

EPIDEMIOLOGIC INVESTIGATION SUMMARY

ACINETOBACTER BAUMANNII

AMONG PATIENTS OF A LONG TERM ACUTE CARE AND SKILLED NURSING 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

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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 July 5, 2017, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed by Washoe County Health District of an *Acinetobacter baumannii* outbreak among patients of Facility A and B. The outbreak was identified by staff of the facility on July 5, 2017 via laboratory testing that identified a patient with carbapenem-resistant *A. baumannii*.

CASE DEFINITIONS

Epidemiological criteria Any patient associated with Facility A and Facility B with a positive lab test for *A. baumannii* or any patient with a positive lab test for *A. baumannii*.

Laboratory criteria Any *Acinetobacter* isolated from any body site that meets the following criteria:

- Resistant to imipenem, meropenem, **or** doripenem based on current Clinical and Laboratory Standards Institutes Standards (CLSI) M100 standards; AND/OR
- Demonstrates production of a carbapenemase by a recognized method (e.g. CarbaNP or PCR or other methods).

Case classification

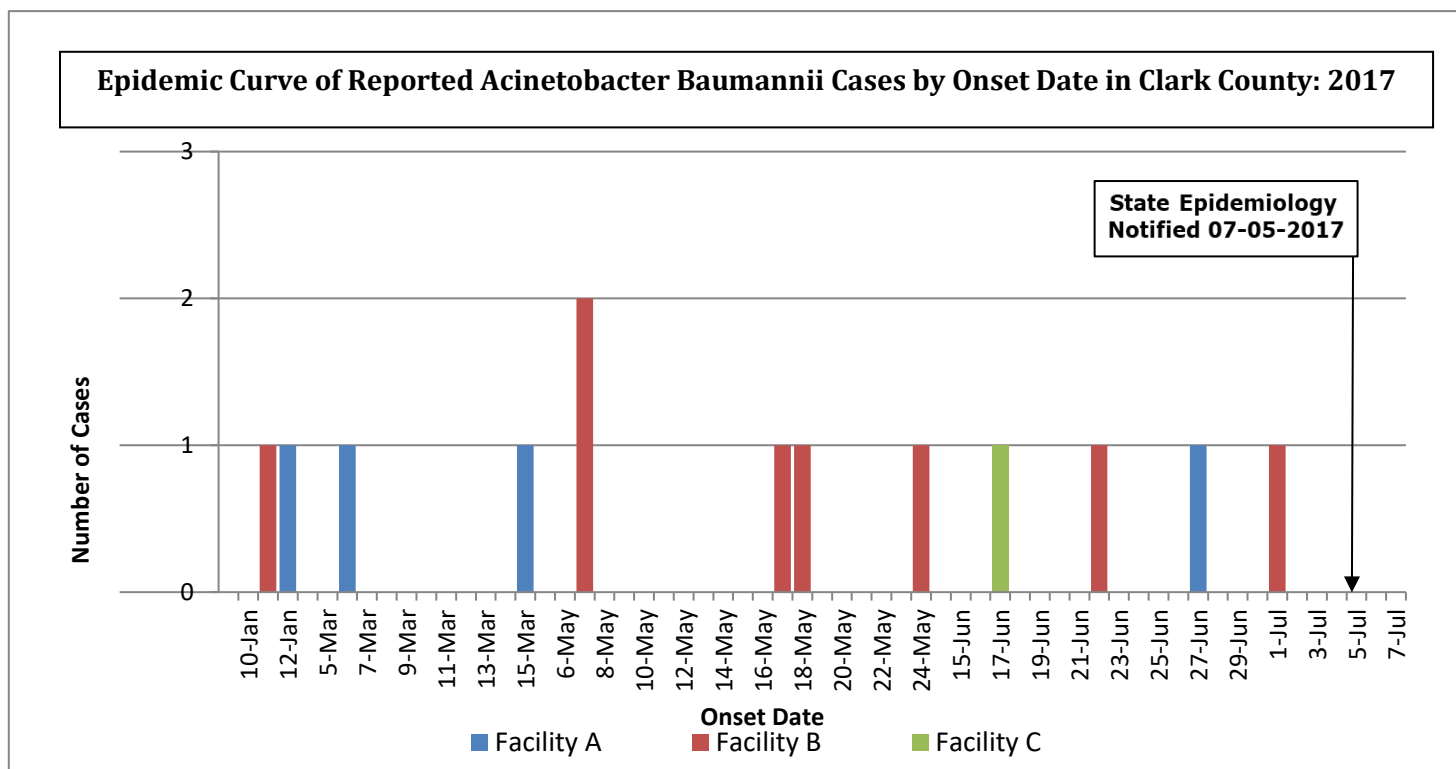
A **confirmed case** was defined as a case meeting epidemiological and laboratory criteria.

