



Legionella pneumophila is a waterborne bacteria. When inhaled as fine mist or vapor, it causes Legionnaires' disease — a serious but treatable pneumonia. It is NOT spread person-to-person and CANNOT be contracted through drinking water.

WHAT IS LEGIONELLA?

- A bacteria that grows in water systems
- Causes Legionnaires' disease — a serious type of pneumonia
- Illness occurs when contaminated water droplets are inhaled (not swallowed)

WHERE IS IT FOUND?

- Building plumbing (pipes, faucets, showerheads)
- Hot water tanks, heaters, and storage systems
- Cooling towers and HVAC systems
- Decorative fountains and water features
- Areas with low water use or stagnation
- Ice machines and emergency eyewash stations

HOW DOES EXPOSURE HAPPEN?

- Breathing in mist or vapor containing Legionella
- Common sources: showers, cooling towers, humidified air, and fountains
- NOT spread person-to-person
- NOT spread through drinking or swallowing water
- Micro-droplets near HVAC exhaust and mechanical systems

WHO IS MOST AT RISK?

- Adults over 50
- Smokers or former smokers
- People with chronic lung conditions
- Individuals with weakened immune systems
- Those with kidney disease or diabetes

SIGNS & SYMPTOMS

- Cough and shortness of breath
- Fever and chills
- Muscle aches and headaches
- Nausea or confusion (in severe cases)
- Symptoms appear 2–10 days after exposure

Early treatment is key.

If you feel unwell after possible exposure, seek medical care promptly.

PREVENTION: WHAT WORKSITES SHOULD DO

- Maintain safe water temperatures (hot stays hot, cold stays cold)
- Prevent water stagnation — regularly flush unused outlets and dead legs
- Clean and maintain building water systems on schedule
- Implement a Water Management Plan (WMP) — recommended by the CDC
- Routine inspection and treatment of cooling towers and HVAC systems
- Keep records of testing, treatment, and maintenance activities

WHAT YOU CAN DO

- Report unusual conditions: discoloration, odd odors, areas of low water use
- Follow workplace safety procedures and attend available training
- Use caution around aerosolized water sources (mist, cooling tower mist)
- Stay aware of your work environment and mechanical areas
- Avoid lingering near visible mist from HVAC or rooftop equipment

IF YOU MAY HAVE BEEN EXPOSED

- Remove yourself from the area if needed
- Notify your supervisor and Health & Safety Committee
- Seek medical attention promptly if symptoms develop
- Inform your provider of potential workplace exposure
- Document and report the concern in writing

KNOW YOUR ROLE

- Workers play a key role in identifying risks early
- Reporting concerns helps prevent larger outbreaks
- Health & Safety Committees support investigation and follow-up
- Management and workers share responsibility for a safe water environment

Newly started-up or recently repaired water systems carry a higher short-term risk of Legionella growth. Extra caution and flushing protocols are important.



COMMON MISCONCEPTIONS — AND THE FACTS

MISCONCEPTION	THE FACTS
You can catch Legionella from drinking tap water	Legionella spreads only through inhaled mist or vapor — not by drinking, handwashing, or using restrooms.
If Legionella is found, the whole building is unsafe	Risk is localized near the source (e.g., a rooftop cooling tower). Most indoor spaces remain safe.
Everyone exposed will get seriously ill	Most people do not get sick. Risk is elevated for adults over 50, smokers, and immunocompromised individuals.
A tower that looks clean must be safe	Legionella is invisible and odorless. Only laboratory water testing can confirm presence or absence.
Tap water, sinks, and toilets are also contaminated	Indoor plumbing is a separate system from cooling towers. Drinking water, sinks, and restrooms remain safe.
All buildings follow the same safety rules	Regulations vary by state and locality. Water Management Plans and regular testing are universal best practices.

LEGIONELLA GROWTH — WATER TEMPERATURE ZONES

Below 68°F / 20°C	68–77°F / 20–25°C	77–108°F / 25–42°C	Above 140°F / 60°C
■ Legionella survives but does not multiply	■ Slow growth possible — monitor closely	■ DANGER ZONE — optimal Legionella growth	■ Bacteria are killed — maintain hot systems here

EMPLOYER RESPONSIBILITIES

- Maintain building water systems to prevent Legionella growth
- Develop a Water Management Program (monitoring, maintenance, controls)
- Ensure proper temperature control and disinfection
- Regularly inspect cooling towers, plumbing, and HVAC systems
- Address stagnant water, scale buildup, and sediment
- Train employees and communicate health risks
- Respond promptly to suspected or confirmed cases

WORKING TOGETHER FOR YOUR SAFETY

- Timely communication when health concerns arise
- Coordinating with Health & Safety Committees for rapid response
- Supporting sick leave, medical testing, and workers' compensation

REPORTING & PUBLIC HEALTH

- Legionnaires' disease is a reportable illness in all U.S. states
- Healthcare providers and laboratories must report confirmed cases to local or state health departments
- In New York, cases are reported to the NYS Department of Health

Health departments may:

- Investigate potential sources of exposure
- Require environmental testing and corrective actions
- Coordinate with employers and building owners

Cooperation with public health authorities is critical to preventing additional cases.

QUESTIONS OR CONCERNS?

Worksite: Supervisor or union steward
PEF H&S: (518) 785-1900 ext. 254
Email: healthandsafety@pef.org
CDC: cdc.gov/legionella

