Health Effects of PFAS

Per- and polyfluoroalkyl substances (PFAS) are a complex group of manmade chemicals that repel water and oil. They are used in many grease-, stain-, and water-resistant consumer products. PFAS can take years to break down in the environment. This is why they are known as “forever chemicals.”

People can be exposed to PFAS by eating food, drinking water, accidentally ingesting dust, or breathing air polluted with PFAS. When people are exposed, PFAS can build up in the body. Nearly everyone has a small amount of PFAS in their blood. After research showed the older, “long-chain” PFAS could build up in the body and cause health problems, they were largely phased out and replaced by newer, “short-chain” PFAS. “Short-chain” PFAS don’t build up in the body as well but still take years to break down in the environment.

Scientists still have questions about the health effects of PFAS, and more research is needed.

Health Effects in Adults
PFAS may:
- Raise cholesterol levels
- Suppress the immune system
- Cause problems with thyroid hormones
- Damage the liver

Health Effects for Infants and Children
PFAS may:
- Disrupt immune system development
- Cause issues with growth and metabolism (how the body changes food into energy)

Health Effects During Pregnancy
PFAS may:
- Increase blood pressure or risk of pre-eclampsia (a serious blood pressure condition) during pregnancy
- Reduce growth and development of an unborn child (fetus), with potential long-term health effects

While breastmilk can expose infants and newborns to PFAS, the health benefits of breastfeeding for children are greater than the risks of health effects from possible PFAS exposure. People who are willing and able to breastfeed infants should continue to do so.

What should I do?
If you have your own private well and are concerned about PFAS, you can get your water tested or contact the RIDOH Private Wells Program. If you receive public water, you can find PFAS testing results and more information at health.ri.gov/pfas. You can also try to avoid products that are treated to provide oil, water, and stain resistance, such as microwave popcorn bags, non-stick cooking pans, and stain-resistant carpets.

PFAS exposures may cause common health problems, like heart disease and infections. People concerned about possible exposures should focus on well-known steps to reduce those health risks, such as:
- Eating healthy,
- Exercising, and
- Seeing their doctor for regular check-ups.

A blood test cannot show if exposure to PFAS will cause health problems or if a current condition was caused by PFAS. Commonly performed blood tests for cholesterol levels and immune function can indicate potential future health problems, while PFAS levels cannot.

Rhode Islanders concerned about exposure to PFAS who want more information can contact the RIDOH Environmental Health Risk Assessment Program at health.ri.gov/ehrap.

To learn more, visit health.ri.gov/PFAS