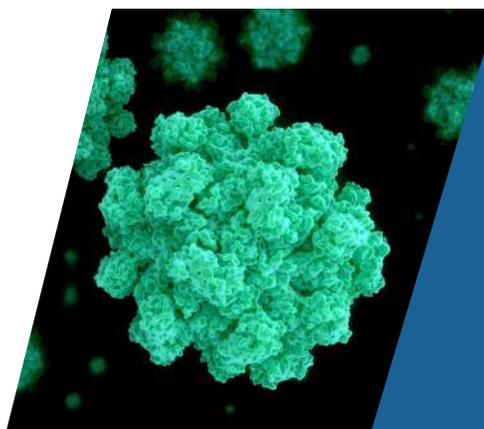




CONTROLLING THE SPREAD OF ACUTE VIRAL GASTROENTERITIS IN SKILLED NURSING FACILITIES





CONTROLLING THE SPREAD OF ACUTE VIRAL GASTROENTERITIS IN SKILLED NURSING FACILITIES

Outbreaks of viral gastroenteritis infection are more likely to occur during winter months within institutions such as hospitals, skilled nursing facilities, nursing homes, schools, and child care settings. These viruses are highly contagious and can be spread rapidly from person-to-person through direct contact, contact with contaminated surfaces, and ingestion of contaminated food. The spread and duration of these outbreaks can be minimized and contained by your facility staff by taking quick, decisive action. To assist you, the Long Beach Department of Health and Human Services is providing you with the *Long Beach Acute Viral Gastroenteritis Outbreak Prevention and Control Toolkit*. This toolkit includes information and outbreak management material you and your staff need to prevent and control outbreaks in your facility.

Viral Gastroenteritis Characteristics

Gastroenteritis is an inflammation of the stomach and intestines. This usually results in vomiting and diarrhea. Examples of viral gastroenteritis include norovirus, rotavirus, astrovirus, and adenovirus. Note that bacteria such as Salmonella, Shigella, or Campylobacter also occasionally cause gastroenteritis, but are more likely to be foodborne and the patterns of illness that occur are usually different from viral gastroenteritis.

The typical symptoms of viral gastroenteritis are sudden onset of nausea, vomiting, low-grade fever, abdominal cramps, and watery, non-bloody diarrhea. Vomiting is more common in children compared to adults. These symptoms can occur in various combinations during an outbreak. Symptoms usually develop within 24 to 48 hours after exposure, but can appear as early as 12 hours. Illness typically lasts 12 to 60 hours and usually will resolve on its own. Individuals are most contagious when sick with norovirus and during the three days after recovery.

Outbreaks of viral gastroenteritis are commonly associated with norovirus. Norovirus is spread very easily from person-to-person, and people can become infected with the virus in several ways, including: eating food or drinking liquids that are contaminated with norovirus, touching surfaces or objects contaminated with norovirus and then eating or placing their hand in their mouth, and having direct contact with another person who has norovirus. These outbreaks can result in:

- Increased staff work load due to acutely ill patients
- Intensive environmental cleaning requirements
- Absenteeism among direct care and other facility staff
- Facility closure to new admissions by the Public Health Department

Norovirus can persist on surfaces in the environment for weeks and is not destroyed by many disinfecting products. When an individual with norovirus handles or prepares food and drinks improperly, they can contaminate those items and can cause infections in people who consume those products; therefore, food handlers with diarrhea or vomiting should not work until at least 72 hours after their symptoms have stopped.

An outbreak of viral gastroenteritis infection is suspected when more than two students and/or staff in a facility or classroom have symptoms, starting within a 48 hour period. **Report any suspected outbreaks to Long Beach Health Department, Communicable Disease Program at 562.570.4302.**



Diagnosing and Treatment

There is no specific medication, or therapy for viral gastroenteritis infection. Individuals with diarrhea and vomiting should drink plenty of fluids to keep hydrated and have plenty of rest. Treatment is supportive and focuses on preventing dehydration. If symptoms do not improve, individuals should contact their primary care physician.

