**Background:**

Noroviruses are a group of viruses that cause gastroenteritis in people. Gastroenteritis is an inflammation of the lining of the stomach and intestines, causing an acute onset of severe vomiting and diarrhea. Norovirus illness is usually brief in people who are otherwise healthy. The elderly and people with other medical illnesses are most at risk for more severe or prolonged infection. Like all viral infections, antibiotics are not effective. Norovirus infections spread very rapidly and long term care facilities are particularly at-risk for outbreaks because of increased person-to-person contact.

**Symptoms of Norovirus:**

The illness typically begins after an incubation period of 12 - 48 hours. The symptoms of norovirus illness usually include nausea, vomiting, diarrhea, stomach cramping, low-grade fever, chills, headache, muscle aches, and tiredness. Onset of symptoms is sudden with frequent vomiting and several episodes of diarrhea. Although symptoms may be severe, they typically resolve without treatment after 1 - 3 days in otherwise healthy persons. However, more prolonged courses of illness lasting 4 - 6 days can occur, particularly among young children, elderly persons, and hospitalized patients. Shedding of the virus peaks four days after exposure, can occur for at least 2-3 weeks for some individuals, and may occur after resolution of symptoms. Approximately 10% of persons with norovirus gastroenteritis seek medical attention, which might include hospitalization and treatment for dehydration with oral or intravenous fluid therapy. Norovirus-associated deaths have been reported among elderly persons and in the context of outbreaks in long term care facilities.

**Transmission of Norovirus**

Norovirus is extremely contagious and can spread easily from person to person. Both stool and vomitus are infectious. Transmission occurs by three general routes: person-to-person, foodborne, and waterborne. People who have direct contact with a person who is infected with the virus can become infected. People can also become infected by eating food or drinking liquids contaminated with the virus. Norovirus infection may occur due to contact with surfaces or objects contaminated with the virus and after persons have had hand-to-mouth contact in a setting of poor environmental sanitation and hand hygiene. Persons working in long term care facilities should pay special attention to residents who have symptoms suggestive of a norovirus infection. Outbreaks within facilities can affect a large percentage of both the resident and staff populations. There is the potential for norovirus to be transmitted by aerosols from vomiting persons. Appropriate precautions should be taken by staff when caring for vomiting residents in order to minimize exposure.

**Outbreaks of Norovirus**

Health-care facilities including nursing homes and hospitals are the most commonly reported settings of norovirus outbreaks in the United States. Virus can be introduced from the community into long term care facilities by staff, visitors, and residents who might either be incubating or infected with norovirus or by contaminated food and beverage products. Outbreaks in these settings can be prolonged, sometimes lasting weeks to months.

The following guidance provides a list of preventive measures to help control the spread of norovirus in a long term care facility in the event that an outbreak is suspected and/or confirmed. A check-list (Attachment 1) is provided as a summary of recommended actions and control measures described in this document.

Efforts to control outbreaks of norovirus in long term care facilities require a combination of infection control, environmental sanitation, and administrative controls. Strict control measures (including isolation or cohorting of symptomatic residents, exclusion of affected staff, cancellation of group activities and restricting new admissions into affected units) are disruptive and costly but may be required to control prolonged outbreaks.

The following guidance should help your facility respond to an outbreak of norovirus gastroenteritis. Although the items are in a list form, the order of activities is not implied, as many response activities will be happening simultaneously. The first step is recognition and reporting. Maine CDC Epidemiologists can then consult with you about laboratory testing and control measures.

**1. Recognition, Reporting & Testing**

**[ ]  Upon suspicion of a norovirus outbreak, notify Maine CDC by calling 1-800-821-5821 or emailing** **disease.reporting@maine.gov** **(no patient information).**
All outbreaks of infectious disease are reportable to Maine CDC. If using email notification, please do not include patient information. Maine CDC Epidemiologists will provide consultation on the need for initial or additional norovirus testing, specimen collection and transportation to the State Health and Environmental Testing Laboratory (HETL). Maine CDC can also assist you with refining interventions and notifying other facilities as needed.

