

Legionnaires' Disease

A problem for health care facilities

Legionnaires' disease (LD) is a serious, and often deadly, lung infection (pneumonia). People usually get it by breathing in water droplets containing *Legionella* germs. People can also get it if contaminated water accidentally goes into the lungs while drinking. Many people being treated at health care facilities, including long-term care facilities and hospitals, have conditions that put them at greater risk of getting sick and dying from LD. *Legionella* grows best in buildings with large water systems that are not managed effectively. CDC outbreak investigations show that effective water management programs—actions that reduce the risk of *Legionella* growing and spreading in building water systems—can help prevent problems that lead to LD. Health care facility leaders* should be aware that LD is a risk in their facility and that they can take action to prevent infections.

Health care facility leaders can:

- Build a team focused on keeping their facility's water safe.
- Create and use a water management program to limit *Legionella* and other waterborne germs from growing and spreading. www.cdc.gov/legionella/WMPtoolkit
- Work with healthcare providers to identify LD cases early and determine if the cases may be associated with a health care facility.
- Report LD cases to local public health authorities quickly and work with them to investigate and prevent additional cases.

Want to learn more? www.cdc.gov/vitalsigns/legionella

*Leaders may include infection control practitioners, facility managers, hospital administrators, quality assurance staff, or others.

76%

People definitely got Legionnaires' disease from a health care facility in 76% of locations reporting exposures.

1 in 4

Legionnaires' disease kills 25% of those who get it from a health care facility.

4 in 5

Most problems leading to US health care-associated outbreaks could be prevented with effective water management.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



Problem:

Legionnaires' disease can occur in your health care facility

Health care facilities may put people at risk for LD when they do not have an effective water management program. These limit germ growth by:

- Keeping hot water temperatures high enough.
- Making sure disinfectant amounts are right.
- Keeping water flowing (preventing stagnation).
- Operating and maintaining equipment to prevent slime (biofilm), organic debris, and corrosion.
- Monitoring factors external to buildings, such as construction, water main breaks, and changes in municipal water quality.



Contaminated water droplets can be spread by:

- Showerheads and sink faucets.
- Hydrotherapy equipment, such as jetted therapy baths.
- Medical equipment, such as respiratory machines, bronchoscopes, and heater-cooler units.
- Ice machines.
- Cooling towers (parts of large air-conditioning systems).
- Decorative fountains and water features.

Health care facility leaders and providers should be aware that some people are at increased risk for LD:

- Adults 50 years or older.
- Current or former smokers.
- People with a weakened immune system or chronic disease.

