

Legionnaires' disease

FAQs

1. What is Legionnaires' disease?

Legionnaires' disease (LD) is an infectious disease caused by bacteria *Legionella* species. The bacteria live in various environmental settings and grow well in warm water (20 – 45°C), and are often found in aqueous environment such as water tanks, hot and cold water systems, cooling towers, whirlpool and spas, water fountains and home apparatus that supports breathing.

2. Can LD be spread from person-to-person?

People may get infected when they breathe in contaminated droplets (aerosols) and mist generated by artificial water systems. They may also get the infection when handling garden soils, compost and potting mixes.

The disease is not transmitted by person-to-person contact, eating or drinking.

3. What are the symptoms of LD?

The incubation period is about 2 – 10 days.

Infected persons mostly present with fever, dry cough, shortness of breath, tiredness, headache, muscle pain, abdominal pain and diarrhoea. In severe cases, neurological symptoms (e.g. confusion) and respiratory failure may appear and in some cases, death may result.

Some patients may have a milder, non-pneumonic form of disease called Pontiac fever, which is a self-limiting febrile illness of short duration.

4. Who may get LD?

While anyone may develop LD, the following groups of people are at higher risk:

- Men (2 – 3 times more susceptible than women)
- People of increasing age, particularly over 50 years old
- Smokers
- Alcoholics
- Persons with weakened immunity, especially those chronic illnesses (such as cancer, diabetes mellitus, chronic lung or kidney diseases) and those taking corticosteroids or drugs that suppress body immunity

The following situations may also increase the risk of infection:

- Poor maintenance leading to stagnant water in water system
- Living in areas with old water distribution or plumbing systems
- Living near cooling towers or fountains
- Using electric water heater, whirlpool, spas or hot water spring spas
- Recent stay in hotels or ships

5. What is the treatment of LD?

It can be treated with antibiotics.

6. How to prevent LD?

Currently, there is no vaccine available for LD. Members of the public should observe the following advice to reduce the risk of infection:

- Observe personal hygiene
- Avoid smoking and excessive drinking
- Remove strainers in water taps and shower heads quarterly for cleaning

- If fresh water plumbing system is properly maintained, it is not necessary to install domestic water filters. In case water filters are used, they should be cleaned or changed periodically
- Drain and clean water tanks of buildings at least quarterly
- Drain or purge for at least one minute the infrequently used water outlets (e.g. water taps, shower heads, hot water outlets etc.) and stagnant points of the pipework weekly or before use
- Seek and follow doctor's advice regarding the use and maintenance of home respiratory devices
- When handling garden soils, compost and potting mixes:
 - water gardens and compost gently using low pressure
 - open composted potting mixes slowly and make sure the opening is directed away from the face
 - wet the soil to reduce dust when potting plants
 - avoid working in poorly ventilated places such as enclosed greenhouses

7. Any precaution for people with weakened immunity?

Persons with weakened immunity should:

- use sterile, distilled, or boiled water (or water outlet fitted with appropriate filters) for drinking, tooth brushing and mouth rinsing
- avoid using humidifiers, or other mist- or aerosol-generating devices. Shower may also generate aerosols

8. What if I suspect that the building where I live or work has *Legionella* bacteria in the water system?

It is most important to operate and maintain properly designed man-made water systems to prevent LD. For more information about the good practices in handling man-made water systems, please visit the website of the Electrical and Mechanical Services Department at <http://www.emsd.gov.hk/> for the '[Code of Practice](#)' and the '[Housekeeping](#)

[Guidelines for Cold and Hot Water Systems for Building Management](#)
published by the Prevention of LD Committee.

In case of doubt, you may contact the building management office for follow up.

9. If it is suspected that *Legionella* bacteria exist in water tanks/facilities, will the Department of Health (DH) provide testing service for our buildings?

DH will conduct detailed epidemiological investigation including taking water samples in response to a confirmed case of LD. You may contact the building management office concerned for follow up if it is suspected that there is *Legionella* bacteria in water tanks/facilities.

May 2012