**[ ]  Obtain an outbreak number from Field Epidemiologists for identification purposes: #\_\_\_\_\_\_\_\_\_**

Use this ID # on all specimens submitted to HETL to coordinate sample tracking for reporting and other administrative purposes. There are no fees or charges associated with the first five outbreak-associated specimens labeled with the proper Outbreak ID#. Include the assigned outbreak number on the bottom right side of the HETL requisition form ([www.mainepublichealth.gov/lab](http://www.mainepublichealth.gov/lab) or [https://www.maine.gov/dhhs/mecdc/public-health-systems/health-and-environmental-testing/micro/documents/HETL\_Requisition%20(Front)%20Form.pdf](https://www.maine.gov/dhhs/mecdc/public-health-systems/health-and-environmental-testing/micro/documents/HETL_Requisition%20%28Front%29%20Form.pdf)).

**[ ]  Maintain a line listing of symptomatic residents and staff.**Report symptomatic residents and staff to the person in charge of infection control. The following information should be systematically recorded for each ill resident and staff on a spread sheet or line list (Attachment 3). Line lists are important to track the progression and resolution of the outbreak. Additional data may be collected in consultation with the Maine CDC Epidemiologist in the event of a prolonged outbreak. The Maine CDC Epidemiologist will ask for a copy of the line list after the outbreak is resolved (96 hours (two incubation periods) with no new symptomatic individuals).

For Residents record:

* Name
* Age
* Sex
* Building and/or Unit/Wing and/or Room # and Bed Designation
* Illness onset date and time
* Symptoms
* Date illness resolved
* Stool specimen collection and date collected
* Test results for specimen
* Hospitalization status
* Death

For Staff record:

* Name
* Age
* Sex
* Job title and assignments
* Illness onset date and time
* Symptoms
* Date illness resolved
* Stool specimen collection and date
* Test results for specimen
* Hospitalization status
* Employment at another healthcare

facility

**[ ]  Collect and submit specimens from affected residents and staff as soon as an outbreak is suspected.**

Upon suspicion of an outbreak,collect specimens from at least 3 affected residents and staff (no more than 5 specimens). The ideal time to obtain stool specimens is during the acute stage of illness, within 48-72 hours of onset. Maine CDC Epidemiologists will advise if it is necessary to collect additional specimens. In many cases it is essential to confirm the diagnosis and to ensure that appropriate control measures are implemented to interrupt the transmission cycle. In assisted living facilities it may be necessary to coordinate specimen collection with the primary care provider.

**[ ]  Follow HETL guidelines for specimen collection, handling, and transport; label specimens with Outbreak #.**

Stool is the preferred specimen and should be collected in a leak-proof container soon after onset of illness. Stool should be submitted in viral transport media such as M4, VTM or UTM. Transfer a pea size portion of stool using a swab to transport media vessel. For liquid specimen place approximately 0.5 ml in transport media. Do not use wooden swabs. ONLY Synthetic-tipped (Polyester, Dacron, Rayon) swabs with plastic shafts should be used. Vomitus can be submitted when stool is not available. If viral transport media is not available, submit specimen in a standard, sterile specimen container. The Epidemiologist handling your outbreak can provide more information regarding specimen transport if needed. HETL guidance for collection, handling, and transport of clinical specimens for norovirus can be found at [www.maine.gov/dhhs/lsis](http://www.maine.gov/dhhs/lsis) (Attachment 2).

**2. Control Measures for Facility:**

Control measures should be implemented simultaneously as soon as an outbreak is suspected. **Outbreak control measures should not be delayed while waiting for test results!** Norovirus is highly contagious and easily transmitted within a facility. Control measures are grouped by category of control measure and department responsible for implementation (Infection Control, Environmental Services, and Administration). Control measures should remain in place until at least 48 hours after the last case symptoms have resolved.

**A. Infection Control:**

**[ ]  Institute contact precautions for ill residents during outbreak.**

If norovirus infection is suspected, healthcare personnel and visitors should wear PPE to reduce the likelihood of exposure to, or contamination by, vomitus or fecal material when caring for or visiting residents with symptoms of norovirus infection.

Gloves and gowns are recommended for the care of residents on Contact Precautions and according to Standard Precautions for any contact with body fluids, non-intact skin, or contaminated surfaces.

**[ ]  Use mask, gloves and gowns while caring for ill residents and cleaning up feces or vomitus.**

Staff should use disposable single-use gloves and gowns when caring for ill residents. Staff should change gloves and gowns and wash hands before and after caring for each resident. Use a surgical or procedure mask, and eye protection if there is a risk of splashes to the face during the care of residents (as needed) and when cleaning feces or vomitus. Consider the use of mask when flushing a commode due to potential aerosolization.