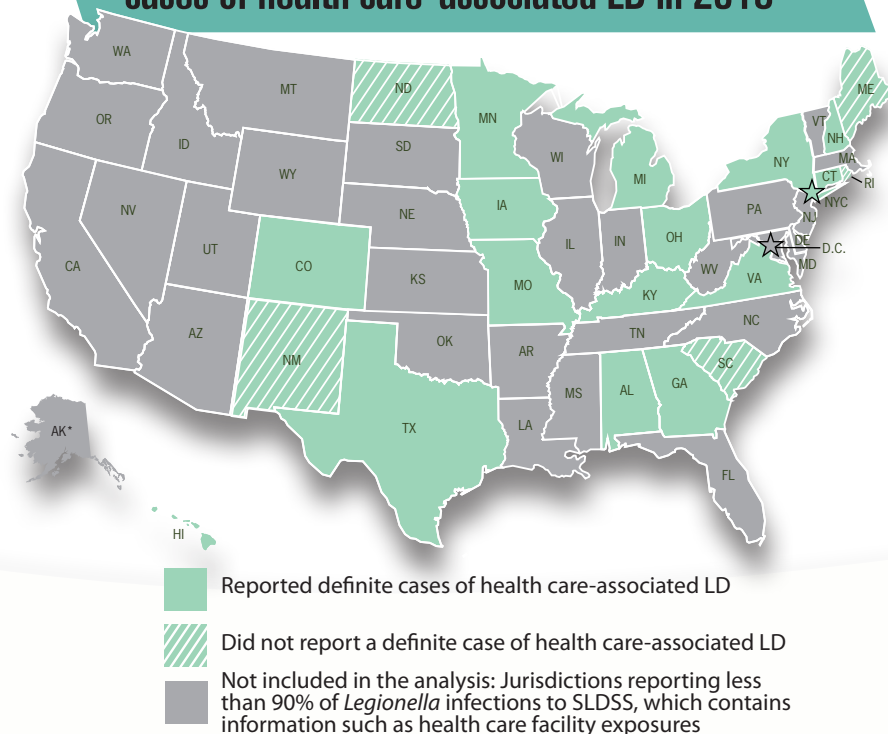
Preventing the first case

A *Legionella* water management program routinely consists of:

- 1 Establishing a water management program team.
- 2 Describing the building water systems using words and diagrams.
- 3 Identifying areas where *Legionella* could grow and spread.
- 4 Deciding where control measures should be applied and how to monitor them.
- 5 Establishing ways to intervene when control limits are not met.
- 6 Making sure the program is running as designed and is effective.
- 7 Documenting and communicating all the activities.

