

Blue-White Legionella

What is Blue White *Legionella*?

Blue-white *Legionella* species are *Legionella* species whose colonies exhibit blue-white auto-fluorescence when viewed under ultraviolet light. Like other *Legionella* species, these bacteria are common to water sources. An important distinction, however, is that blue-white *Legionella* are rarely associated with human infection, collectively responsible for less than 10% of all *Legionella* infections.

What are the most common blue-white species?

- *L. anisa* *
- *L. bozemanii* *
- *L. cherri*
- *L. dumoffii* *
- *L. gratiana*
- *L. gormanii* *
- *L. parisiensis* *
- *L. steigerwalti*
- *L. tucsonensis*

*Associated with human infection.

Do blue-white *Legionella* species cause Legionnaires' disease?

It is reported that greater than 90% of reported Legionnaires' disease cases in the U.S. are caused by *Legionella pneumophila*, and individual blue-white species account for less than 3% of infections. Blue-white *Legionella* are typically nonpathogenic and their presence in water systems is common. Therefore, they should not cause concern among healthy individuals.

Where are blue-white *Legionella* found?

The blue-white *Legionella* species are found in the same environments as other *Legionella*:

- Environmental water sources
- Potable water, such as that from faucets, showers, hot water tanks
- Cooling towers and hot tubs

Who is at risk of *Legionella* infection?

As previously mentioned, blue-white *Legionella* do not generally cause pneumonia or infection in healthy humans. On the other hand, cases have rarely been reported in immunocompromised individuals.

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If blue-white species have been identified in a water source, should the source be disinfected?

Since blue-white *Legionella* species rarely cause disease and can often be detected during routine testing, water distribution systems harboring these species need not be disinfected. There have, however, been cases of Pontiac Fever associated with direct exposure to intense aerosols containing *L. anisa*. These devices (humidifiers, misters, etc.) should be kept clean and periodically disinfected according to the manufacturer's instructions.

Sources

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