

# Harvesting health information from an unusual place: The wastewater treatment plant

May 2 2018

---

Every day, people all over the world unwittingly release a flood of data on what drugs they are taking and what illnesses they are battling, simply by going to the bathroom and flushing. And according to an article in *Chemical & Engineering News (C&EN)*, the weekly newsmagazine of the American Chemical Society, researchers aren't letting all of that information go to waste.

Senior Correspondent Celia Henry Arnaud explains that wastes entering [treatment plants](#) are a rich source of information about a population. In the 1990s, researchers started realizing the potential of this overlooked treasure trove and began analyzing wastes for [illicit drugs](#). These wastewater-based epidemiologists found that these analyses could back up or even improve estimates of drug use obtained by conventional methods. That's at least partially because unlike people filling out a questionnaire, wastewater samples don't lie.

Now, researchers are going beyond [illegal drugs](#), monitoring many other substances. Some are looking for evidence of consumption of legal lifestyle compounds, such as nicotine and caffeine. Others are searching for compounds that could indicate human exposure to pesticides or plasticizers. But the future of wastewater-based epidemiology might lie in health studies that attempt to describe the health of a population and thereby serve as an early warning system to alert officials of burgeoning epidemics.

**More information:** "To monitor the health of cities' residents, look no further than their sewers," [cen.acs.org/environment/water/ ... -look-further/96/i18](https://cen.acs.org/environment/water/...-look-further/96/i18)

Provided by American Chemical Society

Citation: Harvesting health information from an unusual place: The wastewater treatment plant (2018, May 2) retrieved 25 April 2024 from <https://phys.org/news/2018-05-harvesting-health-unusual-wastewater-treatment.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.