Legionnaires’ Disease

What is legionnaires’ disease?
Legionnaires’ disease is a type of pneumonia caused by the bacteria *Legionella pneumophila* and other *Legionella species*. Pontiac fever is a milder form of the disease with flu-like symptoms and no pneumonia. Patients with pontiac fever recover within 2-5 days without treatment.

What are the signs and symptoms?
The illness usually starts with a flu-like illness including fever, tiredness, headache, and muscle pains. This is followed by a dry cough and breathing difficulties which may progress to a severe pneumonia. Some people also develop diarrhoea or may become confused. Death occurs in 10-15% of otherwise healthy people and may be higher in some groups of patients.

The incubation period is 2-10 days although longer periods have been reported. Symptoms usually appear 5-6 days after infection but may take longer.

If you develop the above symptoms and you are worried that you might have legionnaires’ disease please see your doctor.

How common is legionnaires’ disease?
Legionnaires’ disease is not very common. There are less than 20 cases reported each year in Ireland. However, it is thought that many more cases occur that are not diagnosed because legionnaires’ disease is difficult to distinguish from other forms of pneumonia and specific laboratory tests have to be carried out to diagnose it.

Who is most at risk?
All ages can be affected. However, most cases occur in people who are over 40 years of age. Men are more at risk than women, as are smokers, those with excessive alcohol intake, and people with chronic illnesses or people whose immune system is weakened. Travel abroad is also an important risk factor.

Where are *Legionella* bacteria found?
*Legionella* bacteria are found in many types of water systems. They multiply in warm, and stagnant water, such as can be found in air conditioning cooling towers, certain plumbing systems especially showers, spa pools, decorative fountains, sprinklers and nebulisers.

*Legionella* have also been found in potting compost, particularly in warm countries. However, recently several cases associated with potting compost have been reported from Scotland ([http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19496](http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19496)) and ([http://www.hps.scot.nhs.uk/resp/legionella.aspx#Longbeachae](http://www.hps.scot.nhs.uk/resp/legionella.aspx#Longbeachae)).
A recent study in the UK found that not adding screenwash to windscreen wiper fluid was identified as a possible risk factor for community acquired legionnaires’ disease (http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1274091218489).

**How do you get legionnaires’ disease?**
The disease is spread through the air from a water source. People become infected when they breathe in aerosols (tiny droplets of water) which have been contaminated with *Legionella* bacteria. Aspiration of water contaminated with *Legionella* has also caused legionnaires’ disease. This is more likely to occur in people with swallowing disorders. There is no evidence of spread from person-to-person.

**What is the treatment for legionnaires’ disease?**
There are several antibiotics available which are effective in treating the disease.

**Can legionnaires’ disease be prevented?**

**Water systems**
Legionnaires’ disease can be prevented by the proper design and maintenance of water systems that limit the growth of the bacteria in the system.

**Compost**
Take care when dealing with compost, potting mix and any form of soil or dirt. Gardeners should bear in mind that shop-bought compost and other soils, mulches and composted waste can contain a large range of micro-organisms. While most of these have no ill effects, *Legionella longbeachae*, an unusual form of *Legionella* bacteria, can be found in potting compost and other garden products.

While the risk of becoming unwell through such activities as working with potting compost remains very low, good hygiene in relation to gardening is recommended. This includes wearing gloves, wearing a dust mask that fits tightly over the nose and mouth if the work is liable to raise dust (particularly indoors), and washing hands immediately after use. To further reduce risk, avoid stirring up dust, avoid inhaling dust and dampen the soil/compost before use.

Gardeners are also urged to store compost, potting mixes, mulches and soil in a cool place away from the sun. Any compost or potting mix bags should be opened carefully in well ventilated areas, ideally outdoors, and if possible using a safety blade or sharp knife. Doors should be left open in greenhouses or sheds when potting plants or filling hanging baskets. Finally, anyone intending to eat, drink or smoke while gardening, should ensure they wash their hands before doing so.

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