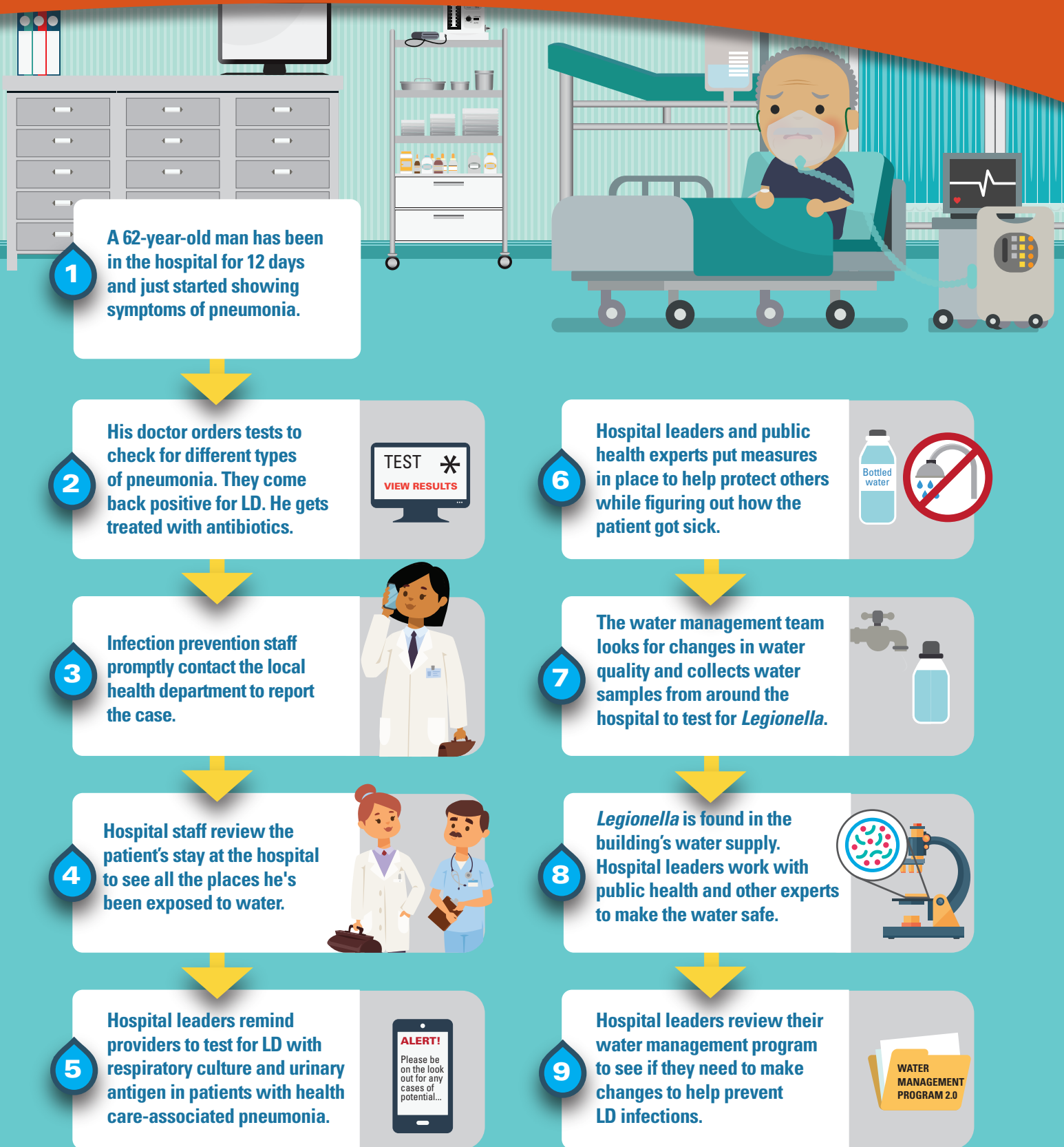
www.cdc.gov/legionella/WMPtoolkit

16 of 21 jurisdictions reported definite cases of health care-associated LD in 2015



*Alaska had no cases to report

One health care facility's LD story and what happens next*



Health care facility leaders can protect patients from LD with prevention and early recognition.

*The same steps apply when two or more cases of possible health care-associated LD (patients with LD who spent part of the 10 days before symptoms began at the same facility) are identified within 12 months of each other.

What Can Be Done?

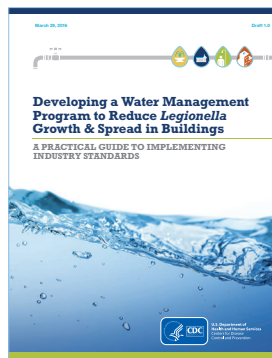


The Federal government is

- Promoting LD prevention practices and providing tools on how to develop water management programs for health care facilities and other at-risk buildings.
- Requiring LD prevention programs at Veterans Health Administration health care facilities. <http://bit.ly/2plRrhl>
- Providing information on technologies for *Legionella* control in building plumbing systems. <http://bit.ly/2cA7w3L>
- Tracking LD and providing guidance in responding to outbreaks to find the source and help prevent more infections.

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Practical guide for developing a *Legionella* water management program

www.cdc.gov/legionella/WMPtoolkit

Healthcare providers can

- Test for LD in people with health care-associated pneumonia, especially those with severe pneumonia or in facilities where other LD cases have been identified or *Legionella* has been found in the water.
- Test for LD in people with pneumonia who have a weakened immune system or chronic disease, fail outpatient treatment, require intensive care, or report recent travel.
- Order a culture specific for *Legionella* from a lower respiratory specimen (e.g., sputum), preferably before giving antibiotics. Also order a urinary antigen test.
- Talk to their laboratories to make sure they do *Legionella* tests on site or have another way to quickly get results.

State and local officials can

- Improve monitoring for LD in health care facilities (including reviewing previous cases to look for patterns), and respond promptly to reports of cases.
- Understand capacity of laboratories to process *Legionella* specimens, and encourage laboratories to save patient isolates for public health investigations.
- Report details, including visits to health care facilities, for all LD cases to CDC. <http://bit.ly/2qcoR4U>
- Report details for all LD outbreaks to CDC's National Outbreak Reporting System. www.cdc.gov/nors
- Provide tools and information to help health care facility leaders create and use *Legionella* water management programs.

1-800-CDC-INFO (232-4636)

TTY: 1-888-232-6348

www.cdc.gov

Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30329

Publication date: 06/06/2017