

WHAT IS LEGIONNAIRE'S DISEASE?

A potentially fatal respiratory disease similar to – but much worse than – pneumonia.



Legionnaires' disease was first detected in 1976 in Philadelphia, when at that time a total of 221 people have been infected. Of these, 34 people have died. Although there was only one reported case in Malaysia, and does not cause death, but the disease will continue to spread, if no preventive measures undertaken.

Legionella bacteria is responsible for two distinct illnesses:


- Legionnaire's disease (severe pneumonia)
- Pontiac fever (mild, non-pneumonia, flu-like)


Legionella bacteria lives in water and thrives in temperatures between **25°C and 45°C.** (hot tubs, large air conditioning systems, hot water tanks)


How does it spread?


Potential **SOURCES of Legionellae** to be investigated:

- hot and cold-water storage tanks
- shower heads
- taps
- toilet cisterns
- hot tubs
- swimming pools (both cold water and heated pools)
- cooling towers
- air-conditioning humidifiers
- condensation trays in air-conditioners and fan coils
- evaporative coolers
- fire-fighting systems
- ornamental fountains (water features)

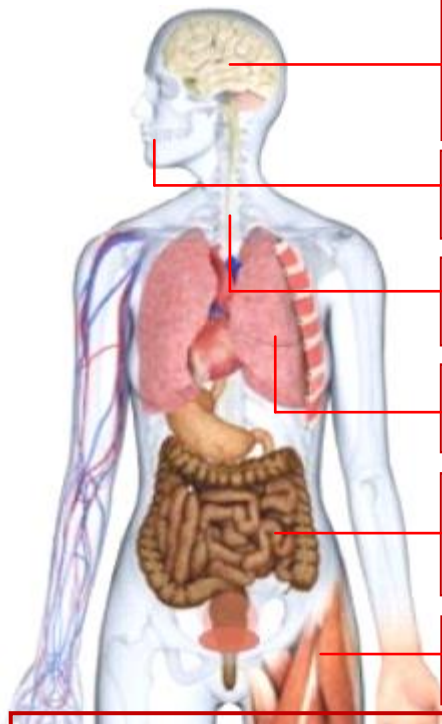
1. 
Municipal feeder systems or adjacent contaminated water supplies.


2. 
Bacteria gets in through breaks in ducts and cooling towers/evaporative condensers.


3. 
Circulated air picks up droplets of contaminated water, transporting Legionella through a building.




4. 
If droplets are inhaled, they can enter the lungs, which is necessary for infection.

Symptoms




 **Headache**
Onset


 **Fever**
Onset

 **Confusion**
(or other mental changes)
  2 – 3 days

 **Loss of appetite**
2 – 3 days

 **Cough**
(may have mucous or blood)
2 – 3 days

 **Chest pain**
2 – 3 days

 **Nausea, vomiting and/or diarrhea**
2 – 3 days

 **Muscle pain**
Onset

 **Fatigue**
2 – 3 days

 **Chills**
Onset

 **There is NO evidence**
Legionnaire's disease is spread from person to person

Most patients develop pneumonia
(some of the lungs' air sacs fill with fluid or pus, making breathing difficult)

How can we prevent it?



- Cooling towers and evaporative condensers should be inspected for corroded parts and have any algae and accumulated scale removed at least once a year.
- Constant treatment of cooling water.
- Don't build fresh air intakes near cooling towers – contaminated air vapour could enter the ventilation system.
- Air filters should be tested for leaks as well as examined, cleaned and/or replaced if necessary.
- Hot water tanks should be cleaned regularly – they are hotbeds for Legionella.
- Water systems should be flushed regularly to prevent water from stagnating.

Since there is no vaccine available for this disease, it is recommended that preventive measures adopted because "**Prevention is better than cure**".

We can help you reduce the risk of contamination with regular examination of your water quality.

Contact us!

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