

Did You KNOW?

Pharmaceuticals in Water Supplies



Science can detect smaller compounds. With improvement in analytical methods, scientists and water professionals are now able to detect compounds in water in amounts as low as parts per trillion. The fact that a substance is detectable does not mean the substance is harmful to humans. Scientists continue to actively research these compounds to determine the extent of ecological harm and any effect they may have on human health.

BJWSA tests the water. In samples taken from the Savannah River and the treated drinking water produced at our two water treatment plants in 2008, the only compounds found were Carbamazepine, a mood regulator, at 0.001 parts per billion and Deet, a common ingredient found in bug spray, at 0.005 parts per billion. One part per billion (ppb) is one drop in one billion drops of water – or picture about one drop of water in a swimming pool. The bottom line - these chemicals were detected at extremely low levels (almost the lowest possible to detect) and should not pose any health threats.

From source to tap, BJWSA performs tests throughout the system each day to ensure safe drinking water. Raw source water is tested routinely to detect contaminants before it enters the treatment plants. At the plant, water quality experts test the water after each stage of the treatment process. In the distribution system, we collect more than 100 water samples each month to monitor the quality of water once it has left the treatment plant

Savannah River runs through a rural area. BJWSA attributes these very small amounts of compounds to the large volume of water flow in the Savannah River (on average 2.7 billion gallons a day flow by our intake) and that the basin area upstream from our water intake is highly rural.

BJWSA tests the wastewater. BJWSA also sampled the treated wastewater from three of our wastewater treatment plants and, not surprisingly, found many more compounds in this water. While they were also at very low levels, it is clear that our area, like the rest of the country, is contributing to the presence of these compounds in the environment.

Keep our source waters clean. Although testing water supplies for pharmaceuticals is still in its early stages, it once again underscores the importance of protecting our precious water resources. While BJWSA continues to actively address emerging issues, including pharmaceuticals in water, the best and most cost-effective way to ensure safe water at the tap is to keep our source waters clean.

Never flush medication down the toilet. You can help protect our source waters by following the Office of National Drug Control Policy (www.whitehousedrugpolicy.gov), which recommends not flushing prescription drugs down the toilet unless the accompanying patient information specifically instructs that it is safe to do so.



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