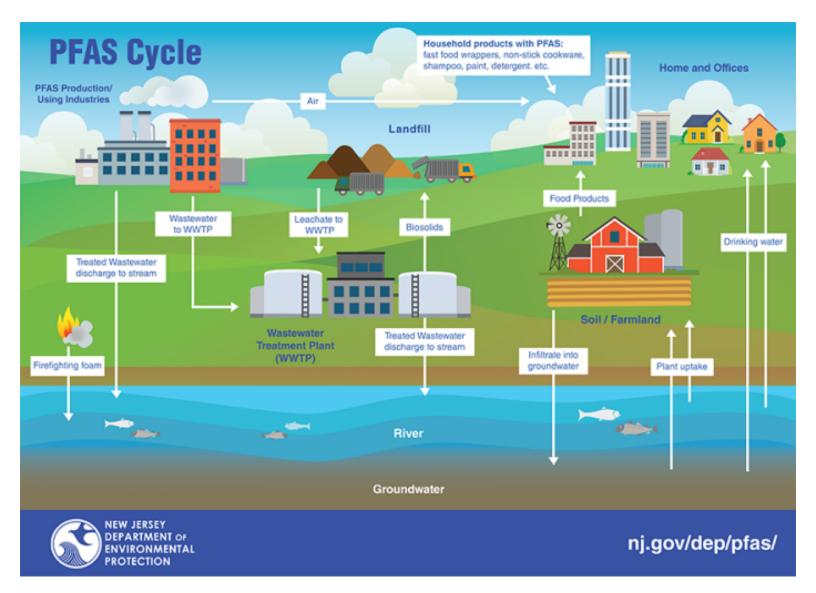
PFAS- Everything You Need to Know!

PFAS (per- and polyfluoroalkyl substances)

FACT/RESIDENT INFO SHEET

PFAS Cycle



For the direct link to the Mount Olive Township Public Works Page: CLICK HERE

- For a list of Morris County Certified Labs for Drinking Water- https://njems.nj.gov/DataMiner
- PFAS (per- and polyfluoroalkyl substances) are a group of man-made chemicals that have been used in a wide range of industrial and consumer products due to their water- and grease-resistant properties.
- Unfortunately, PFAS are persistent in the environment and can accumulate in the human body, potentially leading to health concerns. Here are some common sources of PFAS and ways to prevent exposure:

Consumer Products:

- Cookware: Nonstick cookware (Teflon), especially older versions, may contain PFAS. Consider using alternatives like cast iron, stainless steel, or ceramic cookware.
- Waterproof Clothing: Some waterproof jackets and outdoor gear may have PFAS-based coatings. Look for PFAS-free alternatives.
- Stain-Resistant Fabrics: Carpets, upholstery, and textiles treated with stain or water repellents may contain PFAS. Choose untreated or PFAS-free options.
- Food Packaging: Certain fast-food wrappers, microwave popcorn bags, and pizza boxes may contain PFAS. Limit consumption of fast food and processed foods packaged in such materials.

Food and Water:

- Contaminated Water: PFAS can leach into drinking water supplies from contaminated soil, groundwater, and surface water. Use a water filter that is specifically designed to remove PFAS, and be aware of local water quality reports.
- Fish: Some fish may contain PFAS due to water contamination. Check local advisories and guidelines for safe fish consumption.

Industrial Sources:

• Firefighting Foam: PFAS-containing firefighting foam has been used at military bases and airports. Avoid exposure to runoff from training areas or incidents involving the use of this foam.

Manufacturing Facilities:

• Certain industrial facilities that use PFAS in their processes may release these chemicals into the environment. Be aware of local environmental regulations and potential sources of pollution in your area.

Personal Care Products:

• Some cosmetics, such as foundation and mascara, may contain PFAS. Check product labels for ingredients and opt for PFAS-free alternatives.

Household Products:

• Certain cleaning products, such as stain repellents and carpet cleaners, may contain PFAS. Choose products without these chemicals or make homemade cleaning solutions.

To prevent exposure to PFAS, you can take the following measures:

- Read Labels: Check product labels for PFAS-related ingredients, such as perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS).
- Filter Your Water: Use a certified water filter that is capable of removing PFAS contaminants from your drinking water.
- Avoid Fast Food Packaging: Reduce your consumption of fast food and packaged processed foods that may be served in PFAS-containing containers.
- Choose PFAS-Free Products: When shopping for cookware, clothing, cosmetics, and household products, opt for items labeled as PFAS-free.
- Support Regulations: Advocate for stronger environmental regulations and guidelines to limit the use and release of PFAS by industries.

