



Health Alert Network

Tri-County Health Department

Serving Adams, Arapahoe and Douglas Counties

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The pages that follow contain information critical to protecting the health of your patients and the citizens of Colorado.

HAN ALERT

Number of pages including cover: 4

Subject: **Alert - Increased Reports of Legionnaires' Disease and Unexplained Pneumonia Cluster in Colorado**

Message ID: 8/25/2017 8:15:00 AM

Recipients: HAN Community Members.

From: TRI-COUNTY HEALTH DEPARTMENT

Adams, Arapahoe and Douglas County, Colorado

Recipient Instructions: **Tri-County Health Department is forwarding you the attached HAN. You may have already received this broadcast if you are on the CDPHE distribution list, however, we wanted to ensure you did not miss this important information. No response is required.**

You have received this message based upon the information contained within our Health Alert Network Notification System. If you have a different or additional e-mail or fax address that you would like us to use, or if you have additional questions, call 720-200-1477.

Categories of Health Alert Network Messages:

Health Alert: Conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.

Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.

Info Service/Public Health Brief: Provides general information that is not necessarily considered to be of an emergent nature.

You may download a copy of this HAN from the TCHD website at
<http://www.tchd.org/259/Health-Alert-Network>



HEALTH ALERT NETWORK BROADCAST

MESSAGE ID: 04242017 16:00

FROM: CO-CDPHE

SUBJECT: HAN Alert - Increased Reports of Legionnaires' Disease and Unexplained Pneumonia Cluster in Colorado

RECIPIENTS: Local Public Health Agencies / IPs / Clinical Labs / EDs / ID Physicians

RECIPIENT INSTRUCTIONS: Local Public Health Agencies - please forward to healthcare providers

HEALTH ALERT | Increased Reports of Legionnaires' Disease and Unexplained Pneumonia Cluster in Colorado | Aug. 24, 2017

Health care providers: Please distribute widely in your office

Key points

- Seventeen cases of Legionnaires' disease have been reported in Colorado since Aug. 1, 2017, with 10 cases being reported in the last three days. On average, seven cases are reported in August each year. The majority of cases have been reported among residents in the five-county Denver metropolitan area; public health is investigating these cases to determine where possible exposures may have occurred.
- Patients being seen with unexplained pneumonia should be assessed for Legionnaires' disease.
- In addition to testing with a Urinary Antigen Test (UAT) for *Legionella pneumophila*, we ask that you obtain a lower respiratory specimen for culture for all *Legionella* species. Please send the specimen to the CDPHE Laboratory for further testing.
- CDPHE is working with public health agencies in southeastern Colorado to investigate a cluster of five cases of unexplained pneumonia among persons who traveled to the Lamar area at the end of July 2017. Please ask about any travel to this area when talking to your patients, and report any possible cases to Tori Burket or Nisha Alden at CDPHE (303-692-2700).

Background information

CDPHE has noted a large increase in the number of reported Legionnaires' disease cases during August, specifically in the last three days.

- Sixteen confirmed and one suspect Legionnaires' disease cases have been reported since Aug. 1, 2017.
- Ten confirmed cases have been reported since Aug. 21, 2017.
- Cases range in age from 23 to 88 years, with the average age being 60 years old.
- Sixteen of the 17 (94 percent) of the cases are male.
- One (6 percent) case died.
- The majority of cases reside in Denver metropolitan area counties (Adams, Arapahoe, Denver, Douglas, Jefferson).

CDPHE is working with local public health agencies to interview all cases to determine common exposures, including hotels, group events, recreational water, and other known high-risk exposures. At this point, public health has not implicated a common exposure among the cases; however, the investigation is ongoing.

Additionally, we are investigating a cluster of five cases of unexplained pneumonia in the Denver metro area. These cases traveled to southeastern Colorado (Lamar area) at the end of July 2017. Three of these cases were hospitalized with pneumonia and sepsis, but tested negative for *L. pneumophila* serogroup 1 on UAT. UAT only tests for *L. pneumophila* serogroup 1, so it is possible that a different serogroup of *Legionella* could have caused the illness.

