

# EPIDEMIOLOGIC INVESTIGATION SUMMARY

## INFLUENZA OUTBREAK AMONG RESIDENTS AND STAFF OF A SKILLED NURSING FACILITY IN CLARK COUNTY, NEVADA, 2017

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*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 October 20, 2017, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was informed by the Southern Nevada Health District (SNHD) of an outbreak of influenza among residents of Facility "A." The increase in illness was first identified by staff of the facility on October 19, 2017. Initial symptomology of the ill residents included cough, congestion, and fever. The outbreak investigation began on October 20, 2017.

### 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 October 6, 2017 to October 28, 2017.

**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

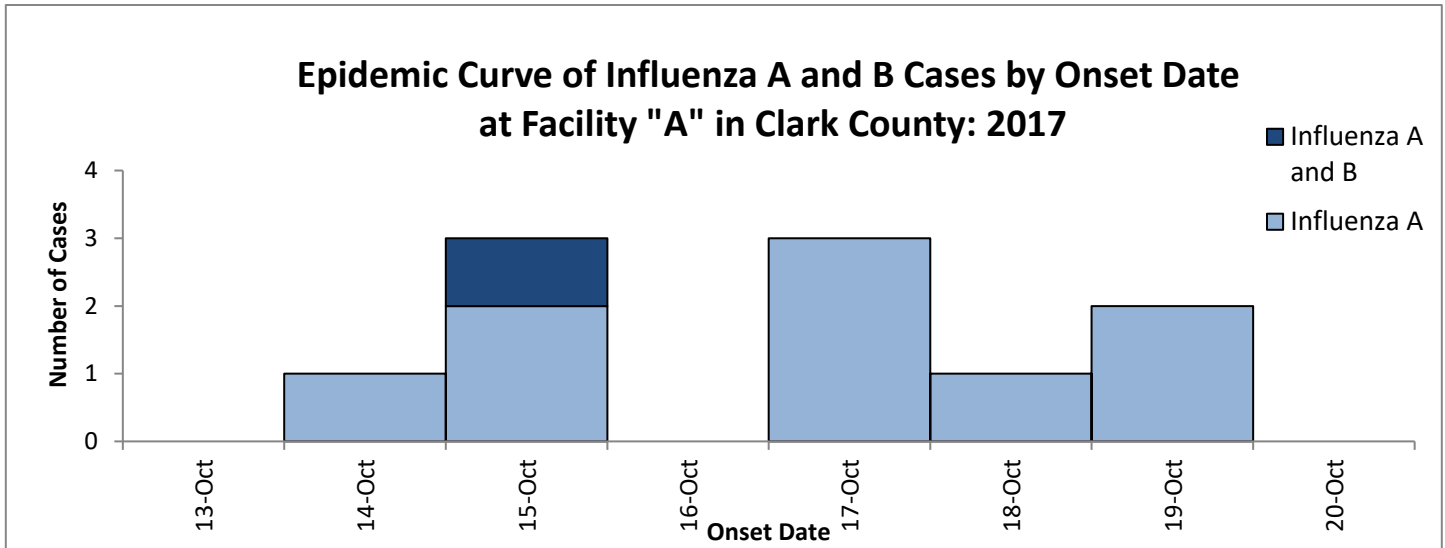
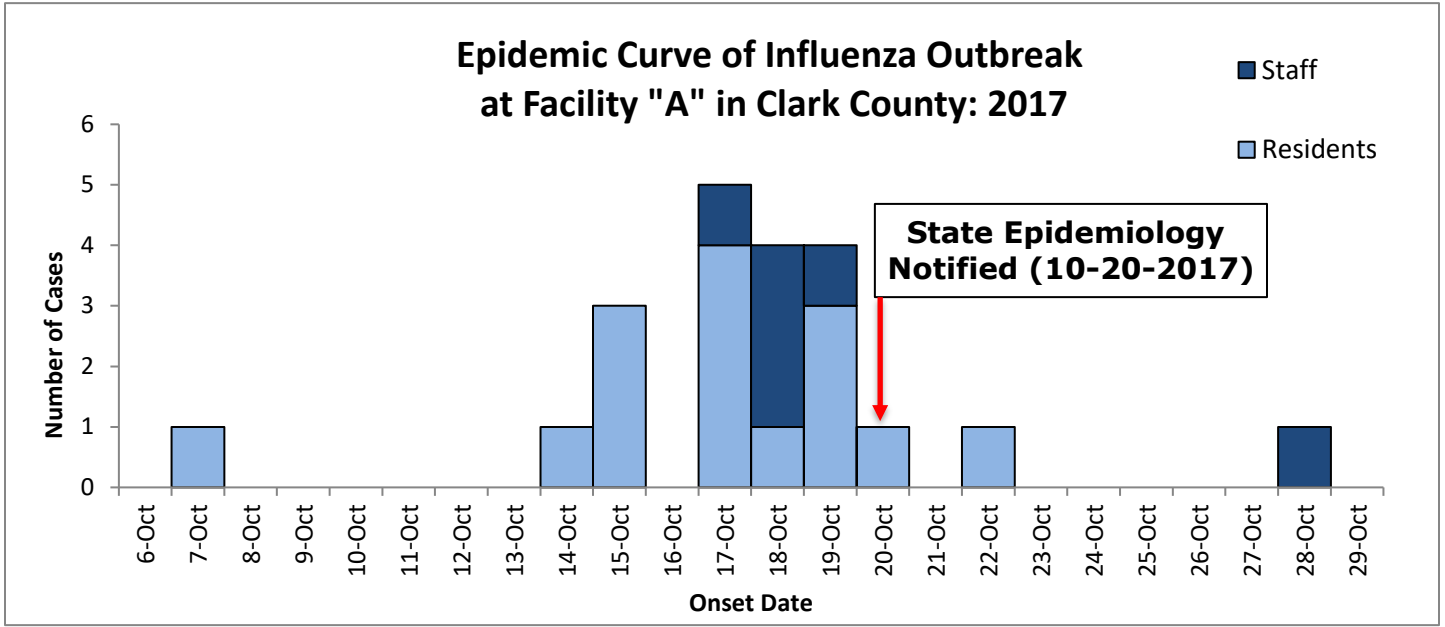
**Confirmed case** A case meeting clinical, epidemiological, and laboratory criteria.

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

### Epidemiology

#### Onset Date

The peak illness onset date was October 17, 2017.



## Epidemiology

A total of 21 cases met the confirmed and probable case definition (ten lab-confirmed and 11 probable). One (1) resident was hospitalized and there were zero (0) deaths associated with this outbreak. The resident attack rate was 42.9% (n=35) and the staff attack rate was 30% (n=20).

**Age-** The median age was 66 (range: 25 – 100 years).

Age	n	Total N	%
20-49 years	4	21	19.0%
50-74 years	8	21	38.1%
> = 75	9	21	42.9%

**Sex-** Male 6 (28.6%), Female 16 (76.2%)

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

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

**Clinical symptoms-**

Symptoms	n	Total N	%
Chills	3	21	14%
Congestion	18	21	86%
Cough	20	21	95%
Fever	18	21	86%
Malaise/Body Aches	6	21	29%

## Laboratory

A total of 17 specimens were tested, and a total of 10 were positive, nine were positive for influenza A and one individual was positive for influenza A and 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 October 28, 2017. The outbreak was declared over on November 6, 2017 because the facility went two full incubation periods without a new case.

### 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 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 influenza<sup>1</sup>.

- 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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