

Legionella & Proper Workplace Management [Professional Safety]

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OSHA estimates that 10,000 to 50,000 cases of Legionnaires' disease occur each year in the U.S. Legionella are a common type of bacteria that originate from warm water sources. The transmission of Legionella can occur when humans inhale aerosolized droplets of water containing the bacteria. CDC estimates that each year 8,000 to 18,000 people are hospitalized with Legionnaires' disease in the U.S.; however, this number may be significantly higher because up to 75% of infections are not diagnosed or reported. Joseph Allen, senior scientist with Environmental, Health and Engineering (EH&E), warns that employers can be liable if an outbreak occurs at the workplace.

"Legionnaires' disease is a serious illness," Allen says. "CDC estimates that 5% to 30% of people who develop Legionnaires' disease die from the infection. Companies can face significant financial liabilities due to potential litigation, productivity loss, adverse impact on the brand and expensive reactive mitigation measures from an outbreak or even an isolated case."

Hot spots for Legionella are hot and cold potable water systems, showers, water faucets, humidifiers, decorative fountains, cooling towers, evaporative condensers and coolers, ultrasonic misters and whirlpool baths, he says. Allen strongly advises companies to create a risk management plan before an outbreak occurs.

"Trying to react to an outbreak after the fact generally increases costs . . . creates a crisis situation that dramatically and adversely impacts the productivity of senior management that are involved in handling the incident, increases the risk that a mistake is made as companies 'react on the fly' and may result in temporary closing or restriction of the use of facilities while the investigation is proceeding," Allen says.

He adds that an effective plan requires a multidisciplinary team that communicates across all levels of a company - senior management, facilities, legal and public relations. It will ensure that potential hazards are identified, plans are in place to reduce the potential for Legionella proliferation and that the responsibilities of each team member are clearly delineated. According to Allen, a good risk management plan would be tailored to each specific building, would be easy to implement and would:

- * identify risk factors for Legionella and Legionnaires' disease, including equipment, environmental conditions and operational risks;
- * define clear roles and responsibilities for both prevention and response;
- * specify testing and maintenance frequency, procedures and interpretation of results;
- * document activities for any required notification to regulatory authorities;
- * automate notifications, facilitate data reviews and organize documents.

Allen adds that the scientific team must have expertise in biosafety, engineering and building safety, exposure and risk assessment, epidemiology, industrial hygiene and risk communication. "A multidisciplinary approach is critical for success in both reactive situations and in the development of proactive measures, such as risk management plans," he says.

Learn more about Legionella risk management at www.eheinc.com.

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