

# NEWPORT NEWS WATERWORKS PHARMACEUTICALS IN WATER FACT SHEET

DATE: November 2020

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## **BACKGROUND**

Medications, cosmetics, lotions, sunscreen and other substances are referred to as “pharmaceuticals and personal care products” or PPCPs. PPCPs in water are an area of growing scientific interest because they are present in very small concentrations, but little is known about their effects on human health. PPCPs get in water in many ways, but most notably by humans flushing medications down the toilet or sink and through bodily discharges flushed down the toilet. In both cases, the PPCPs travel through wastewater in the sanitary sewer system, through a wastewater treatment plant that may not remove them from the water. The treated wastewater is then released into our public waterways. Those public waterways may eventually be used as a drinking water source.

## **FOR YOUR INFORMATION**

The best way to protect drinking water from pharmaceutical and personal care products is to protect your source water. Fortunately we have very little wastewater discharge entering the Chickahominy River (our main water source). We also employ a system of multiple barriers that block, reduce or destroy contaminants in the raw water. These barriers include: clarification, ozonation, filtration and disinfection. Ozone is a highly effective disinfectant and studies have shown that ozone is effective against some pharmaceuticals. Waterworks began using ozone as our primary disinfectant in 2005.

A year-long testing between 2013 and 2014, Newport News Waterworks participated in an EPA national testing protocol (UCMR3), which included a number of non-regulated PPCPs. During this testing, no PPCPs were detected in the finished water.

The long-term effect of trace amounts of PPCPs on humans is unknown.

## **PLEASE NOTE**

- Your drinking water is treated properly and is of very high quality.
- If you have a personal health concern, please contact your physician or the health department.
- Waterworks uses ozone as its primary disinfectant and it is highly effective against many pharmaceuticals.
- To properly dispose of medications:
  - Add crushed pills and/or pour liquids into coffee grounds or kitty litter and dispose of in the trash;
  - Check with your pharmacy to see if they offer medication disposal as a public service.
- For more than ten years, Waterworks staff has served on national committees that are addressing this issue and are pushing for more research and funding on the health effects.

**Newport News Waterworks Customer Service**  
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