

# CORONAVIRUS: LEGIONELLA AND MOLD CONCERNS WHEN RESUMING OPERATIONS

ALLIANZ RISK CONSULTING

Temporary shut-down or even reduction in the building operations for only days, weeks or months could cause serious health conditions. Building inactivity makes for opportunistic microbial proliferation, including legionella bacteria and mold.

Legionella can cause Legionnaires disease. If an outbreak was to occur, this could be deadly to your employees, clients and tenants. According to the US Center for Disease Control (CDC), we have seen the number of cases increase with the growth of recreational water facilities nationwide. Legionella disease rates have increased nine-fold since 2000<sup>1</sup>.

A variety of internal and external factors can contribute to the proliferation, including stagnant water, biofilm, pH fluctuations (low or no disinfectant) and water temperature fluctuations. It is when the affected water becomes airborne and the person inhales the droplets with the legionella bacteria, that they could become infectecare within acceptable ranges per CDC guidelines and local codes. Assistance can be provided by the CDC legionella toolkit under the references listed

2. Properly maintaining building and operational equipment



**Cooling Towers:** Low or no disinfectant level can create biofilm on the water surface. This can create an environment for legionella bacteria proliferation. The cooling tower fan(s) can spray contaminated aerosolized water into an air handling duct or allow it to drift into the breathing zone of individuals. Prior to start-up, the water chemistry should be thoroughly examined by the trained operator of the cooling tower system. Maintenance engineers should be trained to maintain the optimum biocides to kill off the harmful microbial including the biofilm along with preventing mineral deposits that can clog the cooling vanes, water lines and build up on other equipment parts. Total water flushing and/or "chemical shock treatment" should be undertaken to eliminate any accumulated biofilm. If the maintenance team is unable to perform the required maintenance and testing, utilize

Design: [Graphic Design Centre](#)

Copyright © April 2020 Allianz Global Corporate & Specialty SE. All rights reserved.

The material contained in this publication is designed to provide general information only. While every effort has been made to ensure that the information provided is