ISSUE #7

Brownfields Newsletter

KNIK TRIBE
May 2026

PFAS in the Valley

Contamination of groundwater in the Mat-Su Valley, near the intersection of Seward Meridian Parkway and the Palmer-Wasilla Highway, has been identified during sampling performed by the Alaska Department of Environmental Conservation (ADEC). The groundwater is contaminated with PFAS (short for per- and polyfluoroalkyl substances). This discovery is important because many people, businesses, and public properties in our area rely on groundwater wells for drinking water.

There is still much that is unknown regarding this contamination- the source, the boundaries of the plume, and how many people are affected. Investigations by the Alaska Department of Environmental Conservation (ADEC), the Alaska Department of Health (DOH), and the Mat-Su Borough (MSB) are ongoing, including additional water testing, procuring alternative water sources for affected users, and public outreach regarding this area of contamination.

The Knik Tribal Response Program will continue to follow investigation and responses to this human health concern. This newsletter introduces what you should know about PFAS chemicals.

In this newsletter:

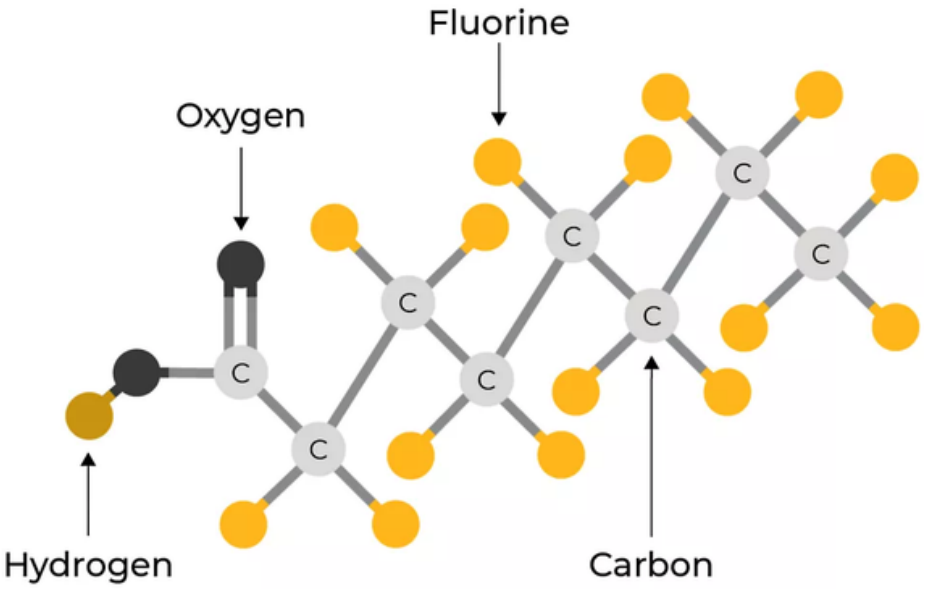
What Are PFAS?

PFAS are a diverse and large group (5,000+) of human-made chemicals in use since the 1940s. They are often called “forever chemicals” because they do not break down easily in the environment. This means they can stay in water, soil, and living things for a very long time.

PFAS are used in many everyday products because they resist heat, water, and grease. You can find them in non-stick cookware, waterproof clothing, food packaging, stain-resistant fabrics and carpets, and some firefighting foams. These chemicals have been extremely useful, but their long-lasting nature has created new concerns. Because of these concerns, their use is slowly being phased out. For example, the State of Alaska no longer allows PFAS based firefighting foam and started a program in 2025 to properly dispose of these materials from airports throughout Alaska.

These chemicals are water soluble and are known to concentrate in groundwater. This is especially concerning in Mat-Su Valley, where many homes rely on well water. Over time, PFAS can build up in the body if people drink contaminated water or eat affected food.

The health effects of PFAS exposure are still being studied, but research shows that long-term exposure may affect human health. Because of this, communities, tribes, and state and federal agencies are working together to better understand PFAS, reduce exposure, and protect public health.



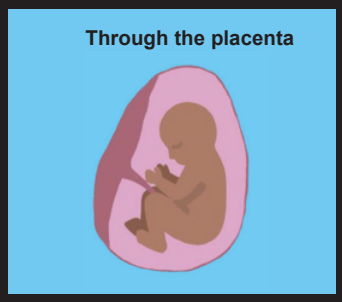
What are PFAS?

Per-and Polyfluoroalkyl Substances

Synthetic chemicals used in oil-and water-resistant products such as cleaners, carpets, cosmetics, paints, and clothing. They are also present in some firefighting foams.

How do PFAS end up in the environment?

How can I be exposed to PFAS?



Can PFAS affect health?

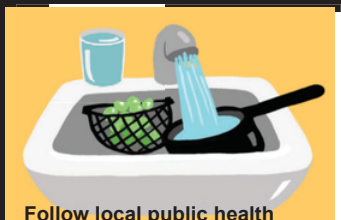
Certain PFAS are associated with these health effects:

- Increases in cholesterol levels
- Small decreases in birth weight
- Lower antibody response to some vaccines in children
- Kidney and testicular cancer
- Pregnancy-induced hypertension or preeclampsia
- Changes in liver enzymes

What can I do if I'm concerned?

