

## FREQUENTLY ASKED QUESTIONS

### LEGIONNAIRES' DISEASE

#### **What is Legionnaires' disease?**

Legionnaires' disease is a form of pneumonia (lung infection) caused by the *Legionella* bacteria. Read more about the disease here: <https://epi.dph.ncdhhs.gov/cd/diseases/legionellosis.html>.

#### **How severe is the illness?**

Legionnaires' disease can be very serious and even cause death. Most cases can be successfully treated with antibiotics and healthy people usually recover from the infection.

#### **How do people get Legionnaires' disease?**

The disease is spread through breathing in tiny water droplets containing the *Legionella* bacteria. Legionnaires' disease is not spread from person to person.

*Legionella* bacteria can be found naturally in freshwater environments such as lakes and streams. It can make people sick when it grows in manmade water systems such hot tubs, cooling towers, large plumbing systems, and decorative fountains. Legionnaires' disease outbreaks happen when a lot of people breathe in water droplets from one of these sources.

#### **Who is at risk?**

Most people who are exposed to *Legionella* do not get sick, but some people are more likely to get sick than others. People may be more likely to get sick if they are aged 50 years or older, are a current or former smoker, have a weak immune system or take medications that weaken the immune system, or have other medical conditions like diabetes, chronic lung disease, liver failure, or kidney failure.

#### **What are the symptoms?**

People with Legionnaires' disease usually have a high fever, chills, cough, and fatigue (tiredness) or weakness. Some people also get muscle aches or headaches.

#### **When do people start to feel sick?**

Most people start to feel sick between 2 and 14 days after breathing in the bacteria. If it has been more than 14 days since you could have been exposed to *Legionella* bacteria, you do not need to worry about getting sick with Legionnaires' disease.

#### **What is the treatment?**

Legionnaires' disease can be treated with certain antibiotics and most healthy people make a full recovery.

#### **Where can I get more information?**

- NC DHHS: Legionellosis: <https://epi.dph.ncdhhs.gov/cd/diseases/legionellosis.html>
- CDC: Patient Facts: Learn More about Legionnaires' disease: <https://www.cdc.gov/legionella/about/>

## **CASES ASSOCIATED WITH NC MOUNTAIN STATE FAIR**

### **Did people get Legionnaires' Disease from the Fair?**

We believe people were exposed to *Legionella* bacteria at the Mountain State Fair. We found that people who got sick with Legionnaires' disease were much more likely to have visited one particular building (Davis Event Center) at the Mountain State Fair, walked by the hot tub displays, and visited during the second half of the fair than people who did not get sick.

### **How many people have become sick after attending the Mountain State Fair?**

Please go to the state website at <https://epi.dph.ncdhhs.gov/cd/legionellosis/outbreak.html> for the most current information on how many fairgoers have become sick with confirmed Legionnaires' disease or Pontiac fever.

### **Who is involved in the investigation?**

Multiple Western NC county health departments, the NC Department of Health and Human Services, the NC Department of Agriculture and Consumer Services, other state health departments, and the U.S. Centers for Disease Control and Prevention (CDC).

### **How did you learn about the cases?**

Doctors and labs are required by law to report all Legionnaires' disease cases to public health. On September 23<sup>rd</sup>, two local health departments told us about an increase in reports of Legionnaires' disease and we quickly identified that most cases were in people who had attended the Mountain State Fair.

### **What is Public Health doing about this?**

We immediately initiated an investigation with local health departments to identify the source of the outbreak and ensure that there was no ongoing risk to the public. We interviewed people who became sick with Legionnaires' disease; alerted clinicians; and notified the public. We conducted a joint site visit of the WNC Ag Center to identify sources of aerosolized water and collected water samples. We then conducted further interviews of fair attendees to determine which fair activities and locations were associated with the outbreak. We have released a preliminary interim report from our investigation here [[https://epi.dph.ncdhhs.gov/cd/legionellosis/InterimReportLegionnairesDiseaseOutbreak\\_101019\\_final.pdf](https://epi.dph.ncdhhs.gov/cd/legionellosis/InterimReportLegionnairesDiseaseOutbreak_101019_final.pdf)].

### **I (or my family member) visited NC Mountain State Fair and became ill afterwards. What should I do?**

The length of time from exposure to when people experience symptoms is generally between 2-14 days. This time window for the fair has now passed and state health officials do not expect many additional cases to be reported. If you experience symptoms consistent with pneumonia, please contact your health care provider.

### **Is the Western North Carolina Agricultural Center safe?**

Legionnaire's disease is acquired through the inhalation of contaminated aerosolized water. Health officials have not identified any significant ongoing sources of aerosolized water at the WNC Ag Center.

Water tests found *Legionella* bacteria in one sample taken from the Ag Center, but finding *Legionella* in a building's water supply is not uncommon. You can only get sick from *Legionella* bacteria if you breathe in tiny aerosolized water droplets.

**What is public health doing to reduce the risk of Legionnaire's disease at Fairs?**

Public health officials are working with the Department of Agriculture to make our public venues and fairgrounds safe for North Carolinians. We have provided guidance to fair organizers and vendors on the proper maintenance and care of displays or water features that can aerosolize water.