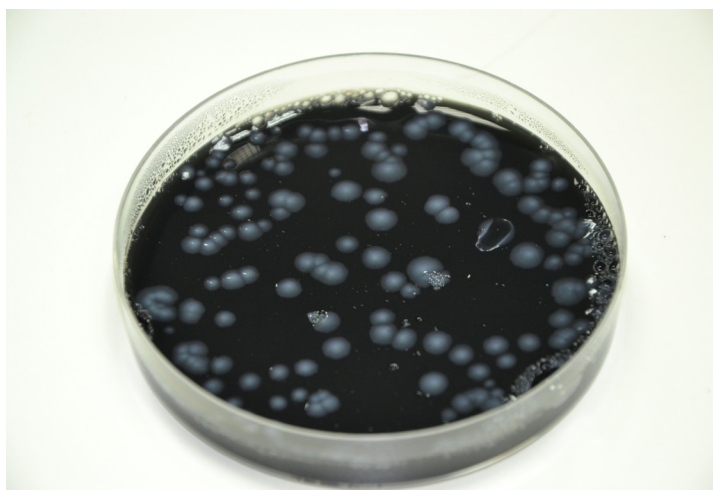


## Legionella: the key word is “awareness”

Lorena Riul

March 2019



Legionella is a well-known bacterium since 1976, when it caused the first pneumonia epidemic in a hotel in Philadelphia where a meeting of legionnaires from the Vietnam War took place, hence its name.

From the aquatic habitat in nature, Legionella has migrated to water systems of various kind which are the natural environment where there are optimal conditions for the bacterium reproduction.

The disease that causes legionellosis is contracted via the respiratory tract by inhalation of water aerosol containing the bacterium. Infection can occur during our everyday life in the shower, in the pool, at ornamental fountains and irrigation systems, or in places where air conditioning is produced by big plants such as cooling towers or evaporative condensers.

The incidence of legionellosis in Italy, as in the rest of the world, is increasing and the mortality rate remains high. Being properly considered, a bacterium whose infection can produce very severe consequences, already in 2000 Italy issued the “Guidelines for the Control and Prevention of Legionnaire’s disease”. Moreover, considering the wide diffusion of Legionella especially in the water systems of the tourist-receptive and thermal structures, the Guidelines were drawn up in 2005, with a special focus also for these structures.

In May 2015, the latest version of the Guidelines was published bringing together, updating and integrating in a single text all the indications reported in the previous national and regulatory guidelines, eg. Legislative Decree 81/2008.

This guideline collects the recommendations developed on the basis of continuously updated and valid knowledge, therefore it is not a mandatory document but it contains indications to be followed in the absence of standard protocols.

In particular, it is important that prevention and control measures are adopted through careful assessment and management of legionellosis risk, as required by the 2015 Guidelines, due to the verified presence of Legionella in tourist-receptive structures and for the important drawbacks in terms of public health, image and legal implications.

After some negative events happened during the last months in Italy, a new situation probably starts for the Heads of Receptive Tourism Structures. In fact, the last 8th of February a news revealed that the special task force (Nas) of the Carabinieri of Trento has reported for manslaughter eight owners of three accommodation facilities of the ‘Paganella plateau being presumably responsible for the death of three Italian tourists. The hotel owners, according to the report, had not prepared the plan for assessing the risk of legionellosis or, in any case, there had been a serious underestimation of this risk. An inadequate prevention plan was claimed. The outcome is 19 tourists suffering from

# Legionella: the key word is “awareness”

Lorena Riul

Fig. Number of cases and incidence rate of legionellosis from 2000 to 2017



Source: Annual Report on Legionellosis in Italy, ISS 2018

Legionnaire’s disease and three deaths.

A check on the state of “health” from a hygienic point of view and a correct and continuous maintenance of the plants, as well as a diligent registration of all interventions up to a risk assessment, are the main measures that protect the health of users and reduce the risks of negative consequences to the image for the structures and legal implications for their managers.

Catas proposes itself as an active partner on the subject of Legionella and offers its experience both for sampling and analysis services for the research of the bacterium, and for an effective approach to the risk analysis of the structures potentially interested in the problem. In this perspective, Catas is available to carry out a preliminary inspection at companies that show interest, in order to analyze facilities and plants and plan the necessary surveillance inspections.

**For info:**

Lorena Riul  
 +39 0432 747255  
 riul@catas.com