

# About Perfluoroalkyl Substances (PFAS) in Drinking Water

## FOR HEALTH PROFESSIONALS

In May 2017, the Minnesota Department of Health (MDH) released new drinking water guidance values for two PFAS (known as PFOS and PFOA). The revised guidelines are lower than previous health guidance for PFAS in drinking water. We anticipate that people whose water supplies have been affected by PFAS contamination, or who have recently learned about this, may bring concerns and questions to their health care providers.

Water supplies that have been affected by PFAS are private wells in parts of Washington County and six community public water supplies (Oakdale, Lake Elmo, Woodbury, Cottage Grove, St. Paul Park, and Bemidji). All of the affected cities identified above will be able to manage their public water systems to provide drinking water that meets the new MDH health-based guidance. Several hundred private wells have been affected, and many of these homes now have treatment systems to remove PFAS. Ongoing efforts to identify other affected private wells are underway. MDH believes that the most affected private wells have already been identified.

## What to know before talking with your patients

The new MDH guidance values reflect an amount of PFAS in water calculated to protect all members of the population from both short and long-term health risks.

- The new values are based on MDH's obligation to ensure protection for the most vulnerable and highly exposed members of the population -- infants exposed both in utero and via breastfeeding. Long-term exposure to PFOA and PFOS leads to accumulation of these chemicals in people. Accumulation in women of child-bearing age results in exposure to the fetus and to breastfed infants.
- The new values are over-protective for most people and are designed to reduce long-term exposure risks through drinking water – the primary exposure concern. For this reason, drinking water with concentrations of PFOA or PFOS above the updated values does not represent an immediate health risk.
- Most of the information we have on health effects of PFOS and PFOA come from studies in laboratory animals exposed to high exposure levels. In general, the health effects observed included developmental delays, mild liver changes, immune suppression, decreased thyroid hormone levels, and decreased kidney weight. [More information can be found under Other Resources below].

## Recommendations for Health Care Providers

The information below addresses common concerns people may have. People who are unsure if they live where PFAS contamination is a concern can contact MDH.

- We do NOT have evidence of harm to human health from exposure to PFAS at the current levels found in Minnesotans' drinking water at this time. The new drinking water guidance represents an increased focus on safety and prevention.

## ABOUT PERFLUOROALKYL SUBSTANCES (PFAS) IN DRINKING WATER

- Municipal drinking water continues to be as safe as, or safer than, purchased drinking water. Purchasing drinking water has other negative consequences, including cost, increased trash burden, and heavy use of fossil fuels to transport water.
- People who use private wells in areas of known PFAS contamination can use a simple filter that goes on the kitchen tap to reduce exposure until other remedies are in place (the MDH webpage below has information on in-home water treatment devices).
- Breastfeeding continues to be the safest and best form of infant feeding, providing nutritional, immunological and developmental benefits to babies that can't be reproduced by manufactured formula. Breastfeeding also has health benefits for the mother.

## Other Resources

MDH resources provide background and detailed information on PFAS contamination and drinking water guidelines in Minnesota. We encourage providers to point people to the MDH webpage and refer people to us when appropriate.

- **[PFAS and Health](http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/index.html#pfasandhealth)**  
(<http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/index.html#pfasandhealth>)
- ***Referral to MDH*** -- MDH staff monitor the email and phone line below. Providers can call or refer people to MDH for more information.

The CDC/ATSDR materials refer to national (EPA) drinking water guidelines, but also offer a clinical perspective. Note that the recently released MDH guidance values for PFOS and PFOA are more protective than the EPA guidance.

- **[An Overview of Perfluoroalkyl and Polyfluoroalkyl Substances and Interim Guidance for Clinicians Responding to Patient Exposure Concerns \(PDF\)](http://www.atsdr.cdc.gov/pfc/docs/pfas_clinician_fact_sheet_508.pdf)**  
[www.atsdr.cdc.gov/pfc/docs/pfas\\_clinician\\_fact\\_sheet\\_508.pdf](http://www.atsdr.cdc.gov/pfc/docs/pfas_clinician_fact_sheet_508.pdf)  
An aid for health professionals who are asked about PFAS exposures and health concerns.
- **[PFAS Continuing Education for Clinicians \(Online video\)](https://www.atsdr.cdc.gov/emes/pfas_clinicians_training.html)**  
([https://www.atsdr.cdc.gov/emes/pfas\\_clinicians\\_training.html](https://www.atsdr.cdc.gov/emes/pfas_clinicians_training.html))  
Offers peer-reviewed, up-to-date literature about PFAS, the known and potential health effects associated with PFAS exposure, and information on how to address potential patient concerns following exposure to PFAS for health professionals.
- **[Per- and Polyfluoroalkyl Substances and Your Health](https://www.atsdr.cdc.gov/pfas/index.html)** (<https://www.atsdr.cdc.gov/pfas/index.html>)
- **[Referral to Region V Pediatric Environmental Health Specialty Unit \(PEHSU\)](http://publichealth.uic.edu/great-lakes/childrens-health)**  
(<http://publichealth.uic.edu/great-lakes/childrens-health>)  
Supported by the American College of Medical Toxicology and funded in part by ATSDR. PEHSU staff are located at the University of Illinois Hospital and Health Science System, Stroger Hospital of Cook County in Chicago, and Cincinnati Children's Hospital. Contact using a toll free hotline number (866-967-7337) or email (ChildrensEnviro@uic.edu).

Minnesota Department of Health - Site Assessment and Consultation Unit  
PO Box 64975, St. Paul, MN 55164-0975  
651-201-4897 or toll-free 1-800-657-3908  
[health.hazard@state.mn.us](mailto:health.hazard@state.mn.us)  
[www.health.state.mn.us](http://www.health.state.mn.us)

06/20/2017

To obtain this information in a different format, call 651-201-4897 or toll-free 1-800-657-3908