**[ ]**  **Use dedicated or disposable equipment for resident care to minimize transmission.**Consider dedicating pieces of commonly used equipment (blood pressure cuffs, glucometers, etc.) for use in affected areas. Common medical equipment should be adequately cleaned and disinfected between uses and at the end of the outbreak.

**[ ]  Cohort ill residents as much as possible and suspend group activities.**Ill residents should not be moved to an unaffected area. Group activities should not occur among affected residents/units until the outbreak is over. Discontinue self-service or family-style dining in dining rooms until outbreak had ended. Staff should make an effort to decrease feelings of isolation among ill residents.

**[ ]  Minimize resident and staff movement between affected and unaffected units/wards**.
Considering the highly infectious nature of norovirus, exclusion and isolation of infected persons are often the most practical means of interrupting transmission of virus and limiting contamination of the environment. Ill residents should be encouraged to stay in their room or affected unit/floor/ward as much as possible. This can be challenging on dementia units. Discuss possible strategies with the Field Epidemiologist. Cancel hair salon, barber shop and other appointments if symptomatic. Residents should not be moved from an affected area to an unaffected area. Staff such as physical and occupational therapists whose services are essential should work on unaffected units before attending to affected units. Non-essential staff should be excluded from the affected areas.

**[ ]  Enforce strict hand hygiene for all facility staff.**
Appropriate hand hygiene is the single most important method to prevent norovirus infection and control transmission. Reducing any norovirus present on hands is best accomplished by thorough handwashing with running water and plain or antiseptic soap. Proper hand hygiene requires washing with soap and running warm water for a minimum of 20 seconds. Do not use hand sanitizer in place of washing with soap and water.

**[ ]  Wash hands with soap and water after contamination with vomitus or feces.**
Hands should be washed for a minimum of 20 seconds with warm running water and soap after contamination with vomitus, feces or other bodily fluids as well as after contact with symptomatic residents. Hand sanitizers should not be considered a substitute for washing hands with soap and water.

**[ ]  Supplement washing with soap and water with ethanol or alcohol-based hand sanitizers.**

Hand washing with soap and running water for at least 20 seconds is the most effective way to reduce norovirus contamination on hands. Hand sanitizers might serve as an effective adjunct in between proper handwashings but should not be considered a substitute for soap and water handwashing. Consider using ethanol-based hand sanitizers (60-95%) if hand sanitizers are used.

**B. Environmental Controls:**

**[ ]  Clean all high traffic areas and high touch items (faucets, door handles, and toilet or bath rails).**
Perform routine cleaning and disinfection of frequently touched environmental surfaces and equipment in isolation and cohorted areas, as well as high traffic clinical areas. Cleaning should include, but is not limited to, commodes, toilets, hand/bed-railing, faucets, drinking water fountains, telephones, door handles, light switches, computer equipment, and kitchen preparation surfaces. Staff should adhere to established healthcare facility policies which guide effective cleaning and disinfection of equipment, using EPA-registered cleaning and disinfecting agents with activity against norovirus or norovirus surrogates (<https://www.epa.gov/system/files/documents/2021-12/2021.12.02-list-g.pdf>).

**[ ]  Use EPA-registered disinfectants or detergents/disinfectants approved for use against norovirus for routine cleaning and disinfection.**

Environmental surfaces contaminated with vomitus or fecal matter should be cleaned to remove any organic matter before being disinfected. All disinfectants and detergents/disinfectants should be used according to the manufacturer’s guidelines and EPA approved for use against norovirus. Proper cleaning and the use of chemical disinfectants is one of the key approaches to interrupting the spread of norovirus and disrupting an outbreak. Effective and thorough environmental cleaning should be optimized to control norovirus outbreaks.

In areas with direct contamination (commode, bathroom), use of a dilute beach solution (1:10) is recommended. For bleach with 8.25% sodium hypochlorite use 1 cup bleach to 1 gallon water (16 cups) with one minute of contact time (area remains wet for entire minute); either air dry or dry with paper towel. Ensure that cleaning product is left on surface for appropriate period of time before wiping off. Wear appropriate personal protection equipment, including gloves when cleaning. Consider the use of mask when flushing a commode due to potential aerosolization. A list of EPA-registered disinfectants is available at: (<https://www.epa.gov/system/files/documents/2021-12/2021.12.02-list-g.pdf>).

