

EPIDEMIOLOGIC INVESTIGATION SUMMARY

GASTROINTESTINAL ILLNESS OUTBREAK AMONG RESIDENTS AND STAFF OF AN ASSISTED LIVING FACILITY IN WASHOE COUNTY, NEVADA, 2015

*Department of Health and Human Services
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Office of Public Health Informatics and Epidemiology*

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PURPOSE

The purpose of this newsletter is to provide the scientific community, decision makers, healthcare providers, and the public a summary of the outbreak investigations conducted by the Division of Public and Behavioral Health.

BACKGROUND

On June 26, 2015, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed by an Administrator of Facility “A” of a gastrointestinal (GI) illness outbreak among residents and staff of Facility “A.” The problem was first identified by staff on June 25, 2015. Initial reported symptomology of the ill individuals included diarrhea, vomiting, and nausea. The outbreak investigation began on June 26, 2015.

METHODS

Epidemiology

On June 27, 2014, DPBH provided recommendations to reduce and prevent the spread of illness in Facility “A” including the submission of outbreak case report forms to OPHIE until further notice, exclusion of symptomatic employees from the facility until 72 hours after symptoms resolved, and laboratory testing to identify the pathological agent(s).

A **confirmed case** was defined as a resident, staff member, or visitor of Facility “A” who was lab confirmed with a gastrointestinal agent who has diarrhea and vomiting (and possibly other GI symptoms) since June 26, 2015.

A **probable case** was defined as a resident, staff member, or visitor of Facility “A” who was not lab confirmed with a gastrointestinal agent but had diarrhea and/or vomiting (along with possible other GI illnesses) since June 26, 2015.

A **suspect case** was defined as a resident, staff member, or visitor of Facility “A” who was not lab confirmed with a gastrointestinal agent but anecdotally had diarrhea and/or vomiting (along with possible other GI illnesses) since June 26, 2015.

Laboratory

Laboratory testing for GI illness was highly recommended for ill residents in order to identify the etiologic agent, target infection prevention measures and control the outbreak within Facility “A.”

Three persons submitted stool specimens for testing. Laboratory testing was focused on the presence of norovirus.

Mitigation

In order to prevent further spread of illness, the OPHIE Outbreak Response Team disseminated recommendations for the prevention and control of norovirus gastroenteritis outbreaks to facility “A.”

Additionally, the facility took precautionary measures by posting a notice at the door for public awareness, isolating probable cases, cleaning according to recommendations and closing the dining room to prevent the spread of illness.

RESULTS

Epidemiology

A total of 31 probable cases were reported. Illness onset occurred between June 25 and June 30, 2015. The epidemic curve is presented in Figure 1 and shows the distribution of illness onset dates.

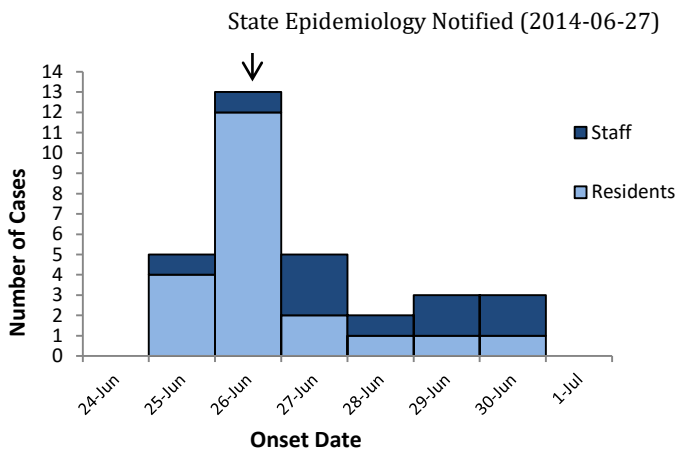


Figure 1. The epidemic curve of GI illness (n=31) associated with an assisted living facility in Washoe County, Nevada from June 25-June 30, 2015.

The peak illness onset date was June 26, 2015. Among the 31 probable cases, the average age was 68 years old (range 18-94 years) and males comprised 19.4% of the cases.

Symptomatic cases reported diarrhea (71%), vomiting (45%), nausea (16%), abdominal pain (6%) and malaise (3.2%). The average duration of illness for cases was approximately two days (range one – four days). The resident attack rate was 38.9%, the staff attack rate was 22.2%, and the overall attack rate was 31.3%.

Laboratory

Of three specimens tested, none tested positive for Norovirus.

Mitigation

Although the cause of the outbreak was undetermined, DPBH reiterated to the facility the same information given at

the start of the outbreak for preventing and controlling norovirus gastroenteritis outbreaks.

CONCLUSIONS

A GI illness outbreak occurred among residents and staff at Facility “A,” an Assisted Living facility in Washoe County, Nevada from June 25 through June 30, 2015. Confirmatory test results did not indicate a causative agent which resulted in the outbreak being classified as a GI outbreak.

In total, 31 persons were classified as probable cases; 21 residents and 10 staff of the facility. Symptoms included diarrhea, vomiting, nausea, abdominal pain and malaise with illness duration lasting an average of two days. Residents of the facility had the highest attack rate at 18.9% and one resident required hospitalization. The epidemiologic link between cases was believed to be the facility in which the residents lived and the staff worked.

The outbreak ceased July 1, 2015.

RECOMMENDATIONS

To prevent such outbreaks in healthcare settings, the following public health measures are recommended:

- Follow hand-hygiene guidelines and careful washing of hands with soap and water after contact with patients with GI illness.
- Use gowns and gloves when in contact with or caring for patients who are symptomatic with GI illness.
- Routinely clean and disinfect high touch patient surfaces and equipment with an Environmental Protection Agency-approved product with a label claim for norovirus.
- Remove and wash contaminated clothing and linens.
- Exclude healthcare workers who have symptoms consistent with GI illness from work.¹

REFERENCES

1. Centers for Disease Control and Prevention. *Norovirus in Healthcare Settings*. February 25, 2013. Retrieved January 28, 2014, from <http://www.cdc.gov/HAI/organisms/norovirus.html>.

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