

ASHRAE draft Standard 188 – Issues and Answers for Healthcare

1) What is the real risk associated with Legionnaires disease?

Environmental controls for Legionella have been required by the Joint Commission Environment of Care (EOC) standard since 2001. The new ASHRAE standard coauthored by two experts from CDC details specific environmental controls for many building types. The standard requires a HACCP risk management process for all healthcare facilities. It is completely aligned with the existing Joint Commission EOC Standard environmental requirements.

A recent CDC study estimated healthcare costs for Legionnaires' disease as high as \$321 million annually with the average inpatient hospitalization cost about \$34,000. CDC has estimated that there are as many as 18,000 cases of Legionnaires' disease a year and 23% of them are HAI's.

Joint Commission defines direct impact as "An organization's failure to resolve these compliance issues has a direct impact if noncompliance is likely to create an immediate risk to patient safety or quality of care. The difference between Direct Impact Requirements and other requirements is that the direct risk usually results because there are no or few processes intervening between the noncompliance and the impact on the safety of a patient's care." Patients are exposed to aerosolized water every day, many times a day.

2) What does the ASHRAE draft standard mean?

After over 5 years in development the standard has now been approved by the ASHRAE committee, the ASHRAE board and finally the ANSI standards committee. The standard is now out for public comment, the final step in the process. This document has already passed all of the major hurdles and will be a Standard by April 2011 if not sooner.

4) What should we do?

Outbreaks of Legionnaires' disease typically result in litigation because it is so easy to identify and prove the source. Because of this and the Joint Commission standards that have been in existence for a decade, all hospitals should have a written risk management plan with clearly defined environmental controls for Legionella in place. The first step should be development of a risk management plan.

5) What parts of the hospital are at risk?

One of the many misperceptions about Legionella is that only high risk facilities or bone marrow wards are the big issue. A study by New York State identified the following as the top Legionnaires' disease risk factors in HAI cases of Legionnaires' disease: 1) Malignancy, 2) Diabetes Mellitus, 3) Cardiac disease, 4) Chronic lung disease and 5) Renal failure disease. Bone marrow is not even in the top five. People with these risk factors can be found in any hospital and any part of a hospital. 77% of LD cases are community acquired cases from buildings including apartments, hotels, offices and homes to name a few. And these facilities do not have the restrictions for hot water temperatures that hospitals are required to implement which greatly increase the risk for Legionella colonization.

About the Author - Tim Keane is a waterborne pathogen engineering expert with EICC (Environmental Infection Control Consultants). He is coauthor of the 2001 Joint Commission / ASHE regulatory advisory titled "Waterborne Pathogens - Compliance with JCAHO Requirements" and coauthor of the draft ASHRAE standard 188. EICC provides independent consulting for control and risk management of legionella in healthcare facilities. EICC is the healthcare division of Legionella Risk Management, Inc. www.Legionellae.org

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