

SF Bay area study reveals chemical levels in bottled, tap and household-treated tap water

September 5 2024, by Bob Yirka



Credit: Unsplash/CC0 Public Domain

A team of water technicians at water testing company SimpleLab has tested chemical levels in hundreds of water samples collected from bottles, household taps and treated tap water in the San Francisco Bay



area. Their paper is published in the journal PLOS Water.

For many years, <u>tap water</u> in the average American home was consumed without hesitation, considered to be absolutely safe. Such beliefs have been tested in recent years, however, with reporting about lead in drinking water consumed by children in Flint, Michigan.

In response, many consumers have stopped drinking tap water and have turned instead to filters or even commercially sold <u>bottled water</u>. In this new effort, the team at SimpleLab tested drinking water from the three main sources available to people living in the San Francisco Bay area to see how they compared.

The work involved analyses of 100 samples of bottled water, 603 samples of tap <u>water samples</u> and 111 samples of household tap water that had been filtered using a Brita filter. They found that almost all the water samples they tested met federal drinking water health standards.

But they also found that chemical levels in filtered and bottled water were nearly equal, while water straight from the tap had much higher levels. The most common chemicals of concern, they note, were trihalomethanes, released when chlorine is used to disinfect the water. All three sources contained some amount of the chemicals.

Trihalomethanes have been linked to several <u>health problems</u> including <u>liver damage</u>, developmental delays and an increased risk of some types of cancers. They also note that their findings are not meant to alarm consumers—consumption of small amounts of trihalomethanes or the other chemicals that they found in the water is not likely to cause harm.

They conclude that most <u>consumers</u> would likely benefit from the use of a filter when drinking tap water. Doing so, they note, also makes water taste better.



More information: Samantha E. Bear et al, Bottled water, tap water and household-treated tap water–insight into potential health risks and aesthetic concerns in drinking water, *PLOS Water* (2024). <u>DOI:</u> 10.1371/journal.pwat.0000272

© 2024 Science X Network

Citation: SF Bay area study reveals chemical levels in bottled, tap and household-treated tap water (2024, September 5) retrieved 6 September 2024 from <u>https://phys.org/news/2024-09-sf-bay-area-reveals-chemical.html</u>

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.