Viral Gastroenteritis (VGE) Outbreak Preparation and Management for Long Term Care Facilities (LTCF)

Introduction

In outbreaks of gastroenteritis, healthcare facilities often face the problem of having to take action before an etiologic agent can be identified. Distinguishing viral from bacterial or protozoal etiologies is sometimes difficult because of overlapping clinical syndromes, but prior testing to rule out bacterial causes is recommended.

Incubation Period

12 – 48 hours

Symptoms

- Nausea
- Vomiting
- Abdominal cramps
- Watery, non-bloody diarrhea

Duration of Illness

12 – 60 hours

Mode of Transmission

Noroviruses (a common cause of VGE) have a very low infectious dose (<10-100 virions) and is easily transmitted. In healthcare settings, norovirus may be introduced into a facility through ill patients, visitors or staff. Typically transmission occurs through exposure to direct or indirect fecal contamination found on fomites, by ingestion of contaminated water or food, or by exposure to aerosols of norovirus from vomiting persons.

Length of Infectiousness

Norovirus is shed for at least 48 to 72 hours after resolution of all symptoms. However, studies have demonstrated the presence of virus in the stool for several months after infection. Additional research is needed to determine length of infectiousness.

Treatment

For most people, viral gastroenteritis is a self-limited illness of a few days duration. In severe cases, dehydration and electrolyte imbalance can be potentially fatal, especially in the elderly.

Diagnosis

Consider ordering testing as early as possible during a suspect norovirus outbreak and ideally from an individual during the acute phase of illness (within 2-3 days of onset).

Immunity

Most persons' antibody levels against norovirus rise after infection; these titers normally peak by the third week and persist until approximately the sixth week, after which they decline. The nature of resistance and susceptibility to the norovirus is poorly understood, but it is likely that previous exposure to a strain of norovirus provides some immunity against severe disease if re-infected with the same strain.

When to report to Clark County Public Health (CCPH)

Long term care facilities are required to report all suspected and confirmed outbreaks to their local health jurisdiction (LHJ) per Washington Administrative Code (WAC) 246-101-305. In Clark County LTCFs are required to report the following:

- When 2 or more cases of diarrhea and/or vomiting occur within a 24 hour-hour period in residents and staff. Report only those cases of diarrhea and/or vomiting that cannot be attributed to another cause.

In the event of an outbreak, CCPH will work with the facility to determine appropriate response and the need for any additional control measures based on CDC and the Washington Department of Health recommendations. Control measures will be determined on a case-by-case basis in response to that particular outbreak. Control measures should be continued until the outbreak is declared over, typically 96 hours after the last onset of diarrhea and/or vomiting in residents or staff.

To report a suspected or confirmed outbreak, call the CD Program at (360) 397-8182.

For additional information visit: http://www.cdc.gov/HAI/organisms/norovirus.html
https://www.clark.wa.gov/public-health/long-term-care-facilities

Before an Outbreak Occurs

Have policies and procedures in place for:

- ❑ Responding to individual cases and outbreaks of VGE in your facility that outlines the chains of communication needed to manage and report outbreaks. Utilize CDC recommendations to guide your facility's response.
- ❑ Work exclusion when employees have potentially transmissible conditions, which do not penalize with loss of wages, benefits, or job status.
- ❑ Visitor restrictions during an outbreak.
- ❑ Patient transfer that clearly outline process for communicating to transport services and receiving facilities when a patient has a known or suspect infectious disease or when the facility is experiencing an outbreak.

- ❑ Provide annual training to staff on the detection and management of VGE and norovirus, and appropriate infection control precautions.
- ❑ Ensure appropriate personal protective equipment (PPE) is available and staff are trained on correct use.

During an Outbreak

Follow **CDC Infection Control Recommendations for Norovirus Outbreaks in Healthcare Settings**.

Additional control measures recommended by CCPH include:

- ❑ Report suspected communicable disease outbreaks to Public Health immediately.
- ❑ Facilities should notify their licensor of the outbreak and initiation of control measures.
- ❑ Prepare a line list of all ill residents and staff including their ward/room/work location, and date and time of symptom onset. A line list template is available on CCPH's website under resources for LTCF. The line list should be updated daily until the outbreak is declared over. This information is used to determine the extent of the outbreak and if it's being controlled.
- ❑ Initiate daily monitoring for new cases of VGE among residents, staff, and visitors.
- ❑ Rule out the possibility of a bacterial infection by testing several stool samples for possible bacterial causes of gastroenteritis, such as Salmonella, shiga toxin-producing E. coli and Shigella, especially if diarrhea is bloody or if diarrhea persists for 2 or more days.
- ❑ Provide education to staff, patients and visitors on the recognition of norovirus symptoms, proper hand washing technique and modes of transmission upon recognition and throughout the duration of an outbreak.
- ❑ Ensure hand washing stations are supplied with soap, paper towels, and hands free trash bins.
- ❑ Provide alcohol based hand rubs with at least 60% alcohol. Educate staff to use them only when hands are not grossly contaminated and when immediate hand washing with soap and water is not possible.
- ❑ Ensure staff members are correctly and consistently donning/doffing appropriate PPE.
- ❑ Direct personnel to wear masks when cleaning areas that are contaminated by feces or vomitus as spattering or aerosol materials may contain infectious virus particles.
- ❑ Provide meals to ill residents in their rooms.
- ❑ Dedicate staff to each ward to prevent the introduction of the illness to other parts of the facility.
- ❑ Avoid new admissions or transfers to areas with symptomatic residents.
- ❑ Post visible signs to alert visitors that the facility is having an increase in gastrointestinal illness.
- ❑ Restrict the number of visitors to the facility, especially to units with affected patients.
- ❑ Inform ill staff they should not report to work at your facility (or any other facility if employed at more than one) until at least 48 hours after resolution of symptoms.
- ❑ Provide regular briefings to staff and residents outlining the status of the outbreak and the control activities being implemented.

After an Outbreak

- ❑ Evaluate your facility's response.
- ❑ Develop action plans to address any identified areas of concern regarding facility readiness and response.
- ❑ Evaluate staff competency related to foundation infection control practices.
- ❑ Review and update staff training regarding applicable policies and procedures with focus infection control.
- ❑ Don't hesitate to use CCPH as a resource for reviewing outbreak response or supporting training needs.