



## General information – Legionnaires' Disease (Legionellosis)

Legionnaires' disease (LEE-juh-nares) is caused by a type of bacterium called *Legionella*. The microorganism was first identified as a cause of human disease in 1976 after a number of people at a Philadelphia convention of the American Legion fell ill with a type of pneumonia (lung infection) [1].

*Legionella* are found naturally in the environment, especially in water and typically do not pose a risk to humans. People may acquire Legionnaires' disease when they breathe in a mist or vapor (small droplets of water in the air of a specific size) that is contaminated with the bacterium [1]. *Legionella* are NOT spread from one person to another person. People most at risk of getting sick from the bacteria are older people (usually 50 years of age or older), as well as people who are smokers, or those who suffer from a chronic lung disease (like emphysema). People who have weak immune systems from diseases like cancer, diabetes, or kidney failure are and individuals that take drugs to suppress (weaken) the immune system (like after a transplant operation or chemotherapy) are also more likely to get sick from a *Legionella* infection [1]. Most people exposed to the bacteria do not become ill.

The chemical environment in the SmartWasher system is unlikely to support the growth and viability of *Legionella pneumophila*, the common cause of Legionnaires disease. In the SmartWasher system there are a large number of non-pathogenic oil-degrading microorganisms that are better adapted to compete against *L. pneumophila* for nutrients. If *L. pneumophila* were present in a SmartWasher it is highly unlikely that this pathogen could cause disease as the system produces very low aerosol levels of the required droplet size necessary to cause a respiratory infection. In support of this statement, there are approximately 50,000 SmartWasher units and an estimated 250,000 individuals currently using the system worldwide. There have been no reported cases of Legionnaires disease associated with the SmartWasher system.

[1] The Health Protection Agency. General information – Legionnaires' Disease (Legionellosis).

[http://www.hpa.org.uk/infections/topics\\_az/legionella/gen\\_info.htm](http://www.hpa.org.uk/infections/topics_az/legionella/gen_info.htm). Accessed 23/12/05.