What is Legionnaires’ Disease?
A serious type of pneumonia caused by Legionella bacteria.

Where does Legionella grow?
Legionella is naturally found in freshwater environments, such as lakes and streams. It can become a health concern when it grows and spreads in domestic and commercially constructed building water systems.

What are the conditions for Legionella growth?
- The optimal temperature range for Legionella growth is 77-108°F.
- Legionella grows best in large, complex water systems that are not adequately maintained.
- Fluctuating temperatures and stagnated water in plumbing systems also contribute to Legionella growth.
- Improperly maintained plumbing systems can lead to sediment, scale and corrosion, all of which provide a habitat and nutrients for Legionella growth.
- Legionella can grow on a biofilm, which is a group of microorganisms, such as bacteria, that can attach to the interior surface of plumbing lines, providing a protective barrier for the Legionella cells.

How are people exposed?
- People can get sick when they breathe in small droplets of water containing Legionella into the lungs. Water containing Legionella can be aerosolized through devices like shower heads, hot tubs, cooling towers, and decorative fountains.
- Less commonly, people can accidentally inhale drinking water containing Legionella.
What steps can be taken to prevent the disease?

Public Accommodations/Health Care Facilities
- Create and implement a water management program for your facility

Residential Homes and Buildings
- Maintain water systems including water softeners and filters
- Maintain water temperature outside the growth range
- Ensure pools, hot tubs, and other water features are properly maintained
- Routinely run water through unused fixtures to prevent water stagnation
- Shock chlorination of a private well and flushing of home plumbing
- Drain garden hoses

Who is at risk?
People who:
- Are 50 years or older
- Are current or former smokers
- Have a chronic lung disease
- Have weakened immune systems
- Have cancer
- Have underlying illnesses such as diabetes, kidney failure, or liver failure

References and General Information
- Legionnaires Disease and Pontiac Fever — CDC
- Legionnaires Disease, Pontiac Fever Fast Facts — CDC
- Legionella Water Management Programs Overview — CDC
- Legionella: Developing a Water Management Program — CDC

Recommended CDC Training
- Preventing Legionnaires’ Disease Training — CDC

CDC Sampling Videos Link
- Legionnaire's Disease Environmental Health — CDC

CDC list of certified Environmental Legionella Isolation Techniques Evaluation (ELITE) labs for processing of water samples
- Elite Program — CDC

www.snhd.info/legionella