

## **Legionnaires disease**

1. Legionnaires disease is a potential fatal form of pneumonia, resulting from inhalation of a fine water mist or particles left after the water has evaporated which is contaminated with legionella bacteria
2. The high risk group are male of age group over 50 years of age, smokers and those who are immunosuppressed.
3. An average 200 to 250 cases are reported in the UK each year,
4. Clinical symptoms are flue-like at the onset, with fever, chills, headache and muscle pain. Patient may develop a dry cough and most suffer difficulty with breathing. About one third develop diarrhoea and vomiting and half become confused and delirious. The bacteria may also cause a short feverish form of illness with out pneumonia, known as PONTIAC FEVER.
5. Fatality rate is about 12%. The diagnosis is done by cultures from sputum , bronchial washing and lung tissues. Measurement of antibodies in blood and specific antigens in the urine.
6. More than forty species of the legionella bacterium have been classified and associated with outbreaks world-wide. However, legionella pneumophila causes about 90% of the cases in the UK.
7. Legionella Bacteria are natural occurring organisms and are common in low numbers in water sources such as rivers, lakes, and reservoirs. They can survive under a wide variety of environment and multiply in the temperature range of 20°C to 45°C and thrive on algae, sludge, scale etc.
8. Two key control measures are 1) Prevention of proliferation of bacteria in the water. 2) Control of release and exposure to water droplets and aerosol.