District Health Department No. 4

Update: Alpena CRTC Groundwater Contamination

Guidance for Health Care Providers January 16, 2018

District Health Department #4 was notified on October 6th that groundwater testing done by the Department of Defense showed high levels PFOS/PFOA in groundwater on the CRTC base. These chemicals, perfluorooalkyl and polyfluorooalkyl substances (PFAS) are in the group referred to as Perfluorinated Chemicals (PFC). The military has been testing bases where there was a history of use of a common firefighting foam known as AFFF. Similar contamination has been found at Wurtsmith AF base in Oscoda and Camp Grayling.

At this time 80 private wells have been tested for PFOA/PFAS in an area around CRTC. 62 results are in and 45 are show non-detectable with 17 between non-detect and 70 parts per trillion (PPT), which is the EPA and State DEQ advisory level. Concentrations range between Non-Detect and 29.7 PPT with the highest combined PFOA/PFOS 5.71 and highest total PFAS 29.7. More results will be coming in and there is more to learn about the effects the contamination may have on residential drinking water and how these levels may change over time. As residents who had their water tested are receiving these results they may have questions for their providers. Note that this contamination does not affect residents who are on municipal drinking water.

A town hall meeting is scheduled for 4:30pm January 18 at the Alpena Training Center to provide information to the public regarding these results. Multiple agencies will be represented to answer questions. As there are currently no exceedances of the 70ppt there is no health advisory. However, until more is known about how the contamination will move over time, we have offered residents who have any detectable contamination filters that are certified to remove PFOS/PFOA. Ingestion (drinking or cooking) is the primary source of human or animal exposure and there is no recommendation to use alternative water for bathing, washing, or other dermal exposure routes. Updated information on the situation and links to resources can be found at Michigan DEQ website www.michigan.gov/alpenaPFOSresponse and at our website www.dhd4.org under the News tab.

The ATSDR has published a Clinician Fact Sheet that can be found at: https://www.atsdr.cdc.gov/pfc/docs/pfas_clinician_fact_sheet_508.pdf. It is an excellent reference for clinical questions that may arise and I have summarized it in a one page document attached.

A good PFAS Fact Sheet on PFAS https://www.atsdr.cdc.gov/pfc/docs/pfas_fact_sheet.pdf

I hope you find this information helpful as you counsel your clients and help address the concerns in our community. You can contact me with any questions or concerns at 231-547-7679 or J.Meyerson@nwhealth.org

Joshua Meyerson, MD, MPH
Medical Director
Clinical Guidance on PFAS


What are PFAS?

PFAS are synthetic chemicals commonly used for waterproofing, non-stick surfaces, stain resistant treatments, and other uses. Common examples include perfluorocarboxylic acid (PFOA), and perfluorosulfonates (PFOS, PFHxS). The major human exposure pathway is ingestion, most commonly from contaminated drinking water. EPA guidance recommends the total PFAS levels in drinking water be less than 70 ppt (parts per trillion).

Health Effects

The “C8 Health Project” included 69,030 adult persons exposed to high levels of PFAS over 50 years. Based largely on this study, CDC guidance lists the following as potential health effects:

- Thyroid function abnormality
- High cholesterol
- Ulcerative colitis
- Testicular cancer
- Kidney cancer
- Pregnancy induced hypertension
- Elevated liver enzymes
- High uric acid

Evidence of causation of these effects in not conclusive, and there is no way to know if PFAS exposure caused or contributed to these health problems.

PFAS serum testing

- Not routinely recommended. Nearly all US Residents have detectable levels.
- Regardless of the degree of elevation, do not predict or rule out the development of future health problems.
- Cannot be interpreted and used in patient care
- Difficult to obtain (only a few specialized labs) and expensive (not covered by insurance)

Other lab testing

- Not routinely recommended, but should be individualized to the patient.
- Lab testing, if any, may include thyroid function, liver function, uric acid, and cholesterol.

Water use

Exposure can be reduced by using an alternative water source for drinking, food preparation, cooking, brushing teeth or any activity that might result in ingestion of water.