

## Pharmaceuticals and Personal Care Products in Drinking Water

In 2008, the Associated Press released a three-part story on pharmaceuticals and personal care products in drinking water sources. While the Onondaga County Water Authority was not one of the systems covered by the story, the article did stir the interest of the Authority. Accordingly, in 2008 OCWA implemented an annual testing program to learn more about potential pharmaceutical and personal care product contaminants that might be found in the Otisco Lake and Lake Ontario water supplies.

While none of us want to find any contaminants in our drinking water, as zero is the desirable level, it is important to begin the process of gathering occurrence data to allow for researchers to target the more commonly found contaminants. As such, the Authority has continued to collect data related to pharmaceuticals and personal care products in water and has continued its process of sharing the data with both researchers and OCWA's consumers.

To learn more about the test results and related information, you can visit OCWA's web site ([www.ocwa.org](http://www.ocwa.org)). Click on the Water Quality tab across the top of the page and scroll down to the Pharmaceuticals and Personal Care Products in Drinking Water. Anyone that has questions about the results, or any of the other water quality reports posted on the Authority web site, is encouraged to contact OCWA's Water Quality Department at 315-455-7061, extension 3157.

### General Information related to Pharmaceuticals and Other Emerging Contaminants

Pharmaceuticals and personal care products, known in the water industry as PPCPs, are a group of compounds consisting of human and veterinary drugs (prescription or over-the-counter) and consumer products, such as fragrances, lotions, sunscreens and housecleaning products. These compounds have been detected in trace amounts in surface water, drinking water and wastewater effluent sampling because water professionals have the technology today to detect more substances, at lower levels, than ever before.

Many PPCP compounds are being found at extremely low levels, typically single digit parts per trillion (ppt). Drinking-water standards are typically set in the parts per-billion range, which is 1,000 times higher. The fact that a substance is detectable in drinking water does not mean the substance is harmful to humans. To date, research throughout the world has not demonstrated an impact on human health from trace amounts of PPCPs found in drinking water.

The water community is committed to protecting the public's health. Water professionals are examining the occurrence of PPCPs in drinking-water supplies and the effectiveness of current treatment techniques for removal. They are also paying close attention to health-effects research in this area, including research being conducted by the Water Research Foundation.

Additionally, the U.S. Environmental Protection Agency (EPA) and New York State as well, consider certain so-called emerging contaminants such as per- and polyfluoroalkyl substances (PFA's) and 1,4-dioxane to be important environmental contaminants. These contaminants are a group of man-made compounds which persist in the environment. Some of these compounds were included in the Unregulated Contaminant Monitoring Rule 3 Sampling back in 2014-2015. As a result, regulations for these compounds are now in effect. See page 21 for recent monitoring results.

***Safer medication disposal:*** *To help safeguard water quality, discard your unwanted or expired medications in the trash, rather than dumping them down the sink or toilet. Keep prescriptions in their original container, remove or black out personal information on labels, then hide them in an empty, sealable container before placing in your garbage bag. For more information on proper disposal and to locate drop-off locations for pharmaceuticals near you, please visit:*

<https://www.dec.ny.gov/chemical/67720.html> .