

Everyone needs to drink water daily, which makes drinking water quality a pressing environmental public health issue. Public and private water supplies may become polluted by natural sources such as underground bedrock, or manmade sources such as sewage, industrial waste and farming runoff. Both public and private water sources can become contaminated. Penn State Extension estimates that 3.5 million mostly rural residents and farms rely on household water wells or other private water sources. The state does not regulate private drinking water sources. At the same time, a single public water system can expose many people to polluted drinking water at once.

HOW WATER QUALITY AFFECTS HEALTH

Poor drinking water quality is linked with health problems, such as gastrointestinal illnesses and reproductive and neurological issues. The risk of developing a specific disease from drinking polluted water depends on many factors such as the contaminating substance, the level and potency of the substance and how sensitive to pollution a person is. Children, pregnant women, the elderly and people with chronic conditions like kidney disease are highly sensitive groups. They are vulnerable to water pollution-related health problems and exacerbations.



LEARN MORE ABOUT DRINKING WATER QUALITY & HEALTH

- Read the [National Drinking Water Regulations¹](#) set by the Environmental Protection Agency (EPA).
- Explore the [Drinking Water Reporting System²](#) for recent data from public water systems.
- Test household water wells and other private water supplies regularly by a [certified laboratory³](#).
- Drink bottled water when water quality is poor.
- Consult a water treatment company about water treatment systems.
- Discuss water quality with a health care provider.

MONITORING DRINKING WATER QUALITY IN PENNSYLVANIA

Pennsylvania tracks drinking water quality based on nine contaminants (all of which can adversely affect health) regulated in public water by the EPA, and a measure of annual public water use. Data are on the [Enterprise Data Dissemination Informatics Exchange⁴](#) (EDDIE) by county and public water system. The data come from the [Bureau of Safe Drinking Water⁵](#) within the Department of Environmental Protection.

- Arsenic – a metal
- Atrazine – an herbicide
- Di(2-ethylhexyl) Phthalate – a manmade chemical
- Nitrates – a molecule found in fertilizer
- Haloacetic Acids – byproducts of chemicals used to disinfect drinking water
- Tetrachloroethene (PCE) – a volatile organic compound
- Trichloroethene (TCE) – a volatile organic compound
- Trihalomethanes (Total) – byproducts of chemicals used to disinfect drinking water
- Uranium – a naturally occurring radioactive element

If you have any questions, contact us at env.health.concern@pa.gov.

December 2019

¹ <https://www.epa.gov/dwstandardsregulations>

² <http://www.drinkingwater.state.pa.us/dwrs/HTM/Welcome.html>

³ <https://www.dep.pa.gov/Citizens/My-Water/PrivateWells/Pages/Water-Testing.aspx>

⁴ <https://www.health.pa.gov/topics/HealthStatistics/EDDIE/Pages/EDDIE.aspx>

⁵ <https://www.dep.pa.gov/Business/Water/BureauSafeDrinkingWater/Pages/default.aspx>