 Reminders on proper handwashing 7.1.4 Procedures for reporting illness		
7.2	Require that all employees, <i>regardless of job duty</i> , who report having experienced vomiting, diarrhea, or "stomach flu" symptoms, remain off duty for 72 hours after their symptoms end.		
7.3	Evaluate policies for the compensation and medical evaluation of ill employees.		

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7.4	Prohibit employee potlucks, and do not allow employees to bring in food (either prepared at home or commercially) to share with others for the duration of the outbreak. Temporarily remove candy dishes and fruit baskets at individual desks or common areas. <i>Note: This recommendation does not include removing office coffee pots.</i>			
Surfac	e Clear	nesis and Feces Removal, and Follow-up Environmental Contact n-up and Disinfection	SOP	Date Implemented
8.1		all fecal and vomitus events as if they are contaminated with a highly ous organism.		
8.2		deration should be given to having a specially trained cleaning team		
O. <u>_</u>		le at all times.		
8.3		e that all biohazardous accidents are only remediated by staff trained and ly protected for such clean-up activities.		
8.4	Have s	staff report all biohazardous accidents to management. Document all		
	known	ardous events in a log including date, time, location, persons affected (if), the names of the persons reporting the event, a short description of		
		ident, the names of the responders, and how a short description of the		
0.5		ise to the accident.		
8.5		event of an emetic or fecal accident, the area must be cleaned as a of urgency. Because of the potential for the aerosolization of the virus,		
		a where such an incident has occurred should be closed, or cordoned		
		a 25 foot radius from the site of the incident. Guests and non-essential		
		nould be excluded from these areas for the duration of the cleanup.		
8.6		duals, who clean up emesis or feces should use the following procedures:		
	8.6.1	Wear appropriate personal protective equipment (PPE), including a		
		disposable mask, gloves, eye shield, disposable shoe covers, and plastic		
		disposable apron.		
	8.6.2	Use disposable cleaning cloths or paper towels to soak up excess		
		liquid. Transfer these and any solid matter directly into a Biohazard		
	8.6.3	bag. To remove gross debris, clean the soiled area with detergent and hot		
	0.0.5	water, using a disposable cloth.		
	8.6.4	Disinfect the contaminated area.		
	8.6.5	Dispose of mop heads, cleaning cloths, other materials used in the		
		cleanup, and PPE into the Biohazard waste bag.		
	8.6.6	Wash hands thoroughly after completing the clean-up procedure and		
		again after completing the disposal procedure.		
	_	le response plan can be found in the Southern Nevada Health District reg		

"Regulations Governing the Sanitation and Safety of Public Accommodation Facilities 2006 Appendix I: Biohazard Event Response Plan for Public Areas"

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			Date
Sectio	n 9: Treatment of Contaminated Materials	SOP	Implemented
9.1	Contaminated linen and other fabric materials should be placed carefully into		
	separate laundry bags. They should be washed separately in a hot wash, and		
	dried separately at 170°F. If an outside laundry is used, they should be advised		
	that the laundry is potentially infectious.		
9.2	Soft furnishings should be removed for appropriate sanitization/disinfection.		
9.3	Soiled mattresses should be wrapped in heavy gauge plastic and discarded via		
	normal solid waste disposal procedures.		
9.4	Contaminated carpets should be cleaned in a three step process. First, carpets		
	must be cleaned with carpet detergent and hot water. Second, carpets must be		
	disinfected by applying an appropriate disinfectant. Finally, carpets should be		
	steam cleaned (158°F for 5 minutes or 212°F for 1 minute is needed for		
	complete inactivation).		
9.5	Contaminated hard surfaces should be washed with detergent and hot water,		
	using a disposable cloth, and then disinfected. Cleaning cloths should be		
	disposed of as biohazardous waste. Mop heads should be discarded after use.		
			Data
	40 P 41 - 1 P 4 P 4 P 4 P 4 P 4 P 4 P 4 P 4 P 4 P	00 D	Date
	n 10: Responding to Emetic Events in Food Preparation or Service Areas	SOP	Implemented
10.1	Stop all food preparation and service until clean-up is completed.		
10.2	Follow the procedures outlined in Section 6 for cleaning.		
10.3	Destroy all exposed food, food that may have been contaminated, and food		
	that has been handled by the infected person.		

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Appendix A Products Approved by the EPA for use Against Norovirus

A number of commercially-available products have been approved by the EPA for use against norovirus. Because norovirus is difficult to grow in laboratory conditions, these products have been tested against Feline Calicivirus (FCV), a surrogate for norovirus. The complete EPA testing methodology can be found at http://www.epa.gov/oppad001/pdf files/confirmatory virucidal test.pdf.

This list is provided solely as a courtesy to hotel/casinos. The Southern Nevada Health District does not endorse or recommend any particular product or manufacturer, and inclusion on this list should not be taken as such an endorsement. This list is based on products known to staff of the Health District at the time this document was created, and should not be assumed to be comprehensive. These products vary in their cost, contact time needed, ability to clean and sanitize/disinfect, and shelf life. Each product must be used in accordance with the manufacturer's instructions and state/local regulations, and appropriate training and personal protective equipment must be provided to staff before they are used. If you have questions or concerns about the use of a particular product, please contact the Environmental Health Specialist assigned to your facility.

Method/Chemical

Product and Manufacturer

Bleach (Sodium hypochlorite)	Generic – 1000 ppm
Ethanol	Generic – 75% Ethanol
Heat	> 170°F
Hydrogen peroxide	Accelerated Hydrogen Peroxide TM (Virox Technologies)
Hypochlorous acid	Sterilox (PuriCore)
Phenols	Mikro-Bak® II (Ecolab)
Parachlorometaxylenol (PCMX)	EcoTru® (EnviroSystems)
Potassium peroxomonosulphate	Virkon® (Antec International)
Quaternary Ammonia (hospital	HB or TB Quat Disinfectant Cleaner (3M TM)
grade)	** Note: regular quaternary ammonia is not effective against norovirus **

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Standardized Visitor Illness Report

_	Name				List all hotels and restaurants visited in the 72 hours before the illness started
Demographic Information	Address				
hic Info	City	State	Zip		
mograp	Date of Birth / Age		□ Female □ Male		
De	Home Phone	Occupation			
	Arrival Date	Departure D	ate		
	Travel Method □Plane □Car □Bus	Travel Method □Plane □Car □Bus			
Travel Information	If Plane, Airline Name	If Plane, Air	e, Airline Name		
	Flight/Bus Number	Flight/Bus Number		and Restaurants Visited	
Travel	Hotel Name	Room Numb	oer	estaura	
	Events Attended (with Da Conferences, Meetings, Weddings et			Hotels and Re	
	Did you seek medical care illness?	for your	□Yes □No	=	
	If yes, when and where was care sought?				
ory	Do you have any underlying medical conditions? ☐ Yes ☐ No				
Medical History	If yes, please list				
Medi	Did any of your travel companions ☐ Yes have a similar illness? ☐ No				
	If yes, provide names and phone numbers				

Illness Information					
Have you recently had any of the following symptoms?	If yes, how long did they last?				
Yes No Don't Know	Before Arrival In Las Vegas After Departing app	<1 Day 1 Day 2 Days 3 or More Days Ongoing			
General					
Nausea Vomiting Diarrhea Bloody Diarrhea Abdominal Cramps Abdominal Pain Yellow skin or eyes					
Dermatologic					
Headache					
Shortness of Breath					