**[ ]  Clean soiled carpets and soft furnishings with hot water and detergent or steam clean as appropriate.**

Immediately clean vomitus or fecal material from carpets and soft furnishings using a manufacturer-approved cleaning agent or detergent. Consider discarding items that cannot be appropriately cleaned. Appropriate PPE should be used during these activities to minimize exposures.

**[ ]  Handle soiled linens carefully using appropriate infection control precautions.**
Linens (sheets, towels, napkins, etc.) and clothing that are soiled to any extent with vomit or stool should be handled carefully—without agitating the item—to avoid spreading virus. Use gloves and hold the soiled laundry away from the body. Soiled items should be laundered with detergent at the maximum available cycle length and then machine dried.

**[ ]  Conduct thorough cleaning of affected personal and communal areas 48 hours after resolution of the last case.**

Staff should wear appropriate personal protective equipment (gowns, gloves, and surgical or procedure masks) when cleaning areas contaminated with feces or vomit. Many institutions contract out for environmental services. In the event of an outbreak it is important to communicate with your environmental services contractor about the importance of thorough cleaning and the use of EPA-registered products and PPE as specified above.

**C. Administrative Controls:**

**[ ]  Exclude ill staff from work for at least 48 hours after symptoms resolve.**
Staff, especially food handlers, should remain out of work for at least 48 hours after symptoms resolve, even if they are feeling well sooner. Instruct ill staff employed at other healthcare facilities not to work for at least 48 hours after symptoms have resolved. Also consider whether ill contractors, volunteers, or visitors are coming into your facility. Examples of contractors may include staff working in environmental services, the beauty salon, or providing therapy or recreational activities.

**[ ]  Suspend group activities as much as possible until after the outbreak is contained.**
Cancel or postpone non-essential group activities (e.g., dining events, bingo, game nights) during an uncontrolled outbreak of norovirus. Consider closing common areas such as activity rooms and dining rooms and serving meals in the resident’s rooms for at least 48 hours after the last case symptoms have resolved.

**[ ]  Post signage about the outbreak and proper hand hygiene.**Post signs in prominent places (entrances, communal areas, dining facilities, etc.) to notify staff, residents and visitors about the outbreak. Include on signs that the facility is experiencing a gastrointestinal illness. Please do not use “stomach flu” or “flu” on signs as that leads to confusion. Also, post signage to promote increased hand hygiene compliance to prevent transmission of norovirus.

**[ ]  Consider restricting admissions if outbreak escalates or is prolonged**.
The facility should consider halting new admissions until the outbreak is over. If new admissions are necessary, admit residents to an unaffected unit or to a unit that has had no new cases within the last 48 hours. Inform prospective residents and hospitals that an outbreak is occurring if facility is still accepting new admissions. The threshold for ward/facility closure varies and depends on risk assessments by infection prevention personnel, facility leadership and Maine CDC.

**3. Recommendations for Residents & Visitors**

**[ ]  Encourage ill residents to stay in their room/apartment if they are sick to minimize contact with unaffected residents for at least 48 hours after symptoms have resolved.**
Ill residents should be placed on contact precautions and should be restricted to their rooms as much as possible for at least 48 hours after symptoms have resolved. Although the facility is their home, residents who are infectious should be encouraged to stay in the rooms and minimize contact with unaffected residents and staff.

**[ ]  Promote good hand hygiene for residents: after using the toilet, having contact with an ill individual, and before preparing food, eating or drinking.**

Good hand hygiene is essential for preventing transmission of norovirus and controlling outbreaks. Encourage the residents to perform handwashing, using soap and warm running water prior to preparation or consumption of food, and after contact with ill persons, touching potentially contaminated surfaces, and toileting activities. If there is no access to soap and water, hand sanitizers may be used.

**[ ]  Encourage ill visitors to wait at least 48 hours after symptoms resolve before visiting residents.**

All visitors should be screened for symptoms and signs of gastroenteritis and encouraged to wait until 48 hours after symptoms have resolved before visiting.

**[ ]  Consider restricting visitation until the outbreak has subsided.**
Encourage elderly persons, young children and persons with underlying medical conditions to postpone their visits until the outbreak is over to prevent illness in these highly susceptible populations. Promote phone calls, video chats, or other forms of communication as an alternative to visits. Promote good hand hygiene for visitors to the facility.