There is a vaccine for rotavirus. There are two brands of the vaccine and infants will either get 2 or 3 doses, depending on which vaccine is used. Infants should receive the first dose of rotavirus vaccine before 15 weeks and the last dose by 8 months.

Recommendations for Administrators/ Staff

- Any staff member with symptoms of viral gastroenteritis infection should be sent home and must not return until they are **no longer symptomatic for 48 hours**. Staff with direct patient care and kitchen staff (foodhandlers) should not return to work until they remain symptom-free for 72 hours.
- Symptomatic food handlers must not prepare or serve food for others under any circumstances.
- Staff who interact with or assist sick patients or clean up vomit or feces must wash hands thoroughly after each encounter.
- Administrative staff at the facility should track the number of ill patients and staff in a daily sick log.
- Post hand hygiene signage in the bathrooms for patients, visitors, and staff.
- Cancel or postpone group activities until the outbreak is over.
- Maintain the same staff-to-resident assignments. Floating staff should be assigned exclusively to either well or sick sections until the outbreak is over.
- Non-essential staff and visitors should not visit the facility until the outbreak is over.

Control Measures

Interrupting person-to-person transmission will limit the extent of the outbreak. The following recommendations may assist facility personnel in controlling an outbreak of viral gastroenteritis. Control measures should take place if an outbreak is suspected without waiting for a diagnostic confirmation.

- Notification
 - Each nursing unit should immediately report any resident(s) or staff member(s) with sudden onset of symptoms
 - New cases should be recorded daily using a case log
 - Notify the medical director immediately.
 - Notify the local health department and the Licensing and Certification district office
 - Consult with the local health department about laboratory testing.



- Management of Residents and Staff
 - Confine symptomatic residents to their rooms until 48 hours after symptoms cease. Exclude non-essential staff from entering the room.
 - Request symptomatic staff, visitors, and volunteers to stay home until symptom-free for at least 48 hours.
 - Discontinue “floating” staff from the affected unit to non-affected units.
 - Wear gloves, gowns, and a mask when in contact with the symptomatic resident. Remove gloves and gown, perform hand hygiene, and remove mask after contact with the ill resident.

Strict infection control practices are necessary to control spread. Necessary infection control practices are:

- Hands should be washed vigorously with soap and warm water for more than 20 seconds:

Wash Hands AFTER:

- Toilet visits
- Cleaning up vomit or diarrhea
- Changing diapers
- Handling soiled clothing or linens
- Sneezing and coughing

Wash Hands BEFORE:

- Eating
- Feeding
- Food preparation
- Serving food
- Providing healthcare services

- Effective handwashing technique:
 - Lather hands with soap and warm water for 20 seconds,
 - Scrub entire hands including beneath fingernails,
 - Rinse hands well with warm running water, and
 - Dry hands with disposable paper towel or under air dryer.
- Each sink should be supplied with soap and access to paper towels.
- Educate residents and staff about good hand washing techniques.
- Post signs to remind all persons in the facility to practice frequent hand washing.
- Persons cleaning areas that are heavily contaminated with vomit or feces should wear disposable gloves and face masks.
- Clean up vomit and fecal spillages promptly and carefully so that the release of virus into the air is minimized. Properly dispose of vomit or feces in a toilet and disinfect the surrounding area with a bleach-based cleaner.
- If it is possible, immediately remove and wash clothing or linens that may be contaminated with vomit or feces. Handle soiled items as little as possible, without agitating them. Launder with an approved detergent in hot water of at least 160°F for at least 25 minutes. Dry in a hot dryer if fabric allows. If laundry is not done at your facility, place soiled linens in a plastic bag and seal or tie the bag.



Cleaning and Disinfecting Environmental Surfaces

During an outbreak, routine cleaning should occur with increased frequency, especially common-use bathrooms.