Information about Legionellosis

- **Organism:** *Legionella* is a bacteria that causes Legionnaires' disease, a form of pneumonia, or Pontiac fever, a flu-like illness characterized by high fever. There are numerous serogroups of *Legionella pneumophila*, though illness is predominantly caused by serogroup 1.
- **Symptoms:** Pneumonia, cough, shortness of breath, fever, headache, chills, fatigue, body aches, or altered mental status.
- **Incubation period:** Generally 2-10 days, but can be up to 14 days.
- **Duration of illness:** Usually up to 7 days or longer.
- **Diagnosis:** While the gold standard remains culture of a lower respiratory specimen, diagnosis is most commonly made by using a urinary antigen test (UAT), which tests for *L. pneumophila*, serogroup 1. Serology and PCR are less commonly used.
- **Treatment:** Antibiotics, typically macrolides and respiratory quinolones, are used to treat Legionnaires' disease since it is a bacterial illness. Information about antibiotic selection is available here: <https://www.cdc.gov/legionella/clinicians/diagnostic-testing.html>
- **Risk factors:** Some individuals are more at-risk for developing Legionnaires' disease after being exposed to *Legionella* than others. This includes individuals who are over 50 years old, individuals who have underlying respiratory illness (e.g., COPD, asthma, lung cancer), and individuals who are immunocompromised or are taking immunosuppressive medication.
- **Transmission:** Legionnaires' disease is transmitted by inhaling aerosolized water droplets contaminated with *Legionella*.
- **Sources of exposure:** Common sources of exposure include hot tubs, shower, misters, fountains, hot springs, sprinklers, cooling towers, and swamp coolers, however other aerosolized water sources have the potential to spread *Legionella* to people who are exposed. There is no person-to-person transmission of *Legionella*.

Recommendations / guidance

For clinicians:

1. Consider the diagnosis of legionellosis in any person with unexplained pneumonia.
2. Collect a urine specimen to test using a Urinary Antigen Test (UAT).
3. Collect a lower respiratory specimen to test using a culture. Because UAT only tests for *Legionella pneumophila* serogroup 1, we are asking that you also collect a lower respiratory specimen to be cultured for other serogroups and species of *Legionella*. Submit this specimen to your normal clinical laboratory for culture. If labs are unable to culture for *Legionella*, the specimens can be sent to state public health laboratory for culture (see below).
4. Health care providers are asked to report cases of unexplained pneumonia in persons who visited the Lamar, Colorado area from July 28 to present to Tori Burket or Nisha Alden at CDPHE - [303-692-2700](tel:303-692-2700)

For clinical laboratories:

1. Please forward *Legionella* isolates from positive cultures of lower respiratory specimens to the state public health laboratory for further characterization.
2. If you are unable to conduct *Legionella* culture, please forward specimens from patients with suspected legionellosis as soon as possible to the state public health laboratory.
3. Please call Tori Burket at CDPHE (303-692-2700) before sending a specimen to the lab.

Note: Lower respiratory specimens are sometimes rejected during a workup for pneumonia based upon specimen quality (e.g., due to lack of white blood cells in the sample or contamination with other bacteria). Lower respiratory specimens should not be rejected for these reasons when working up Legionnaires' disease, because *Legionella* can often be recovered.

For local public health agencies:

- Legionnaires' disease cases should be promptly interviewed by their respective local public health agency using the standard Legionellosis case investigation form found on the CDPHE Communicable Disease Manual (<https://www.colorado.gov/pacific/cdphe/communicable-disease-manual>).
- Please notify Tori Burket or Nisha Alden at CDPHE (303-692-2700) if you identify any noteworthy exposures reported during case interviews.
- Please send the completed case report form to CDPHE either through secure email (tori.burket@state.co.us), fax (attn: Tori Burket - 303-782-0338), or by uploading it to the documents section on the case event page in CEDRS.

For more information

For more information, physicians, laboratories, and public health partners should contact Tori Burket or Nisha Alden at CDPHE -- 303-692-2700.

