

EPIDEMIOLOGIC INVESTIGATION SUMMARY

GASTROINTESTINAL ILLNESS OUTBREAK AMONG RESIDENTS AND STAFF OF AN ASSISTED LIVING FACILITY IN WASHOE COUNTY, NEVADA, 2017

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

**December 2017
Edition 1.0
2017 volume, issue 39**

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 December 12, 2017, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed of a gastrointestinal (GI) illness among residents of Facility "A." The outbreak or increase in illness was first identified by staff of the facility on December 11, 2017. Initial symptomology of the ill residents included vomiting and diarrhea. The outbreak investigation began on December 12, 2017.

CASE DEFINITIONS

Clinical criteria An illness with gastroenteritis that presents with the following symptoms: vomiting, diarrhea, abdominal cramps or stomach ache, nausea, with or without fever between December 10, 2017 to December 19, 2017.

Vomiting OR Diarrhea OR Abdominal cramping (stomach ache) + fever* OR Nausea + fever*

*fever refers to self-reported fever or measured elevated temp.

Epidemiological criteria Any residents or staff members associated with Facility "A" identified through investigations.

Epidemiology

Onset Date

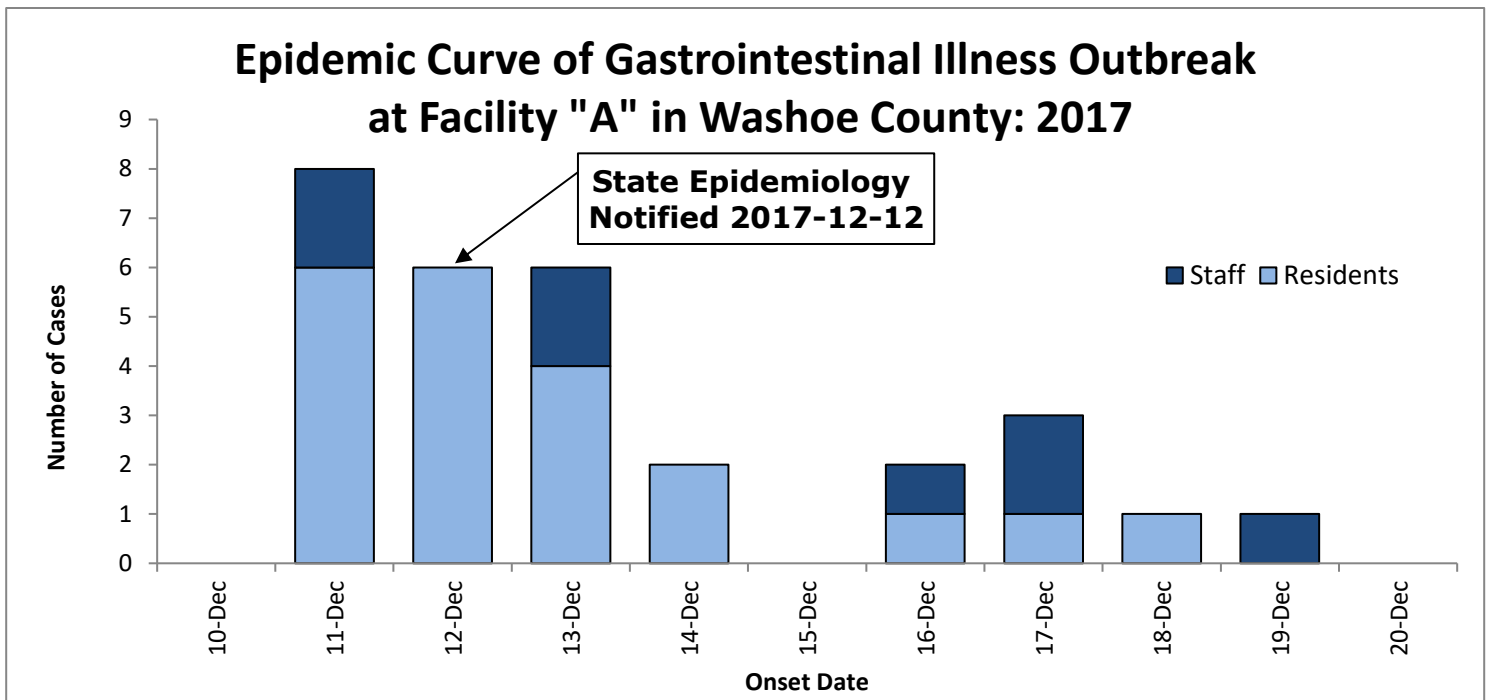
The peak illness onset date was December 11, 2017.

