

EPIDEMIOLOGIC INVESTIGATION SUMMARY

INFLUENZA OUTBREAK AMONG RESIDENTS OF AN ASSISTED LIVING FACILITY IN CARSON CITY, NEVADA, 2018

*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 February 16, 2018, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed by Carson City Health and Human Services (CCHHS) of two positive influenza labs among residents of Facility "A." OPHIE contacted Facility "A" but they denied an outbreak. On February 23, 2018, OPHIE was notified by CCHHS of an additional positive lab. After OPHIE contacted Facility "A" again, the facility did acknowledge the increase in illness. Symptomology of the ill residents included cough, congestion, and fever. The outbreak investigation began on February 23, 2018.

CASE DEFINITIONS

Clinical criteria An influenza-like illness, which is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza between February 1, 2018 to February 12, 2018.

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

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

Case classification

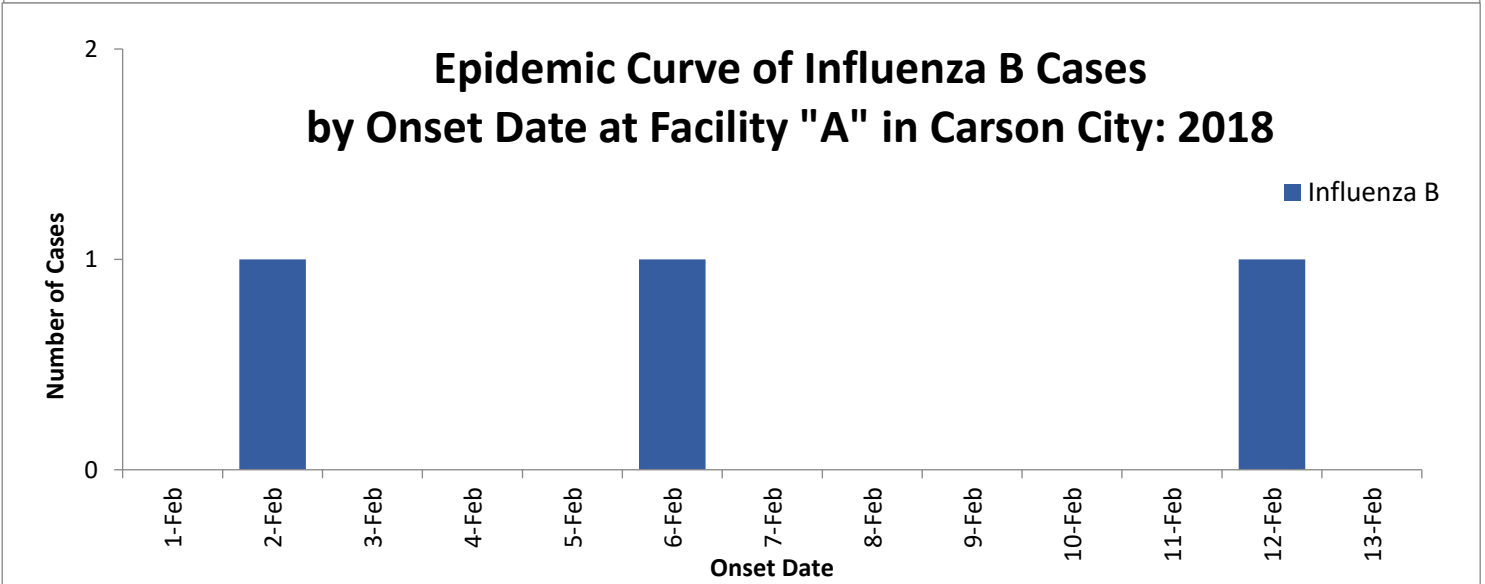
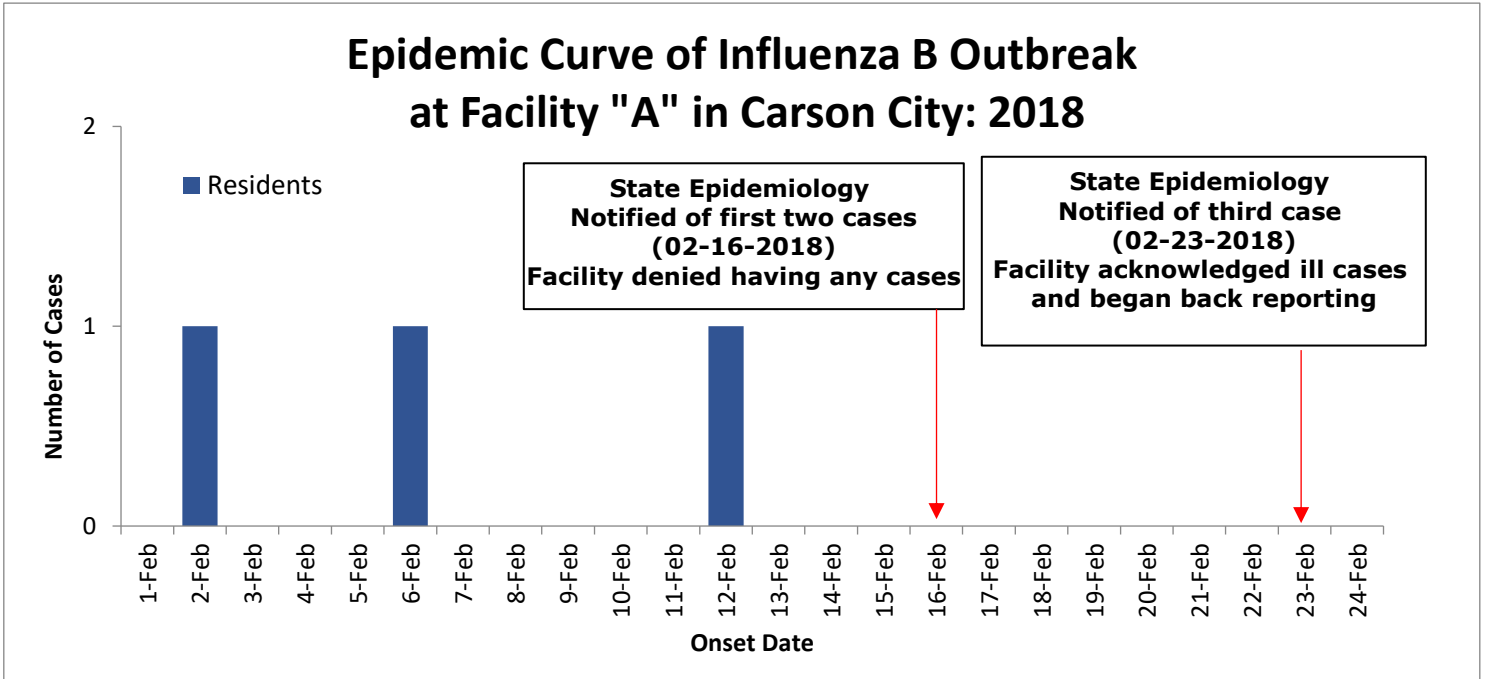
Confirmed case A case meeting clinical, epidemiological, and laboratory criteria.

