

# Epi Update for Friday, August 29, 2025

## CENTER FOR ACUTE DISEASE EPIDEMIOLOGY (CADE)

### Iowa Department of Health and Human Services (Iowa HHS)

Items for this week's Epi Update include

- *Legionella* review
- CDC respiratory virus season outlook
- Infographic: Legionnaires' disease

#### **Legionella review**

Legionellosis cases are reported year-round, but tend to peak in late summer in Iowa. *Legionella* can cause Legionnaires' disease or Pontiac fever. Water systems can spread *Legionella* bacteria to people, including showerheads, hot tubs, decorative fountains, large/complex plumbing systems, and cooling towers.

Legionnaires' disease is characterized by illness with pneumonia. Symptoms include acute onset of lower respiratory illness with fever or cough. Additional symptoms include shortness of breath, myalgia, headache, chest pain, nausea, diarrhea, abdominal pain, and altered mental status. Hospitalization is common. The case-fatality rate is approximately 10%.

Pontiac fever is a milder, self-limiting illness without pneumonia.

Laboratory testing for *Legionella* is commercially available. Preferred diagnostic tests include both of the following paired together:

- Culture or molecular testing of lower respiratory specimens to detect a range of *Legionella* types
- Urine antigen test for *Legionella pneumophila* serogroup

Lower respiratory specimens include sputum, bronchoalveolar lavage, tracheal aspirate, and lung tissue.

Iowa HHS and local public health partners investigate each reported legionellosis case to identify common sources of infection and recommend mitigation strategies, if necessary.

For more information about legionellosis, visit [www.cdc.gov/legionella/index.html](http://www.cdc.gov/legionella/index.html).

#### **CDC respiratory virus season outlook**

CDC has released the *2025-2026 Respiratory Disease Season Outlook*, sharing expectations for peak SARS-CoV-2, RSV, and influenza hospitalizations for the upcoming season. CDC will update the outlook every two months throughout the season or as warranted by changes in the trajectories of any of the three diseases.

CDC expects the upcoming respiratory virus season will likely have a similar peak combined hospital burden compared to last season.

Vaccination remains the best way to protect yourself and your loved ones against serious outcomes of viral respiratory illnesses.

To view the full seasonal respiratory virus outlook, visit [www.cdc.gov/cfa-qualitative-assessments/php/data-research/season-outlook25-26.html](http://www.cdc.gov/cfa-qualitative-assessments/php/data-research/season-outlook25-26.html).

## Infographic: Legionnaires' disease

# LEGIONNAIRES' DISEASE

Legionnaires' (LEE-juh-nares) disease is a very serious type of pneumonia (lung infection) caused by bacteria called *Legionella*. If you develop pneumonia symptoms and may have been exposed to *Legionella*, see a doctor right away. Be sure to mention if you have used a hot tub, spent any nights away from home, or stayed in a hospital in the last two weeks.

**Legionnaires' Disease Can Cause Pneumonia Symptoms**

Signs and symptoms of Legionnaires' disease can include:

- ▶ Cough
- ▶ Shortness of breath
- ▶ Muscle aches
- ▶ Headache
- ▶ Fever

Doctors use chest x-rays or physical exams to check for pneumonia. Your doctor may also order tests on a sample of urine and sputum (phlegm) to see if your lung infection is caused by *Legionella*.

**Legionnaires' Disease Is Serious, but Can Be Treated with Antibiotics**

Legionnaires' disease is treated with antibiotics (drugs that kill bacteria in the body). Most people who get sick need care in a hospital but make a full recovery. However, about 1 out of 10 people who get Legionnaires' disease will die from the infection.

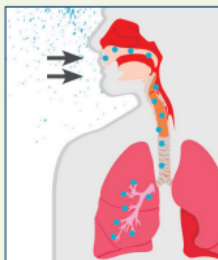
**Certain People Are at Increased Risk for Legionnaires' Disease**

Most healthy people do not get Legionnaires' disease after being exposed to *Legionella*. Being 50 years or older or having certain risk factors can increase your chances of getting sick. These risk factors include:

- ▶ Being a current or former smoker
- ▶ Having chronic lung disease, such as emphysema or chronic obstructive pulmonary disease (COPD)
- ▶ Having a weakened immune system from diseases like cancer, diabetes, or kidney failure
- ▶ Taking medication that weakens your immune system

**Legionella Are Usually Spread through Water Droplets in the Air**

In nature, *Legionella* live in fresh water and rarely cause illness. In man-made settings, *Legionella* can grow if water is not properly maintained. These man-made water sources become a health problem when small droplets of water that contain the bacteria get into the air and people breathe them in. In rare cases, someone breathes in *Legionella* while they are drinking water and it "goes down the wrong pipe" into the lungs. In general, people do not spread Legionnaires' disease to other people.



Legionnaires' disease, a type of severe pneumonia, is caused by breathing in small droplets of water that contain *Legionella*.

**Common Sources of Infection**

Outbreaks of Legionnaires' disease are often associated with large or complex water systems, like those found in hospitals, hotels, and cruise ships.

The most likely sources of infection include:



Water used for showering (potable water)



Cooling towers (parts of large air conditioning systems)



Decorative fountains



Hot tubs

To view in full size, visit [www.cdc.gov/legionella/downloads/fs-legionnaires.pdf](http://www.cdc.gov/legionella/downloads/fs-legionnaires.pdf).

**Have a healthy and happy week!**  
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