Chlorine bleach concentrations and mixing instruction

Food/mouth contact items, toys	Most non-porous surfaces	Heavily contaminated non-porous surfaces
1 tablespoon of bleach in 1 gallon water (1:250 dilution)	1/3 cup bleach in 1 gallon water (1:50 dilution)	1 and 2/3 cups bleach in 1 gallon water (1:10 dilution)

- Before the disinfection process:
 - Spot test disinfectant solutions; disinfectants can discolor or corrode surfaces.
 - Protect yourself from norovirus aerosols and disinfectant by wearing personal protective equipment (PPE): disposable gloves and a facemask.
 - Clean surfaces with visible debris
- After cleaning, disinfect with diluted chlorine bleach or a U.S. Environmental Protection Agency (EPA)- approved disinfectant.
 - EPA-registered disinfectants should be used according to manufacturers' instructions, including the use of proper PPE recommended by the manufacturer when applying the product.
 - Diluted chlorine bleach
- Contact Time
 - Leave bleach on surface for 10-20 minutes and then rinse thoroughly with clean water.
- Stability of Chlorine Bleach
 - Once opened, bottles of household bleach will lose effectiveness after 30 days.
 - Use a new unopened bottle of bleach every 30 days for preparing diluted disinfectant solutions.
 - Prepare a fresh dilution of bleach daily and discard unused portions.
- Phenolic-based disinfectants (e.g., Pinesol or Lysol) are effective but may require concentrations of 2-4 times the manufacturer's recommendations for routine use.
- Heat disinfection [to 140° F (60°C)] is suggested for items like upholstery and carpet that cannot be cleaned with chemical disinfectants such as chlorine bleach.
- Quaternary ammonium compounds, often used for sanitizing food preparation surfaces and disinfecting large surfaces such as countertops or floors, are **not** effective against noroviruses.



Cleaning Surfaces

High Risk Surfaces

- “High touch” surfaces such as faucets, toilets, floors, tables, toys, toilet rails, counters, phones, tables, chairs, sleeping mats, walls, hand rails, doorknobs, elevator buttons, phones, light switches, and ice machines require frequent cleaning.

Non-porous Surfaces/Hard Surfaces

- Examples include: bath rails, chairs (all wooden, plastic, and steel parts), counters, doorknobs, elevator buttons, faucets, handrails, light switches, phones, tables, toilets, sinks, etc.)
- Disinfect with chlorine bleach; rinse with water for food preparation areas.

Porous Surfaces

- Examples include carpets and upholstered chairs and sofas.
- Visible debris should be cleaned with absorbent material (double layer) and discarded in a plastic bag to minimize airborne particles.
- Steam clean (heat inactivation) 158° F for 5 minutes or 212° F for 1 minute for complete inactivation. Disinfecting with bleach may discolor carpets and/or upholstered furniture.

Reporting

Any outbreak (2 or more residents and/or staff) of acute gastroenteritis must be immediately reported to the LBDHHS Epidemiology Program at (562) 570-4302 or by fax at (562) 570-4374. For after hours, weekends, and holidays, call (562) 435-6711 and ask for the Communicable Disease Control Officer. If you have questions or need additional information, contact the Epidemiology Program at (562) 570-4302.

Resources

- CDC. Norovirus in Healthcare Facilities – Fact Sheet, available at <http://www.cdc.gov/HAI/organisms/norovirus.html>, (accessed 16 August 2011).
- CDC. Division of Viral Disease, Norovirus, available at <http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus.htm> (accessed 16 August 2011).
- Philadelphia Department of Public Health, “Controlling the Spread of Norovirus in Schools and Childcare Settings– Interim Recommendations from the Philadelphia Department of Public Health, February 10, 2011”, available at https://hip.phila.gov/xv/Portals/0/HIP/Disease_Info/Norovirus/
- PDPHGuidelines_ControllingSpreadNorovirus_SchoolsChildcareSettings_021011.pdf (accessed 16 August 2011).
- Contra Costa Health Services, Communicable Disease Programs
- CDC. Division of Communicable Disease Control in Consultation with Licensing and Certification Program, “Recommendations for the Prevention and Control of Viral Gastroenteritis Outbreaks in California Long-Term Care Facilities.” October 2016. <https://www.cdph.ca.gov/pubsforms/Guidelines/Documents/PCofViralGastroenteritisOutbreaks.pdf>



Viral Gastroenteritis Line Listing – Symptomatic RESIDENTS

Name	D.O.B.	Age	Sex (M/F)	Patients unit/room	Symptomatic onset date	Vomiting (Y/N/Unk)	Diarrhea (Y/N/Unk)	Bloody Stools (Y/N/Unk)	Abdominal Cramps (Y/N/Unk)	Fever (T max Y/N)	First Symptom free date	Hospitalized (Y/N)	Specimen collected (Y/N)	Date of specimen collected	Lab Results	Immuno compromised or conditions? Date of Death?