- Talk to your healthcare provider, who can counsel you on your unique situation.
- Share ATSDR's PFAS Information for Clinicians with your provider: https://www.atsdr.cdc.gov/pfas/hcp/clinical-overview/
- Reach out to your local health department, which may provide additional resources and ways to reduce exposure.

How can I reduce my exposure?



Follow local public health guidance about the water you drink and use.

Eat a wide variety of foods.

Choose products without PFAS when possible.

ATSDR

https://www.atsdr.cdc.gov/pfas/

How Do People Come into Contact with PFAS?

People can be exposed to PFAS in numerous ways. The most common way is by drinking water that contains PFAS. In areas where groundwater is affected, private wells can be a significant source of exposure. PFAS can also be swallowed when people eat food that has been grown, caught, or prepared using contaminated water.

People may also be exposed through the use of common, everyday products. PFAS can be found in items like food packaging, stain-resistant fabrics, and waterproof clothing. Small amounts of these chemicals can get into the body through normal use, such as eating food wrapped in certain materials or touching treated surfaces.

Breathing in dust is another possible exposure route. Tiny particles in indoor dust may contain PFAS from carpets, furniture, or other household items. People may breathe in this dust or accidentally swallow it, especially young children who spend more time on the floor and put their hands in their mouths.

Understanding these exposure routes can help people take simple steps to reduce risk. Testing drinking water, using water filters, and being mindful of certain products can all help lower the risk of exposure to PFAS. The EPA has cleanup levels for PFAS in soil and water to protect human health but they have also recognized that exposure at any level is potentially harmful, and have set the maximum contaminant level goal at zero.

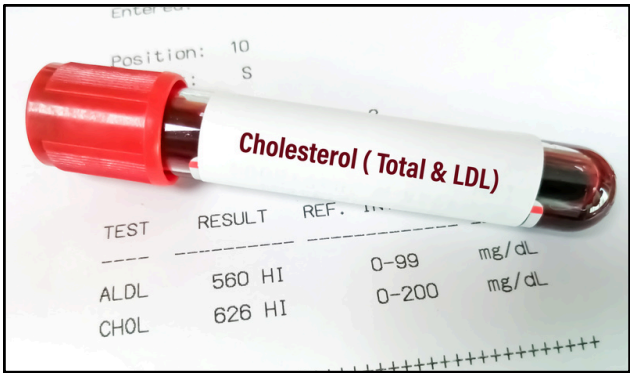
What are the Possible Health Effects of PFAS?

Scientists are still learning about how PFAS affect human health. PFAS are classified as an emerging contaminant, which means research is ongoing and there are still many unknowns. While we do not have all the answers yet, studies from around the world are helping us better understand possible risks.

Some research suggests that long-term exposure to certain PFAS may be linked to significant changes within the body. These changes may include higher cholesterol levels, suppression of the immune system, and changes in how the liver works. Some studies have also found possible links to certain cancers and impacts on growth and development in infants and children.

It is important to understand that these health effects are based on studies of groups of people over time. Not everyone who is exposed to PFAS will have health problems. How PFAS affect a person can depend on how much they are exposed to, how long the exposure lasts, and their overall health.

Because there are still uncertainties, public health experts take a cautious approach. Efforts are focused on reducing exposure where possible and continuing research to better understand these chemicals and how to protect communities.



Reducing PFAS Exposure

While scientists continue to study PFAS and the effects of exposure, there are simple steps you can take to help reduce your exposure. One of the most important steps is making sure your drinking water is safe. If you use a private well, consider having it tested. There are several local options listed in the "Additional Information" section below. You can also use a home water filter to remove PFAS, such as activated carbon or reverse osmosis systems. They are available in pitcher-style, countertop, or under-the-sink models. If you decide to obtain a water filter, look for filters that are certified to reduce PFAS under NSF/ANSI Standard 53 or 58. These filters have been tested vigorously and have been demonstrated to reduce PFAS in the water. Remember that filters need regular maintenance to work properly, including replacing cartidges at in accordance with the manufacturer's recommendations.

In the kitchen, try to limit the use of old or damaged non-stick cookware, especially if the coating is scratched. Choosing stainless steel, titanium, ceramic, or cast-iron cookware can be a good alternative. You can also reduce how often you use food packaging that may contain PFAS, such as microwave popcorn bags or grease-resistant fast-food wrappers. Finally, stay informed and follow local guidance. Taking these small steps can help lower your overall exposure and support a healthier home environment.

Additional Information

Local:

- Matanuska-Susitna Borough: matsu.gov

State:

- ADEC PFAS page: dec.alaska.gov/spar/csp/pfas
- ADEC Wasilla PFAS site: dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/SiteReport/28130
- ADOT PFAS page: dot.alaska.gov/airportwater

Federal:

- EPA PFAS page: epa.gov/pfas
- Agency for Toxic Substances and Disease Registry: atsdr.cdc.gov/pfas

PFAS Water Testing:

- Mat-Su Test Lab: matsutestlab.com
- Alaska Water Laboratories: akwaterlabs.com

Knik Tribe Brownfields Program	KROBILLARD@KNIKTRIBE.ORG
WWW.KNIKTRIBE.ORG/ALASKA-KNIK-TRIBE-BROWNFIELDS-PROGRAM	1800 LAUREL DRIVE PALMER, AK 99645