**4. Internal and External Communications**

During an outbreak it is important to have policies in place that specify procedures for communication needed to manage and report on outbreaks of norovirus gastroenteritis. Key stakeholders such as facility Administrators, Infection Preventionists, Nurse Managers, and communications staff, as well as state public health authorities, should be included in the framework. Also consider your corporate structure and include your corporate management when necessary.

**[ ]  Identify a single point of contact for internal communications.**
This person should be in charge of communication about the outbreak to the staff, residents, volunteers and visitors. Maine CDC Epidemiologists will work directly with this person on a daily basis. The Director of Nursing, Infection Preventionist, or other staff members with access to both resident and facility information are ideal candidates for this position as they will be involved with the daily activities related to the outbreak investigation and implementation of control measures.

**[ ]  Identify a single point of contact for external communications.**
This person should communicate with their corporate partners and if the press becomes involved, this person will be the designated contact for public information from the facility.

**[ ]  Notify staff of outbreak and control measures and conduct enhanced surveillance for ill staff.**Notify all staff that the facility is experiencing a norovirus outbreak and explain infection control measures that have been put in place to control the outbreak. Enhance surveillance among staff for signs of norovirus and exclude all ill staff from work for at least 48 hours after symptoms have resolved. Excluding staff from work prevents ill staff from transmitting norovirus within the facility.

**[ ]  Notify residents and guardians of outbreak and control measures and request ill residents report to nursing staff**.
Post signs that the facility is experiencing an increase in gastrointestinal illness. Please do not use “stomach flu” or “flu” on signs as that leads to confusion. Timely notification to residents, guardians, visitors, and staff with information about the outbreak in the facility can help to encourage cooperation from all persons to help prevent transmission of illness. It is important to encourage residents with diarrheal illness to report to staff, especially in the assisted-living setting where many residents maintain personal healthcare providers.

**[ ]  Consider a final communication to staff, residents, and guardians when the outbreak has resolved.**

A final communication will inform staff, residents, and guardians that the outbreak is over and that the facility will be returning to normal operations. An outbreak is considered resolved after 96 hours (two incubation periods) with no new symptom onset.

**References and Resources:**

Maine Center for Disease Control and Prevention –Norovirus Website: [www.maine.gov/dhhs/norovirus](http://www.maine.gov/dhhs/norovirus)

US CDC - Norovirus website: <http://www.cdc.gov/norovirus>

US CDC - Norovirus in Healthcare Settings <http://www.cdc.gov/HAI/organisms/norovirus.html>

US CDC - Norovirus in Healthcare Facilities Fact Sheet: <http://www.cdc.gov/hai/pdfs/norovirus/229110-ANoroCaseFactSheet508.pdf>

US CDC - Updated Norovirus Outbreak Management and Disease Prevention Guidelines: <http://www.cdc.gov/mmwr/pdf/rr/rr6003.pdf>

US CDC – Responding to Norovirus Outbreaks: <http://www.cdc.gov/norovirus/php/responding.html>

US CDC – Norovirus: Facts for Food Handlers: <https://www.cdc.gov/norovirus/downloads/foodhandlers.pdf>

EPA’s Registered Antimicrobial Products Effective Against Norovirus: <https://www.epa.gov/system/files/documents/2021-12/2021.12.02-list-g.pdf>

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**Checklist for Norovirus Outbreaks in Long Term Care**

Date Initiated: Name:

**Recognition, Reporting & Testing**

* Upon suspicion of a norovirus outbreak, notify Maine CDC by calling 1-800-821-5821 or emailing disease.reporting@maine.gov (please no patient information)
* Obtain an outbreak number from Field Epidemiologists for identification purposes: #\_\_\_\_\_\_\_\_\_
* Maintain a line listing of symptomatic residents and staff
* Collect and submit 3-5 specimens from affected residents and staff as soon as an outbreak is suspected
* Follow HETL guidelines for specimen collection, handling, and transport; label specimens with Outbreak #
* Outbreak is consider resolved when 96 hours (2 incubation periods) has elapsed from last onset of symptoms

