

Mitigating a Norovirus Outbreak in a Long-Term Care Facility

Stark County Health Department

Background

Norovirus is a highly infectious virus that is hard to contain, with as few as 10 viral particles being able to cause illness in an individual. Each year, there are about 2,500 Norovirus outbreaks in the U.S. Currently, there are no treatments nor vaccines to help treat or prevent Norovirus. Norovirus transmission occurs through direct contact with an infected person, consuming contaminated food or water, and contact with contaminated surfaces. Symptoms include diarrhea, vomiting, nausea, stomach pain, fever, body aches, and headaches. Symptoms usually start about 12 to 48 hours after exposure and typically last between 1 to 3 days. It is especially difficult to contain in healthcare settings where workers are in contact with multiple patients. Without proper hand hygiene, it can easily be spread between these susceptible patients, though any person can easily become ill with Norovirus.

Approach

Our organization developed a shared Communicable Disease email that was monitored daily by our public health nurses and epidemiologists. Our partners in long-term care were readily able to report COVID-19 cases and various outbreaks. As a result, they utilized this email to notify the health department of GI illnesses among staff and residents at the facility. The CDC Norovirus Toolkit along with a line list was supplied to the contact at the facility to record demographic data, symptom onset data, and any notes regarding any healthcare sought. Our team worked with the state health department to provide education and guidance and subsequently sent samples to the state microbiology lab for testing.

Challenges

A challenge we faced was the lag time between the report of the first case and the provision of the line list to the local health department and collecting and shipment of specimens to the state microbiology lab. The collection and shipment were insufficient with a collection of only 2 specimens despite having many more ill. One additional challenge was the outbreak setting on a memory care unit. This unit accounted for half of all ill individuals and these residents may or may not have been incontinent. In combination with one another, these factors contributed to difficulty in preventing the spread of Norovirus to residents and employees.

Results / Outcomes

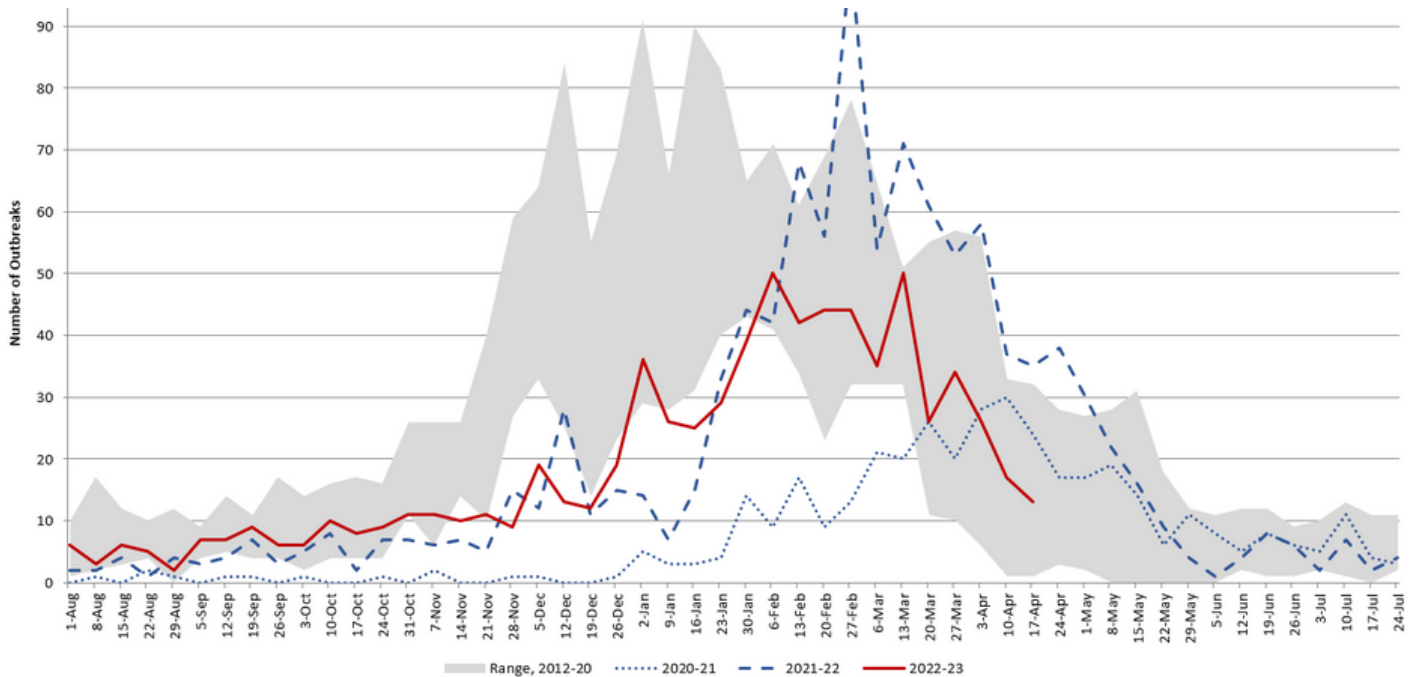
The shared Communicable Disease email inbox continues to be a valuable tool to educate and share information with partner facilities. To further disseminate critical information, our team presented on relevant prevention and control measures for Norovirus at a Long-Term Care Infection Prevention Collaboration meeting. These meetings are held virtually every other month. Information on LTCF Norovirus prevention and control strategies was shared at the meeting, and the slides along with meeting minutes were provided to all LTCFs in our jurisdiction. In providing these meetings and teleICARS, we now feel that most facilities see our organization as a trusted resource for information and guidance, as opposed to merely an entity to report to. Facilities have utilized our email to report clusters or outbreaks and have responded to our requests for additional information. They have been open to educational materials and have reached out with additional questions especially regarding IPC.



Lessons Learned

The outbreak in this facility ended only after the implementation of strict control measures. Recommendations for controlling future NoV outbreaks in LTCFs include emphasizing the need to control resident's movements within the facility, limitation of visitors, timely and effective environmental cleaning and disinfection, leave of absence for ill staff, and encouraging effective hand hygiene. Prompt communication with LHD's with multiple symptomatic residents/staff is also key to avoiding outbreaks.

Number of Suspected or Confirmed Norovirus Outbreaks Reported by NoroSTAT-Participating States Per Week, 2012-2023



For More Information

https://starkhealth.org/government/offices/public_health/nursing_services/communicable_disease.php

References

<https://www.cdc.gov/norovirus/about/index.html>

