

EPIDEMIOLOGIC INVESTIGATION SUMMARY

DIARRHEAL ILLNESS OUTBREAK AMONG RESIDENTS OF AN ASSISTED LIVING FACILITY WASHOE COUNTY, NEVADA, 2014

*Department of Health and Human Services
Division of Public and Behavioral Health
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 August 14, 2014, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed by the Wellness Director of Facility "A" of a gastrointestinal (GI) illness outbreak among residents of Facility "A". The problem was first identified by staff of the facility on August 13, 2014. Initial symptomology of the ill residents and staff included diarrhea, nausea, and vomiting. The outbreak investigation began on August 14, 2014.

Facility "A" reported an outbreak approximately two months prior on May 27, 2014. The outbreak consisted of 111 cases (109 probable and 2 confirmed) of which 77 were residents, 33 were staff, and 1 was a visitor to the facility. The outbreak was determined to be caused by norovirus and ceased on June 27, 2014.

METHODS

Epidemiology

On August 14, 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 daily 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 GI agent since August 13, 2014.

A **probable case** was defined as a resident, staff member, or visitor of Facility "A" who was not lab confirmed with a GI agent but had diarrhea and/or vomiting (along with possible other GI illnesses) since August 13, 2014.

A **suspect case** was defined as a resident, staff member, or visitor of Facility "A" who was not lab confirmed with a GI agent but anecdotally had diarrhea and/or vomiting (along with possible other GI illnesses) since August 13, 2014.

Laboratory

Laboratory testing for GI illness was recommended for ill residents in order to identify the etiologic agent, target infection prevention measures, and control the outbreak within Facility "A". Stool samples were the recommended specimen type for laboratory testing.

No laboratory tests were conducted for this outbreak.

Mitigation

In order to prevent further spread of illness, the OPHIE Outbreak Response Team disseminated information and

recommendations for the prevention and control of norovirus gastroenteritis outbreaks to Facility “A”.

RESULTS

Epidemiology

A total of 13 probable cases were reported. Illness onset occurred between August 13 and August 16, 2014. The epidemic curve is presented in Figure 1 and shows the distribution of illness onset dates.

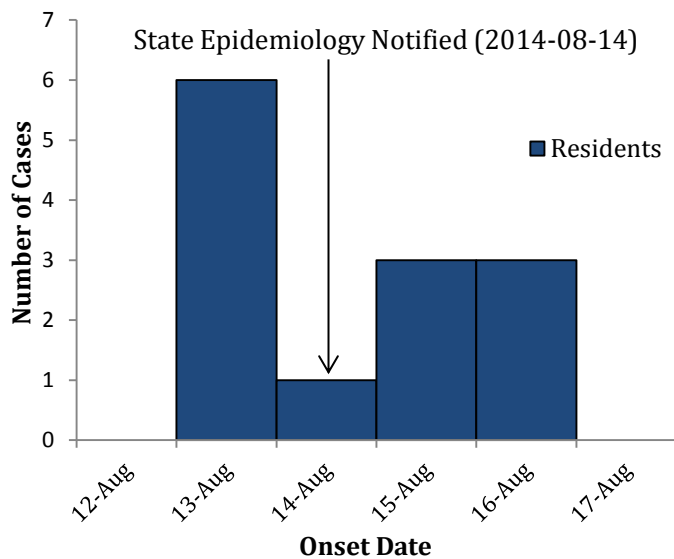


Figure 1. The epidemic curve of diarrheal illness (n=13) associated with an assisted living facility in Washoe County, Nevada, from August 13-16, 2014.

The peak illness onset date was August 13, 2014. Among the 13 probable cases, the average age was 84 and males comprised 23.1% of cases.

Symptomatic cases reported diarrhea (84.6%), vomiting (76.9%), and nausea (76.9%). The average duration of illness of cases was approximately 2 days and the resident attack rate was 5.6%.

Laboratory

No specimens were able to be collected or tested.

Mitigation

Although the cause of the outbreak was undetermined, DPBH reiterated to the facility the recommendations for preventing and controlling future norovirus gastroenteritis outbreaks.

CONCLUSIONS

A GI illness outbreak occurred among residents at Facility “A”, an assisted living facility in Washoe County, Nevada, from August 13 to August 16, 2014. No confirmatory tests were conducted, resulting in the outbreak classification: diarrheal illness not otherwise specified. Mode of transmission is believed to be person-to-person.

In total, 13 persons were classified as probable cases and all were residents of the facility. Symptoms included diarrhea, nausea, and vomiting with illness duration lasting an average of 2 days. Residents of the facility had an attack rate of 5.6% and the epidemiologic link between cases was believed to be the facility in which the residents lived.

The outbreak ceased as of August 17, 2014.

RECOMMENDATIONS

To prevent such GI 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 norovirus infection.
- Use gowns and gloves when in contact with or caring for patients who are symptomatic with norovirus.
- 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 norovirus 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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