

EPIDEMIOLOGIC INVESTIGATION SUMMARY

RESPIRATORY ILLNESS OUTBREAK AMONG RESIDENTS AND STAFF OF AN ASSISTED LIVING FACILITY IN NYE 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 January 26, 2015, the Division of Public and Behavioral Health (DPBH), Office of Public Health Informatics and Epidemiology (OPHIE) was first informed by an administrator of Facility "A" regarding a respiratory illness among residents Facility "A." The problem was first identified by staff of the facility on January 20, 2015. Initial reported symptomology of the ill residents and staff included cough, fever and malaise. The outbreak investigation began January 26, 2015.

METHODS

Epidemiology

On January 26, 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 and laboratory testing for respiratory illness.

A **confirmed case** was defined as a resident, staff member, or visitor of Facility "A" who was lab confirmed with a respiratory agent since January 26, 2015.

A **probable case** was defined as a resident, staff member, or visitor of Facility "A" who was not lab confirmed with a respirator agent, but had coughing and/or congestion (along with possible other respiratory illnesses) since January 26, 2015.

A **suspect case** was defined as a resident, staff member, or visitor of Facility "A" who was not lab confirmed with a respiratory agent but anecdotally had cough and/or congestion (along with possible other respiratory illnesses) since January 26, 2015.

Laboratory

Laboratory testing for respiratory illness was recommended to identify the etiologic agent, and thereby target infection prevention measures and control the outbreak within Facility "A." Laboratory testing was focused on detecting the presence of influenza.

No laboratory specimens were collected and tested during this outbreak.

Mitigation

In order to prevent the further spread of illness, the OPHIE Outbreak Response Team disseminated recommendations for the prevention and control of respiratory illnesses.

RESULTS

Epidemiology

A total of 22 probable cases were reported. Illness onset occurred between January 20 and January 27, 2015. The

epidemic curve is presented in Figure 1 and shows the distribution of illness onset dates.

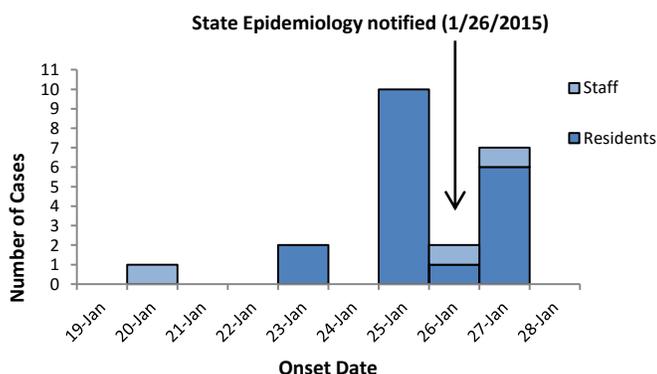


Figure 1. The epidemic curve of respiratory illness (n=22) associated with an assisted living facility in Nye County, Nevada from January 20 – 27, 2015

The peak illness onset date was January 25, 2015. Among the 10 probable cases, the average age was 81 years old (range 31-95 years). Males comprised 54.5% of the cases.

Symptomatic cases reported malaise (81.8%), fever (63.6%), cough (40.9%), congestion (27.3%), and sore throat (13.6%). Average duration of illness could not be calculated because information on illness duration was not reported. The resident attack rate was 42.2%, staff attack rate was 7.3% and the overall attack rate was 25.6%.

Laboratory

No laboratory specimens were collected and tested during this outbreak.

Mitigation

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

CONCLUSIONS

A respiratory illness outbreak occurred among residents at Facility “A,” an assisted living facility in Nye County, Nevada from January 20 through January 27, 2015. Confirmatory tests were not conducted resulting in the outbreak being classified as a respiratory illness outbreak.

In total, 22 persons were classified as probable cases all of which were residents and staff of Facility “A.” Symptoms included fever, cough, headache, congestion, malaise, and sore throat. The residents of the facility had the highest attack rate at 42.2%. 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 January 28, 2015.

RECOMMENDATIONS

To prevent such respiratory illness outbreaks in healthcare settings, the following public health measures are recommended:

- Promote and administer seasonal influenza vaccines to staff and residents
- Implement guidelines and training for respiratory hygiene, cough etiquette, and infection control practices
- Instruct sick workers not to return to work until 24 hours after fever has left and to wear a face mask and adhere to the second recommendation above when coughing and sneezing persist
- Isolate patients with probable or confirmed influenza and those with associated symptoms in a single patient room until 24 hours after fever and symptoms subside.
- Follow appropriate isolation and infection control practices, including gloves, gowns, avoidance of direct skin-to-skin contact, and so on, when providing hands-on care to patients who might have influenza.¹

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: <http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>

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