Probable case A case meeting clinical and epidemiological criteria without laboratory confirmation.

Epidemiology

Onset Date

There was no peak illness onset date.



Epidemiology

Epidemiology Summary

A total of three cases met the confirmed case definition. All three residents were hospitalized and there were zero (0) deaths associated with this outbreak. The resident attack rate was 4.8% (3/62). The overall attack rate was 2.9% (3/103).

Age- The median age was 94 (range: 91 – 95 years).

Age	n	Total N	%
> = 75	3	3	100%

Sex- Male 1 (33.3%), Female 2 (66.7%)

Incubation period- The incubation period for influenza is 1-4 days.

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

Clinical symptoms-

Symptoms	n	Total N	%
Congestion	3	3	100%
Cough	1	3	33%
Fever	0	3	0%
Malaise/Body Aches	0	3	0%

Laboratory

A total of three specimens were tested, and all were positive for Influenza B.

Data Sources

Health Clinic Visit Data. (electronic)

Residents who had complaints consistent with respiratory illness. (line listing form)

Staff who call in with complaints consistent with respiratory illness. (line listing form)

CONCLUSIONS

The last onset date occurred on February 12, 2018. The outbreak was declared over on February 27, 2018 after the facility went two incubation periods with no new cases and OPHIE received a complete report.

Mitigation

After lab results confirmed that the cause of the outbreak was influenza which has an incubation period of one to four days, DPBH reiterated the importance of continued outbreak control measures in order to interrupt further transmission. The facility continued their own mitigation efforts as well.

RECOMMENDATIONS

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

- Remind residents, staff, and visitors of proper hand hygiene and cough etiquette in compliance with CDC/WHO guidelines.
- Clean and disinfect equipment and environment with an agent approved to kill the influenza virus.
- Educate healthcare workers, housekeepers, administration staff, residents, and families on influenza.
- Isolate residents and exclude from work any staff members who have symptoms consistent with influenza¹.
- Immediately notify infection control about positive laboratory results.

REFERENCES

1. Centers for Disease Control and Prevention. Prevention Strategies for Seasonal Influenza in Healthcare Settings: Infection Control Practices Advisory Committee. January 9, 2013. Retrieved February 2, 2015, from: <https://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>

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