Long Beach Department of Health and Human Services, Epidemiology Department
 Phone: (562) 570-4302 Fax: (562) 570-4374



Gastroenteritis Line Listing- Symptomatic STAFF

Name	D.O.B.	Age	Sex (M/F)	Department Location	Work at multiple sites (Y/N/UNK)	Last Date Worked	Symptomatic onset date	Vomiting (Y/N/UNK)	Diarrhea (Y/N/UNK)	Bloody Stools (Y/N/UNK)	Abdom. Cramps (Y/N/UNK)	Fever (T max)	First Symptom free date	Hospitalized (Y/N/UNK)	Stool /vomitus sample collected	Date of specimen collected	Lab Results	Immuno compromised or conditions? Date of Death?	

Long Beach Department of Health and Human Services, Epidemiology Department
 Phone: (562) 570-4302 Fax: (562) 570-4374



Outbreak Management Check List

1. Communication	N/A	Date	Completed by	Signature
Facility Administration Notified				
Facility Infection Control Notified				
Immediately reportable to LB Epidemiology Department (562) 570-4302 or Fax: (562) 570-4374				
Report to California Department of Public Health Licensing and Certification Local Office				
Patients, relatives, & visitors notified				
Date of last admission				
Health facility closed to new admissions				
Health facility reopened to new admissions				
2. Investigation and Monitoring	N/A	Date	Completed by	Signature
Symptomatic healthcare workers removed from work and/or referred to Employee health and/or evaluated by a clinician				
Patients evaluated for NV and placed in contact isolation				
Employee line list completed				
Patient line list completed				
Map Cases on facility floor plan				
Report all new cases to health department daily				
3. Specimen Collection	N/A	Date	Completed by	Signature
Stool specimens collected within 48-72 hours of onset and kept refrigerated for lab confirmation				
Vomitus specimen collected to supplement the diagnosis, if needed				
4. Infection Control				
Enhanced environmental cleaning conducted throughout the outbreak period				
Contact isolation- symptomatic residences confined to their rooms. Movement of all residence minimized.				
Limit staff movement between units. If staff have been exposed to ill patients, maintain work assignments to same unit				
Environmental cleaning- EPA approved disinfectant for NV or bleach/water preparation (1 part household bleach to 10 parts water)				
5. Hand Hygiene	N/A	Date	Completed by	Signature
Antiseptic soap used as preferred method (20 seconds or more)				
6. Education	N/A	Date	Completed by	Signature
Training provided to all staff on signs and symptoms of norovirus				
Educational materials given to staff				
Control measures discussed				



Notification Alert Template

Administrative staff should use this template to notify staff, patients, and facility visitors of a viral gastroenteritis outbreak.

[Insert Agency Letterhead]

DATE

Dear Patients, Families, Visitors:

Our facility is currently working with the City of Long Beach Department of Health and Human Services to investigate a number of patients and/or staff who became ill with viral gastroenteritis, which causes vomiting and diarrhea. These viruses are found in the stool or vomit of infected people. We are notifying you in the interest of public awareness and safety.

People can become infected with the virus in several ways, including:

- Eating contaminated food or drinking contaminated liquids.
- Touching contaminated surfaces or objects and then placing their hand in their mouth.
- Having direct contact with another person who is infected and showing symptoms (for example, when caring for someone with illness, or sharing foods or eating with utensils from someone who is ill).

The symptoms of illness usually begin about 24 to 48 hours after exposure to the virus. If you are feeling sick tell the nurse, and staff who are experiencing any symptoms of gastrointestinal illness should remain home until showing no symptoms for 48 hours. Be sure to wash your hands when entering and before leaving this facility. The best way to prevent infection is to wash your hands.

