

PFAS



At [Rockford Pediatrics](#), we have received questions regarding the contamination of local well water.

Background

A local footwear company, Wolverine World Wide, historically used chemicals to “[scotchguard](#)” their products. They stopped using these chemicals when they were discontinued in 2002. Recently, unsafe levels of hazardous chemicals have been found in private residential drinking wells. The water has been testing positive for high levels of [perfluoroalkyl](#) and polyfluoroalkyl substances (called [PFAS](#)), which is a class of unregulated toxicants. It has been reported that certain contamination sources have come from a decades-old dump site near Belmont and an old dump at in Plainfield Township, which has contaminated the groundwater of multiple properties near Chandler Drive NE.

Locations of concern

Read the following [MLive article](#) that includes a map of all affected areas.

Where are PFAS substances used?

PFAS are often used to prevent food from sticking to cookware; making furniture and carpets resistant to stains; waterproofing clothes and shoes; making food packaging resistant to grease absorption and in some firefighting materials. Exposure to PFAS is widespread and global.

What are the health concerns associated with PFAS?

According to the U.S. Environmental Protection Agency (EPA), PFAS are considered an “emerging contaminant” which is a chemical that is characterized by a perceived, potential, or real threat to human health or the environment or lacks published health standards. PFAS persist in the human body and are eliminated slowly. PFAS can be found in blood and, at much lower levels, in urine, breast milk and in umbilical cord blood. The potential for adverse effects to occur depends upon several factors such as the amount and concentration of PFAS ingested, as well as the length of exposure.

What are the potential PFAS risks to infants and children?

In addition to well water, newborns can be exposed to PFAS through breast milk. The baby’s level of exposure depends upon the duration of breastfeeding. Older children may be exposed to PFAS through food and water. Younger children, who spend more time lying and crawling on floors, have a higher risk of exposure to PFAS from carpet cleaners and similar products.

How long do PFAS remain in the body? What are the limits for PFAS exposure?

PFAS can remain in the body for 2-9 years. The [Environmental Protection Agency](#) (EPA) has recommended that the concentration of PFAS in drinking water should not be greater than 70 parts per trillion. These concentrations do not represent definitive cut-offs between safe or unsafe conditions, but rather provide a margin of protection for people throughout their life from possible adverse health effects.

What are the health risks associated with PFAS?

Studies in humans and animals are inconsistent and inconclusive, but they do suggest that certain PFAS may cause harm to the human body with high exposure. Adverse health effects have been demonstrated in animal studies, but these occurred at exposure levels higher than those found in most people.

The health effects included enlargement of the liver, changes in hormone levels and adverse developmental and reproductive effects. Research has found probable links between elevated PFAS blood levels and [high cholesterol](#), ulcerative colitis, thyroid function, [testicular cancer](#), [kidney cancer](#), [preeclampsia](#), as well as elevated blood pressure during pregnancy.

What should you do if you are concerned about possible exposure to PFAS in your well water?

Contact the [Kent County Public Health Department](#) at (616) 632-7100. If your home’s well water is above the threshold, a whole home water filtration system may be necessary.

Please call Rockford Pediatrics at (616) 259-6100 if you have any questions or concerns.

References:

https://www.atsdr.cdc.gov/pfc/docs/pfas_clinician_fact_sheet_508.pdf