Laboratory criteria Any laboratory confirmation by PCR or other method from a human specimen for an enteric etiology.

Case classification

A **confirmed case** A case meeting clinical, epidemiological, and laboratory criteria.

A **probable case** A case meeting the following clinical criteria and epidemiological criteria.



Epidemiology Summary

A total of 29 cases met the probable case definition. There were no confirmed cases, and zero (0) deaths or hospitalizations associated with this outbreak.

The resident attack rate was 38.2% (n=55) and the staff attack rate was 15.1% (n=53). The overall attack rate was 26.9%.

Age- The median age was 74 (range: 20 – 96 years).

Age	n	Total N	%
20-49 years	5	29	17.2%
50-74 years	6	29	20.7%
> = 75	18	29	62.1%

Sex- Male n=12 (41.4%), Female n=17 (58.6%)

Incubation period- The incubation period for norovirus, the suspected pathogen, is 12-48 hours¹.

Duration of illness- The average duration of illness was approximately two days (range one – three days).

Summary of Symptoms-

Symptoms	n	Total N	%
Abdominal Pain	4	29	13.7%
Chills	1	29	3.4%
Diarrhea	26	29	89.7%
Headache	1	29	3.4%
Malaise/Body Aches	4	29	13.7%
Nausea	14	29	48.3%
Vomiting	21	29	72.4%

Laboratory

There were no specimens tested.

Data Sources

Residents who reported complaints consistent with GI illness. (line listing form)

Staff who called in with complaints consistent with GI illness. (line listing form)

CONCLUSIONS

The latest onset date occurred on December 19, 2017. The facility completed two incubation periods for the suspected pathogen with no new cases, therefore the outbreak investigation was closed on December 26, 2017.

Mitigation

Although there were no lab results confirming the cause of the outbreak was norovirus, DPBH reiterated the importance of continued outbreak control measures to interrupt further transmission of the suspected pathogen. The facility continued their own mitigation efforts as well.

RECOMMENDATIONS

To prevent norovirus 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.
- After vomiting or having diarrhea, immediately clean and disinfect contaminated surfaces using a bleach-based household cleaner, which is effective against norovirus, as directed on the product label. If no such cleaning product is available, you can mix a solution with ½ cup of bleach to one gallon of water.
- Remove and wash contaminated clothing and linens.
- Exclude healthcare workers who have symptoms consistent with norovirus from work for 48 hours after the resolution of symptoms.
- During outbreaks, place patients with norovirus gastroenteritis on Contact Precautions for a minimum of 48 hours after the resolution of symptoms to prevent further exposure to susceptible patients.

REFERENCES

1. <https://www.cdc.gov/hai/pdfs/norovirus/229110-anorocasefactsheet508.pdf>

For additional information regarding this publication, contact:

**Office of Public Health Informatics and
Epidemiology**
4126 Technology Way, Ste 200
Carson City NV 89706
Email: outbreak@health.nv.gov
Tel: (775) 684-5911



Brian Sandoval
Governor
State of Nevada

Richard Whitley, MS
Director
Department of Health and Human Services

Julie Kotchevar, PhD
Interim Administrator
Division of Public and Behavioral Health

Dr. Leon Ravin, MD
Chief Medical Officer (Acting)
Division of Public and Behavioral Health



RECOMMENDED CITATION

Division of Public and Behavioral Health. Office of Public Health Informatics and Epidemiology. Epidemiologic Investigation Summary, *Gastrointestinal Illness Outbreak Among Residents and Staff of a Skilled Nursing Facility in Washoe County, Nevada, 2017*. v 2017. i 39. e 1.0. December 2017.

ACKNOWLEDGEMENTS

Thank you to all persons who contributed to this publication:

Jessica Conner, MPH; Brian Parrish, MPH; Kimisha Causey, MPH; Adrian Forero, BS; Chidinma Njoku BS; Judy Dumonte; Sandi Larson, MPH; Melissa Peek-Bullock; Ihsan Azzam, MD, MPH.

This report was produced by the Office of Public Health Informatics and Epidemiology of the Division of Public and Behavioral Health with funding from budget account 3219.