

University of Washington Medical Center officials say a second person linked to an outbreak of Legionnaires' disease has died.

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The bacteria that cause Legionnaires' disease have been detected in part of the water supply at the University of Washington Medical Center, where officials said a second person linked to an outbreak has died.

An ice machine and two sinks in cardiac units of the hospital's Cascade Tower were found to be contaminated with the germs that can cause the potentially deadly form of pneumonia, officials said Wednesday.

Signs warning patients, family and staff not to use drinking fountains and sinks were posted Wednesday throughout the tower.

Cascade Tower is supplied with city of Seattle drinking water, but there's likely little risk of spread to surrounding areas, said Dr. Tom Staiger, UWMC medical director.

"We don't have any indication that people in the general public should be worried about this," Staiger told reporters at a news conference.

Hospital officials have trucked in "a lot" of bottled water for an outage in the Cascade Tower that could last at least two weeks while testing continues. The tower is served by one of five separate city water feeds for different sections of the hospital. Water in one system does not mix with the others, officials said.

The announcement follows reports of two previous cases of Legionnaires' disease in patients treated in the UWMC cardiac-care units: a 30-year-old woman reported on Aug. 26, and a 50-year-old man reported Sept. 6, health officials have said. The man died Sept. 8, King County health officials said.

The case announced Wednesday occurred in a woman in her 50s. She died Aug. 27. Infection with the Legionella bacteria was detected during an autopsy, and health officials said it may have contributed to her death.

The patients were infected with Legionella pneumophila, one of about 60 different types of the bacteria.

Tests of 15 other patients in the UWMC units have shown no evidence of infection, Staiger said. Officials are testing patients with symptoms of respiratory problems and culturing samples to check for Legionella bacteria.

Patients warned

With assistance from Larry Lee, owner of Pacific Industrial Hygiene, UWMC has intensified testing of water systems throughout the hospital, with focus on the areas where the bacteria were detected. In the Cascade Tower, new filters are being installed on sinks, fountains and showers.

"We are doing everything that we can identify that is reasonably possible to put in place to reduce the risks to patients, family and staff," Staiger said.

Still, patients and their families were alarmed by news of the potential risk. Lisa Baker, 46, of Snohomish, has been in the Cascade Tower since before Aug. 25, when she underwent a stem-cell transplant to treat myelodysplastic syndrome, a bone-marrow disorder, diagnosed last spring.

On Tuesday, her husband, Bob Baker, 46, got a text from his wife saying a nurse had just taken away a container of ice chips and warned her not to use the sink or shower.

“The nurse seemed upset. She said she hadn’t seen anything like this in 34 years,” Baker said. “That got us both nervous.”

Baker said he is waiting for doctors to test his wife for Legionella infection — or explain why they won’t.

Public Health – Seattle & King County is assisting with the investigation. The water restrictions were put in place Tuesday evening, as soon as Legionella was confirmed; other patients could still test positive for infection, said Dr. Meagan Kay, a county medical epidemiologist.

In addition, the federal Centers for Disease Control and Prevention has been notified of the findings.

Further test results that could specify what kind and how much of the Legionella bacteria were found could take two weeks to come back, said Lee.

Ice machines have been linked to past episodes of Legionella infections — and deaths — in hospitals. The machines often contain water reservoirs located next to compressors, which can warm the water enough to allow any bacteria present to grow, investigations have found.

Previous incident

The Legionnaires’ cases come more than a year after UWMC was cited by the state Department of Labor & Industries for violations that included detection of low levels of Legionella bacteria in a hospital cooling tower, a specialized device that helps heat and cool buildings year round. The hospital was fined \$54,000 for other infractions, but nothing for the Legionella problem.

Cooling towers have been associated with outbreaks of Legionnaires’ disease, which is caused when people breathe in mist contaminated with the bacteria.

The type of Legionella detected in the L&I investigation was different from that in the current outbreak, leading UWMC officials to focus the latest investigation on the direct environment and patients.

Officials have been testing the cooling towers quarterly.

In January, tests showed evidence of small amounts of Legionella bacteria, 120 colony-forming units per milliliter of water. Another test in July showed 520 colony-forming units per milliliter.

The level of concern — at which employees require protection — is 1,000 colony-forming units per milliliter, according to federal Occupational Safety and Health Administration guidelines. Officials said the July reading may have taken too long to arrive at a testing site in Virginia, allowing bacteria to grow

Legionnaires’ disease is reported in about [5,000 people a year](#) in the U.S., according to the Centers for Disease Control and Prevention. In Washington state, the number of cases varies each year from fewer than 10 to more than 50. In 2014, 63 cases of Legionnaires’ disease were reported, including eight deaths, according to the state health department.

It’s a relatively rare disease. Most people don’t get sick if they’re exposed to the bacteria, but some might, particularly if they’re older than 50, current or former smokers, have a chronic lung disease or have immune systems weakened by disease or medications.

The disease was identified after an [outbreak in 1976](#) sickened many attendees at an American Legion meeting in Philadelphia.