INSERT FACILITY NAME has already taken the appropriate steps to get this outbreak under control, and Public Health is working closely with the staff of **INSERT FACILITY NAME** to investigate the cause of these infections to prevent new infections.

INSERT FACILITY NAME has strengthened all infection control measures to control this problem. Staff education and strict hand washing for staff has been implemented. The strengthened infection control measures that **INSERT FACILITY NAME** already has in place can reduce the number of new infections.

For any questions regarding this notification alert, please contact: **INSERT FACILITY CONTACT INFORMATION**

Sincerely,

NAME, TITLE

REPORTABLE DISEASES AND CONDITIONS

Title 17, California Code of Regulations (CCR) §2500

It shall be the duty of every health care provider, knowing of or in attendance on a case or suspected case of any of the diseases or condition listed below, to report to the local health officer for the jurisdiction where the patient resides. Where no health care provider is in attendance, any individual having knowledge of a person who is suspected to be suffering from one of the diseases or conditions listed below may make such a report to the local health officer for the jurisdiction where the patient resides.

URGENCY REPORTING REQUIREMENTS

☎=Report immediately by telephone

☒=Report within 1 working day

⌚=Report within 7 calendar days from time of identification

REPORTABLE DISEASES

- ☒ **Amebiasis**
- ⌚ Anaplasmosis
- ☎ **Anthrax**
- ☒ **Babesiosis**
- ☎ **Botulism (Infant, Foodborne, Wound)**
- ⌚ Brucellosis, animal (except infections due to *Brucella canis*)
- ☎ **Brucellosis, human**
- ☒ **Campylobacteriosis**
- ⌚ Chancroid
- ☒ **Chickenpox (Varicella), (outbreaks, hospitalizations and deaths)**
- ☒ **Chikungunya Virus Infection**
- ⌚ *Chlamydia trachomatis* infections, including Lymphogranuloma Venereum (LGV)
- ☎ **Cholera**
- ☎ **Ciguatera Fish Poisoning**
- ⌚ Coccidioidomycosis
- ⌚ Creutzfeldt-Jakob Disease (CJD) and other Transmissible Spongiform Encephalopathies (TSE)
- ☒ **Cryptosporidiosis**
- ⌚ Cyclosporiasis
- ⌚ Cysticercosis or Taeniasis
- ☎ **Dengue Virus Infection**
- ☎ **Diphtheria**
- ☎ **Domoic Acid Poisoning (Amnesic Shellfish Poisoning)**
- ⌚ Ehrlichiosis
- ☒ **Encephalitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic**
- ☎ ***Escherichia coli*: shiga toxin producing (STEC) including *E. coli* O157**
- ☎ **Flavivirus Infection of Undetermined Species**
- ☒ **Foodborne Disease**
- ⌚ Giardiasis
- ⌚ Gonococcal Infections
- ☒ ***Haemophilus influenzae*, invasive disease, all serotypes (report an incident of less than 5 years of age)**
- ☒ **Hantavirus Infections**
- ☎ **Hemolytic Uremic Syndrome**
- ⌚ Hepatitis, Viral
- ☒ **Hepatitis A**
- ⌚ Hepatitis B (specify acute case or chronic)
- ⌚ Hepatitis C (specify acute case or chronic)
- ⌚ Hepatitis D (Delta) (specify acute case or chronic)
- ⌚ Hepatitis E, acute infection
- ⌚ Human Immunodeficiency Virus (HIV) Infection, stage 3 (AIDS)
- ⌚ Human Immunodeficiency Virus (HIV), Acute Infection
- ⌚ Influenza, deaths in lab-confirmed cases age 0-64 years
- ☎ **Influenza, novel strains (human)**
- ⌚ Legionellosis
- ⌚ Leprosy (Hansen Disease)
- ⌚ Leptospirosis
- ☒ **Listeriosis**
- ⌚ Lyme Disease
- ☒ **Malaria**
- ☎ **Measles (Rubeola)**
- ☒ **Meningitis, Specify Etiology: Viral, Bacterial, Fungal, Parasitic**
- ☎ **Meningococcal Infections**
- ⌚ Mumps
- ☎ **Novel Virus Infection with Pandemic Potential**
- ☎ **Paralytic Shellfish Poisoning**
- ☒ **Pertussis (Whooping Cough)**
- ☎ **Plague, Human or Animal**
- ☒ **Poliovirus Infection**
- ☒ **Psittacosis**
- ☒ **Q Fever**
- ☎ **Rabies, Human or Animal**
- ☒ **Relapsing Fever**
- ⌚ Rickettsial Diseases (non-Rocky Mountain Spotted Fever), including Typhus and Typhus-like illnesses
- ⌚ Rocky Mountain Spotted Fever
- ⌚ Rubella (German Measles)
- ⌚ Rubella Syndrome, Congenital
- ⌚ Respiratory Syncytial Virus (only report a death in a patient less than five years of age)
- ☒ **Salmonellosis (Other than Typhoid Fever)**
- ☎ **Scombroid Fish Poisoning**
- ☎ **Shiga toxin (detected in feces)**
- ☒ **Shigellosis**
- ☎ **Smallpox (Variola)**
- ☒ **Streptococcal Infections (Outbreaks of any type and Individual Cases in Food Handlers and Dairy Workers Only)**
- ☒ **Syphilis**
- ⌚ Tetanus
- ☒ **Trichinosis**
- ☒ **Tuberculosis†**
- ⌚ Tularemia, animal
- ☎ **Tularemia**
- ☒ **Typhoid Fever, Cases and Carriers**
- ☒ ***Vibrio* Infections**
- ☎ **Viral Hemorrhagic Fevers (e.g., Crimean-Congo, Ebola, Lassa, and Marburg viruses)**
- ☒ **West Nile Virus (WNV) Infection**
- ☎ **Yellow Fever**
- ☒ **Yersiniosis**
- ☎ **Zika Virus Infection**
- ☎ **OCCURRENCE of ANY UNUSUAL DISEASE**
- ☎ **OUTBREAKS of ANY DISEASE (Including diseases not listed in §2500). Specify if institutional and/or open community.**

