

PROBLEM

Legionella

Legionaries' disease is caused by the microorganism legionella pneumophila. This bacterium can be found in any natural freshwater source. But the number of microorganisms is most often insufficient to cause the disease. Human built water systems are another matter.

The disease can only be caused by inhaling aerosol dispersal, i.e., droplets. And the best environment for the bacterium to multiply, is stagnate water with a temperature between 25°C and 45°C (77-113° F).

The disease is not transmittable between humans and the bacteria needs to overcome the hosts resistance to be able to infect the host.

So where can you be exposed to high numbers of this organism?

Short answer is anywhere. The bacterium can be found in nature, industry, healthcare, and private facilities. But that doesn't mean that you would get infected. Age, weakened immune system and how much of the bacterium you are exposed to are factors that will determine if you get the infection.

So we look at the professional occupations where you work with aerosol producing installations/devices:

Service and construction

Showers, baths, evaporative condensers, air conditioners using water injection etc.

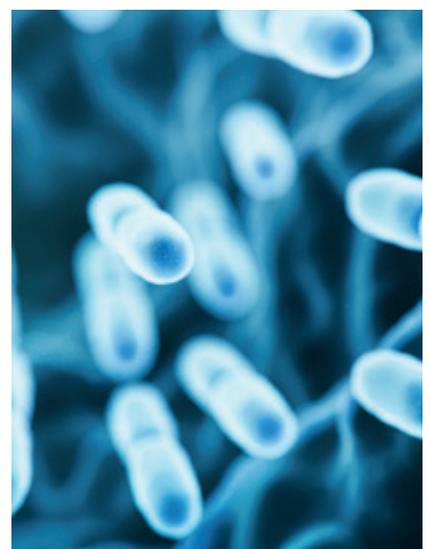
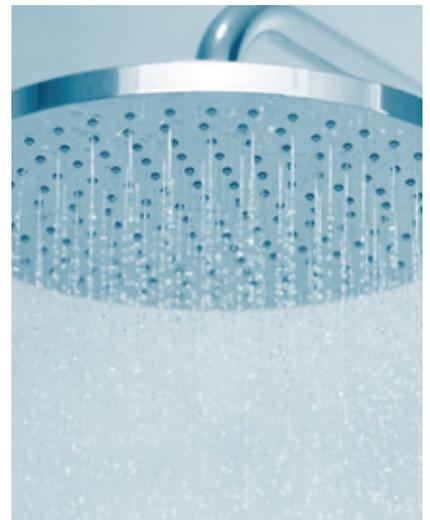
Healthcare

Birthing baths, not so often used eye wash or ice machines, air humidifiers, water pipes for dental equipment etc.

Industry

Aerations ponds, cooling towers, hot and cold water tanks, valves, pipes etc.

There are plenty of measures to remove the risk and those measures should be explored first. Avoid stagnant water and so-called dead pipes. Make sure to flush the system if it is rarely used or if it is a seasonal system. But if there is uncertainty or testing shows high concentration of the bacterium, use respiratory protection.



SUNDSTRÖM RECOMMENDS

SHORTER DURATION

For the private person or professional that do this seldom. A half mask with goggles and particulate filter SR 510 P3 R or a full-face mask with a particulate filter SR 510 P3 R is recommended.



Particle filter SR 510 P3 R



Half Mask SR 100



Half Mask SR 900



Full Face Mask SR 200

LONGER DURATION

For the professional that do this often or for longer periods of time. A powered respirator with a face shield or hood is recommended. Use particulate filters SR 510 P3 R on the powered respirator.



Particle filter SR 510 P3 R



Fan Unit SR 500



Hood SR 604



Fan Unit SR 700



Face Shield SR 570



Hood SR 530