**Control Measures for Facility**

**Infection Control:**

* Institute contact precautions for ill residents during outbreak
* Use mask, gloves and gowns while caring for ill residents and cleaning up feces or vomitus
* Use dedicated or disposable equipment for resident care to minimize transmission
* Cohort ill residents as much as possible and suspend group activities
* Minimize resident and staff movement between affected and unaffected units/wards
* Enforce strict hand hygiene for all facility staff
* Wash hands with soap and water after contamination with vomitus or feces
* Supplement hand washing with soap and water with ethanol or alcohol-based hand sanitizers

**Environmental Controls:**

* Clean all high traffic areas and high touch items (faucets, door handles, and toilet or bath rails)
* Use EPA-registered disinfectants or detergents/disinfectants approved for use against norovirus for routine cleaning and disinfection
* Clean soiled carpets and soft furnishings with hot water and detergent or steam clean as appropriate
* Handle soiled linens carefully using appropriate infection control precautions
* Conduct thorough cleaning of affected personal and communal areas 48 hours after resolution of the last case

**Administrative Controls:**

* Exclude ill staff from work for at least 48 hours after symptoms have resolved
* Suspend group activities as much as possible until after the outbreak is contained. Consider risks/benefits of limiting dining hall services
* Post signage about the outbreak and proper hand hygiene
* Restrict admissions if outbreak escalates or is prolonged

**Recommendations for Residents & Visitors**

* Encourage ill residents to stay in their room/apartment if they are sick to minimize contact with unaffected residents for at least 48 hours after symptoms have resolved
* Promote good hand hygiene for residents: after using the toilet, having contact with an ill individual, and before preparing food, eating or drinking
* Encourage ill visitors to wait at least 48 hours after symptoms resolve before visiting residents
* Consider restricting outside visitation until the outbreak has subsided

**Internal and External Communications**

* Identify a single point of contact for internal communications
* Identify a single point of contact for external communications
* Notify staff of outbreak and control measures and conduct enhanced surveillance for ill staff
* Notify residents/guardians of outbreak and control measures and request ill residents report to nursing staff
* Consider a final communication to staff, residents, and guardians when the outbreak has resolved

**Maine Health and Environmental Testing Laboratory**

**Norovirus**

***Laboratory Submission Information Sheet***

## Sample Case Log to Track Residents with Gastrointestinal Illness

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Individual Identification** | **Location** | **Illness Description** | **Laboratory Confirmation** | **Illness Complications** |
| **Name** | **Age** | **Sex (M/F)** | **Building, Unit****Room #, and/or Bed designation** | **Date onset illness** | **Fever (Y/N)** | **Nausea (Y/N)** | **Vomiting (Y/N)** | **Diarrhea ( Y/N)** | **Date illness resolved** | **Stool Sample Collected (Y/N)** | **Date Collected** | **Norovirus Positive (Y/N)** | **Hospitalized (Y/N)** | **Died (Y/N, if yes, date)** |
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## Sample Case Log to Track Staff with Gastrointestinal Illness

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| --- | --- | --- | --- | --- |
| **Staff Identification** | **Staffing Assignment**  | **Illness Description** | **Laboratory Confirmation** | **Illness Complications** |
| **Name** | **Age** | **Sex (M/F)** | **Job Title and/or****Staff location (Unit/wing/classroom)** | **Date & time of onset illness** | **Fever (Y/N)** | **Nausea (Y/N)** | **Vomiting (Y/N)** | **Diarrhea ( Y N)** | **Date illness resolved**  | **Stool Sample Collected (Y/N)** | **Date Collected** | **Norovirus Positive (Y/N)** | **Hospitalized (Y/N)** | **Employment at another healthcare facility (Y/N and Where)** |
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**Gastrointestinal Illness: Data collection line listing**

|  |  |  |
| --- | --- | --- |
| List for: | [ ]  Patients | [ ]  Employees Location:      |
|  |  |
|  |  |  |  |  |  |  |  |  |  | **Check if Symptom(s) Present** | **If Applicable** |
| **Name** | **Age** | **Sex** | **Room** | **Building/Unit/Wing** | **Onset of Diarrhea or Vomiting** | **Last Episode of Diarrhea or Vomiting** | **Duration** | Diarrhea | Vomiting | Abdominal Pain/ Tenderness | Nausea | Fever | Blood in Stool | Headache | Chills | Muscle Ache | Hospitalization (Y/N) | Hospital Admit Date | Death (Y/N), Date | Date of Enteric Stool | Date of Viral Stool | Norovirus Positive (Y/N) |
|  |  |  |  |  | Date | Time | Date | Time |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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