

WATER QUALITY QUESTIONS ANSWERED



Is my water safe to breathe?

EPA and SCDHEC have created regulations and standards to ensure that water is safe to drink. BJWSA meets or exceeds all of those standards to protect public health. In a steamy shower or when playing outside in the sprinkler, water may be inhaled. Inhaling water is a different risk path than drinking water. You can be sure that your water is safe to drink. Is it safe to breathe? Yes, our processes and testing show the water we deliver is safe to breathe, but care should be taken to maintain water quality in large buildings and hot tubs.

Legionella is water borne pathogen that is inhaled rather than consumed and causes Legionellosis or Legionnaires' disease, a kind of pneumonia. Legionella was named after an outbreak at an American Legion convention in 1976. Other Legionella outbreaks have been traced to hot tubs and cooling towers in large buildings, both of which recycle water. BJWSA uses chloramines as one of the disinfectants, and chloramines are very effective at neutralizing Legionella. The water entering a large building has an adequate disinfectant residual, but as the water is heated and/or recycled, the disinfectant can dissipate which allows the Legionella to grow in the building plumbing.

Legionella image at <https://phil.cdc.gov/Details.aspx?pid=22879>

For more info about Legionella visit <https://www.cdc.gov/legionella/index.html>. If you manage a large building (hotel, hospital, school, nursing home), consider developing a water management plan to prevent Legionella in your facility. Learn more at <https://www.cdc.gov/legionella/wmp/toolkit/index.html> and <https://www.nap.edu/resource/25474/interactive/>.

Nontuberculous mycobacteria (NTM) are common microorganisms found in the air and soil. These microorganisms are different from the mycobacteria that cause tuberculosis or leprosy. For some people who have underlying lung disease like COPD or compromised immune systems, NTM can cause non-contagious lung diseases, the main one being Mycobacterium Avium Complex (MAC). NTM bacteria sometimes grow in pipes and plumbing and can be aerosolized by a shower head. BJWSA has tested drinking water for NTM at both treatment plants, in the distribution system, and in a residential shower. The tests showed no NTM bacteria present in any of the locations. Learn more about NTM at <https://www.cdc.gov/hai/organisms/nontuberculous-mycobacteria.html> and <https://rarediseases.info.nih.gov/diseases/12829/nontuberculous-mycobacterial-lung-disease>.

BJWSA's water treatment plants disinfect drinking water with chlorine and chloramines. The amount of disinfection is prescribed by EPA and SCDHEC regulations to remove or inactivate bacteria and viruses. Our disinfection process is monitored continually by both online analyzers and licensed operators who staff our plants 24 hours a day. We test for bacteria and disinfectant residuals through this distribution system every month. It takes chlorine just a few minutes to inactivate viruses, and our treatment process includes several hours of contact time because bacteria, particularly Giardia, take a little longer to neutralize. Viruses, including SARS-CoV-2 the coronavirus that causes COVID-19, are relatively weak and are easily removed or inactivated in our water treatment plants.



Beaufort-Jasper Water & Sewer Authority
Inspire trust and enhance public health.



The Chelsea Water Treatment Plant has a 1.5 million gallon clearwell (right) and 3.0 million gallon clearwell (left) which provide contact time for the disinfection process to inactivate viruses and bacteria.