

LEGIONELLA TESTING

Testing for *Legionella* is an essential component of a Quality Control and/or Quality Assurance program. Regular monitoring and quantification of *Legionella* species will ensure safe water and/or environmental conditions.

All *Legionella* species are potentially pathogenic for humans. Disease caused by *Legionella* species is often termed legionellosis. Two types of legionellosis caused by *L. pneumophila* are Legionnaires' disease and Pontiac fever. The disease is caught by inhaling small droplets of water suspended in the air which carries the microorganism. The disease is not spread from person to person, and not everyone exposed to the bug will become ill.

Most *Legionella* species have been isolated from the environment. The optimal temperature of growth is 36°C, however growth can occur at temperatures between 25°C and 43°C. *Legionella* does not grow at 50°C or above. The optimum pH for growth of legionellae is 6.8-7.0.

Legionella mainly lives in water where temperatures are warm enough to encourage growth of the bacteria.

Systems particularly at risk are:

- Cooling towers
- Hot and cold water distribution
- Air conditioning
- Humidifiers
- Whirlpool spas
- Showers

Who Should Test for Legionella?

- City Councils
- Hospital Engineers
- OH&S Professionals
- Building Maintenance
- Schools Maintenance

To operate a well maintained system, specific tests such as *Legionella* species need to be complemented with other analysis such as total bacterial count (also called heterotrophic colony count) and system water quality characteristics.

Examples of water quality characteristics are:

- pH
- Total alkalinity
- Chloride
- Turbidity - presence of corrosion products
- Total dissolved solids/ conductivity
- Suspended solids

Symbio Alliance is NATA accredited for *Legionella* and many other microbiological and chemistry tests for water and air quality. Speak to one of our customer service team for details on how Symbio Alliance can help with management of your air and water systems.