

# EPIDEMIOLOGIC INVESTIGATION SUMMARY

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

*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 May 2, 2015, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed by the Health Services Director of Facility "A" of a gastrointestinal (GI) illness outbreak among residents and staff at Facility "A." The problem was first identified by staff on May 2, 2015. Initial reported symptomology of the ill residents included diarrhea, vomiting, and nausea. The outbreak investigation began on May 2, 2015.

### METHODS

#### Epidemiology

On May 2, 2015, 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 is lab confirmed with a gastrointestinal agent who has diarrhea or vomiting (and possibly other GI symptoms as well e.g. nausea, abdominal pain) since May 2, 2015.

A **probable case** was defined as a resident, staff member, or visitor of Facility "A" who is not lab confirmed with a gastrointestinal agent but who has diarrhea or vomiting (and possibly other GI symptoms as well e.g. nausea, abdominal pain) since May 2, 2015.

A **suspect case** was defined as a resident, staff member, or visitor of Facility "A" who is not lab confirmed with a

gastrointestinal agent but who anecdotally has diarrhea or vomiting (and possibly other GI symptoms as well e.g. nausea, abdominal pain) since May 2, 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." Laboratory testing was focused on the presence of norovirus.

No laboratory specimens were collected and tested during this outbreak.

#### Mitigation

In order to prevent further spread of illness, the OPHIE Outbreak Response Team disseminated recommendations for the prevention and control of gastrointestinal outbreaks to Facility "A."

Additionally, the facility incorporated its own prevention measures at the beginning of this outbreak. Facility “A” began isolating cases, closed the dining room, postponed food tray services, and postponed activities. Reminders were posted at entrances of the facility to make visitors aware of the outbreak

## RESULTS

### Epidemiology

A total of 34 cases (all probable) were reported. Illness onset occurred between April 23 and May 2, 2015. The epidemic curve is presented in Figure 1 and shows the distribution of illness onset dates.

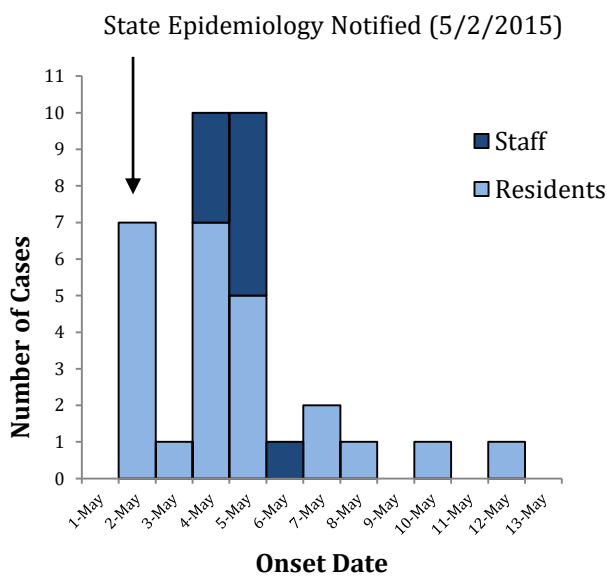


Figure 1. The epidemic curve of a gastrointestinal outbreak (n=34) associated with an assisted living facility in Clark County, Nevada from May 2-May 12, 2015

The peak illness onset dates were May 4 and May 5, 2015. Among the 34 cases, the average age was 71 years old (range 18-95 years). Males comprised 29.4% of cases.

Symptomatic cases reported diarrhea (79%), vomiting (50%), nausea (6%), cough (3%), runny/stuffy nose (3%), and fever (3%). The average duration of illness for cases was approximately 2 days (range 1–5 days). The resident attack rate was 39.7%, the staff attack rate was 14.8%, and the overall attack rate was 27.4%.

### Laboratory

No laboratory specimens were collected and tested during this outbreak.

### Mitigation

Although the cause for the outbreak was undetermined, DPBH reiterated to the facility the same information given at the start of the outbreak investigation for preventing and controlling norovirus and GI illness outbreaks.

## CONCLUSIONS

A GI illness outbreak occurred among residents and staff at Facility “A,” an assisted living facility in Clark County, Nevada from May 2 through May 12, 2015. Confirmatory tests were not conducted resulting in the outbreak being classified as a gastrointestinal illness outbreak not otherwise specified.

In total, 34 persons were classified as cases; 25 residents and 9 staff. Symptoms included diarrhea, vomiting, nausea, cough, runny/stuffy nose, and fever with illness duration lasting an average of 2 days. Residents of the facility had the highest attack rate (39.7%). 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 May 13, 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.<sup>1</sup>

## 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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