

Drugs in wastewater contaminate drinking water

July 20 2015

Both prescription and illegal drugs that are abused have been found in Canadian surface waters. New research shows that wastewater discharges flowing downstream have the potential to contaminate sources of drinking water with these drugs at relatively low concentrations.

The concentrations of cocaine, morphine, and oxycodone did not decline with distance downstream from the <u>wastewater treatment plant</u> discharge, and many of the drugs were not removed effectively by drinking <u>water treatment plants</u>.

The research is part of a special section on pharmaceuticals in the journal *Environmental Toxicology & Chemistry*.

"These results demonstrated a link between wastewater discharges and quality of potable water sources and emphasized the importance of evidencing that improvements to wastewater treatment protect sources of drinking water—a project we have embarked on since the publication of these results," said lead author Dr. Viviane Yargeau.

More information: Rodayan, A., Afana, S., Segura, P. A., Sultana, T., Metcalfe, C. D. and Yargeau, V. (2015), Linking drugs of abuse in wastewater to contamination of surface and drinking water. *Environmental Toxicology and Chemistry*. DOI: 10.1002/etc.3085



Provided by Wiley

Citation: Drugs in wastewater contaminate drinking water (2015, July 20) retrieved 25 February 2025 from https://phys.org/news/2015-07-drugs-wastewater-contaminate.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.