HIV REPORTING BY HEALTH CARE PROVIDERS §2641.5-2643.20

Human Immunodeficiency Virus (HIV) infection is reportable by traceable mail or person-to-person transfer within seven calendar days by completion of the HIV/AIDS Case Report form (CDPH 8641A) available from the local health department. For completing HIV-specific reporting requirements, see Title 17, CCR, §2641.5-2643.20 and <http://www.cdph.ca.gov/programs/aids/Pages/OAHIVReporting.aspx>

REPORTABLE NONCOMMUNICABLE DISEASES AND CONDITIONS §2800–2812 and §2593(b)

Disorders Characterized by Lapses of Consciousness (§2800-2812)

Pesticide-related illness or injury (known or suspected cases)**

Cancer, including benign and borderline brain tumors (except (1) basal and squamous skin cancer unless occurring on genitalia, and (2) carcinoma in-situ and CIN III of the cervix) (§2593)***

LOCALLY REPORTABLE DISEASES (If Applicable):

- ☒ **Positive Skin Tests in Children Less Than 3 years of Age Without History of BCG Vaccination;**
- ⌚ **Carbapenem-Resistant Enterobacteriaceae (CRE) (Acute care hospitals and skilled nursing facilities only) Report monthly via NHSN. If not enrolled in NHSN, must report by CMR.**
- ☒ ***Norovirus* in Food Employees**

To report a case or outbreak of any disease contact the Epidemiology Program:

Phone: (562) 570-4302 • Fax: (562) 570-4374 • After Hours: (562) 435-6711

* Failure to report is a misdemeanor (Health and Safety Code §120295) and is a citable offense under the Medical Board of California Citation and Fine Program (Title 16, CCR, §1364.10 and 1364.11).

** Failure to report is a citable offense and subject to civil penalty (\$250) (Health and Safety Code §105200).

*** The Confidential Physician Cancer Reporting Form may also be used. See Physician Reporting Requirements for Cancer Reporting in CA at: www.ccrca.org.