EPIDEMIOLOGIC INVESTIGATION SUMMARY

DIARRHEAL ILLNESS OUTBREAK AMONG RESIDENTS AND STAFF 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 June 16, 2014, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed by the Administrator at Facility "A" of a gastrointestinal (GI) illness outbreak among its residents and staff. The problem was first identified on June 15, 2014, with initial symptomology of the ill being diarrhea and vomiting. The outbreak investigation began on June 16, 2014.

METHODS

Epidemiology

On June 16, 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 GI agent since June 15, 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 June 15, 2014.

A **suspect case** was defined as 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 June 15, 2014.

Laboratory

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

No laboratory specimens were collected or tested during this outbreak.

Mitigation

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

RESULTS

Epidemiology

A total of 18 probable cases were reported. Illness onset ranged between June 15 and June 26, 2014. The epidemic curve is presented in Figure 1 and shows the distribution of illness onset dates.

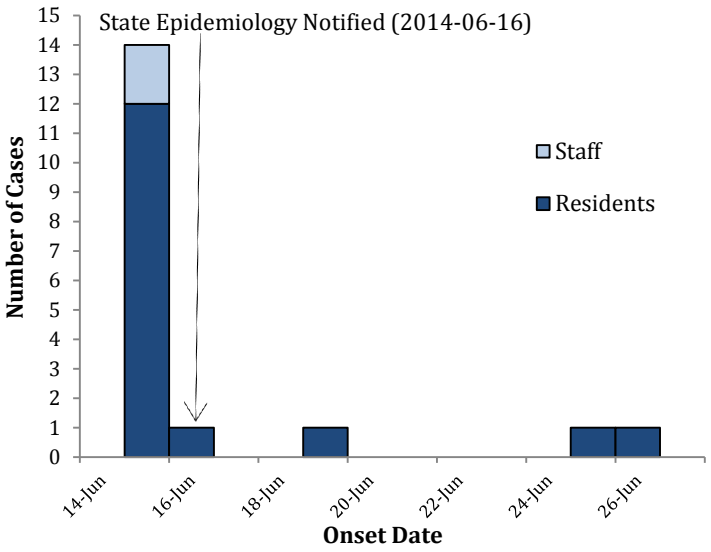

Figure 1. The epidemic curve of diarrheal illness (n=18) associated with an assisted living facility in Washoe County, Nevada from June 15 to June 26, 2014

The peak illness onset date was June 15, 2014. Among the 18 cases, the average age was 80 years old (range 50-95 years) and males contributed 27.8% of the cases.

Symptomatic cases reported diarrhea (100%), vomiting (22.2%), and nausea (5.6%) and the reported duration of illness was 1 day. The resident attack rate was 29.1%, the staff attack rate was 3.8%, and the overall attack rate was 16.7%.

Laboratory

No specimens were 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 diarrheal illness outbreak occurred among residents and staff at Facility "A", an assisted living facility in Washoe County, Nevada, from June 15, to June 26, 2014. Facility "A" was unable to meet the request to collect and test laboratory specimens resulting in the outbreak classification: diarrheal illness not otherwise specified. The illness was believed to be transmitted person-to-person.

In total, 18 persons were classified as probable cases; 16 residents and two staff of the facility. Symptoms included diarrhea, vomiting, and nausea with reported duration of illness being one day. Residents of the facility had the highest attack rate at 29.1%. The epidemiologic link between cases was believed to be the facility in which the residents lived and the staff worked.

The outbreak ceased as of June 27, 2014.

RECOMMENDATIONS

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

- Follow hand-hygiene guidelines, and carefully wash hands with soap and water after contact with patients with diarrheal illness.
- Use gowns and gloves when in contact with, or caring for patients who are symptomatic.
- Routinely clean and disinfect high touch patient surfaces and equipment.
- Remove and wash contaminated clothing and linens.
- Exclude healthcare workers who have symptoms consistent with diarrheal 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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