Site Visit

A site visit was conducted on July 7, 2017 at Facility A and Facility B due to several cases of *A. baumannii* by OPHIE to address breaches in infection control and identify source of infection. A second joint site visit was conducted on July 12, 2017, with OPHIE and the Bureau of Health Care Quality and Compliance (BHCQC).

A third facility (Facility C) housing patients transferred from Facility A and B was identified. This facility also housed a patient with *A. baumannii* that was not associated with Facility A or Facility B. A site visit of Facility C was conducted on August 3, 2017.

An additional site visit was performed on October 30, 2017 of Facility A and Facility B to evaluate environmental cleaning practices and to ensure previous recommendations were being followed.



Epidemiology

Onset Date

Hospital admit dates range from 12/4/16 through 06/23/17.

Epidemiology Summary

A total of 13 cases which met the confirmed case definition were reported. There were six deaths associated with this outbreak, *A. baumannii* was not listed as a cause of death on these cases.

- The duration of outbreak was January 11, 2017 – July 1, 2017 (171 days)
- The median length of stay (LOS) was 66 days (range 3-129).
- 6 cases were admitted to intensive care unit (ICU) at some point during their hospitalization history.
- The median LOS in ICU was 20 days (range 1-28)
- 6 cases were on ventilators.
- 9 cases had undergone surgery while hospitalized.
- 3 cases underwent dialysis while hospitalized.
- None reported travel prior to infection.

Age- The median age was 68 (range: 48 years – 86 years).

Age	n	Total N	%
10-19 years	0	13	0.0%
20-49 years	1	13	7.7%
50-74 years	8	13	61.5%
> = 75	4	13	30.8%

Sex- Male n=8 (61.5%), Females n=5 (38.4%)

Laboratory

There was a total of 13 specimens tested, all were positive for *A. baumannii* and determined that there was a link between 12 of the 13 specimens. One of the 13 specimens were identified as a Carbapenemase producer.

Data Sources

Washoe County Health District (electronic)
Facility A, B and C (electronic and US mail)

CONCLUSIONS

The outbreak was declared over on November 9, 2017 by DPBH based on guidance from Centers for Disease Control and Prevention (CDC) to conduct active surveillance for 2 months. The facility ceased to have a case as of July 1, 2017, and corrected infection control breaches.

Mitigation

After lab results confirmed that the cause of the outbreak was *A. baumannii*, DPBH consulted with the facility infection preventionist to determine areas of infection control breaches and to ensure best practices by healthcare workers and environmental cleaning staff were being followed. The facility received guidance on preventive methods provided by CDC. The facility continued their own mitigation efforts as well.

RECOMMENDATIONS

To prevent *A. baumannii* outbreaks in healthcare settings, the following public health measures are recommended:

- Ensure environmental cleaning services are properly disinfecting high touch surfaces among other surfaces in patient rooms and throughout the facility.
- Proper hand hygiene techniques are followed.
- Proper PPE is used when assisting and treating patients.
- Utilize inter-facility transfer forms when transferring patients to healthcare facilities.
- Educate healthcare workers, housekeepers, administration staff, patients, and families on *A. baumannii*.
- Dedicate equipment for wound care patients on infection control precautions.
- Provide infection prevention training for wound care staff.

- Properly isolate patients on infection control precautions.

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
Administrator
Division of Public and Behavioral Health

Ihsan Azzam, PhD, MD
Chief Medical Officer
Division of Public and Behavioral Health



RECOMMENDED CITATION

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