Links to check for more information:

- For a list of items that are PFAS Free- CLICK HERE
- https://dep.nj.gov/pfas/
- https://www.nj.gov/health/ceohs/documents/pfas_drinking%20water.pdf
- https://www.epa.gov/pfas

https://dep.nj.gov/wp-content/uploads/pfas/docs/faq-pfas-in-drinking-water.pdf

For information on Certified Laboratories for Testing :

https://njems.nj.gov/DataMiner

1 Othings you can do about toxic **PFAS chemicals**

PFAS are a family of almost 9,000 human-made chemicals that are effective at repelling grease, water, and stains, as well as combating certain types of fires. PFASs are in cookware, food packaging, stain resistant carpets and clothing, some cosmetics, outdoor gear, and even dental floss. You may know them as Teflon®, or Scotchguard®. Virtually all Americans have them in their bodies. They've been detected in San Francisco Bay and the fish that people catch and consume from those waters. They've also been detected in California drinking water sources serving 19 million people.

PFAS chemicals have been linked to cancer, high cholesterol, birth defects, suppression of vaccines, and other serious health effects. They all persist in the environment and are virtually indestructible. Even if we stopped using all of them tomorrow, we would still have an on-going problem.

Because it is difficult to completely avoid exposure to PFAS, Clean Water Action is working to stop the use of these toxic chemicals. In the meantime, there are some simple things that you can do to limit your exposure:

Ditch the non-stick cookware — even if it says PFOA (a type of PFAS) Free.

When heated at high temperatures, PFAS-containing cookware gives off fumes that are serious enough to cause flu-like symptoms in people and even kill pet birds. Don't be fooled by PFOA-free labels, as that may just mean that the PFOA was replaced by another PFAS. Stainless steel and cast iron cookware are great alternatives.

Can't replace the cookware? Reduce the heat. Don't preheat nonstick cookware and never use it in an oven heated at or above 400 degrees. Also never use steel wool or other scraping cleaners on non-stick items; this can release the coating into your food or the environment.

Pop your own corn. Microwave popcorn bags, including organic products, usually have PFAS coatings inside that can leach into your snack and are released into the air when you open the bag. Instead, buy loose popping corn and pop it on the stove. Alternatively, pop loose kernels in a covered bowl or paper bag in the microwave.

Bring your own container for to-go food. Eating out? Bring your own metal or glass container to bring home your leftovers. You'll avoid PFAS in take-out containers and reduce trash. Also limit foods like hamburgers, pastries, or french fries that come in grease-resistant packaging. Studies have detected PFAS in almost half of tested wrappers or pastry bags.









https://cleanwater.org/10-things-you-can-do-about-toxic-pfas-chemicals

People Can Be Exposed to PFAS in a Variety of Ways (source EPA.gov)

Due to their widespread production and use, as well as their ability to move and persist in the environment, surveys conducted by the Centers for Disease Control and Prevention (CDC) show that most people in the United States have been exposed to some PFAS. Most known exposures are relatively low, but some can be high, particularly when people are exposed to a concentrated source over long periods of time. Some PFAS chemicals can accumulate in the body over time.

Current research has shown that people can be exposed to PFAS by:

- Working in occupations such as firefighting or chemicals manufacturing and processing.
- Drinking water contaminated with PFAS.
- Eating certain foods that may contain PFAS, including fish.
- Swallowing contaminated soil or dust.
- Breathing air containing PFAS.
- Using products made with PFAS or that are packaged in materials containing PFAS.

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a series of man-made chemicals that can be found in a variety of consumer products and water.

Products that may contain PFAS:









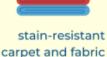




fast food packaging/wrappers

water

non-stick cookware



Health concerns with **PFAS**

PFAS remain in the environment and the human body for long periods of time. Reducing exposure to PFAS will lower your risk for health problems. Talk to your healthcare provider about the recommended screening guidelines for these effects, especially if you have high levels of PFAS in your drinking water.

Based on current research, higher exposure to PFAS increases the risk of:





infertility and low certain types of birth weight cancers



developmental delays



thyroid and heart issues



reduced vaccine response

Those at greater risk



PFAS do not have any taste, color, or odor. The best way to prevent exposure to PFAS is to avoid products and sources that may contain them.

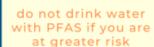


use home water treatment systems or specific water filters that remove PFAS



limit the use of waterproof and stain-

> choose non-stick. PFAS-free cookware















Winnebago County Health Department

¿Que son los PFAS?

Las sustancias perfluoroalquiladas y polifluoro

alquiladas (PFAS) son una serie de sustancias quimicas artificiales que pueden encontrarse en

Productos que pueden contener PFAS:











envases y envolturas de comida rapida

agua

ute**espiioendedecteita**ay alfombra a**exiticitieredtee**esistente a las incendios manchas

Problemas de salud relacionadoscon los PFAS

Los PFAS permanecen en el medioambiente y en el cuerpo humano durante largos periodos de tiempo. Reducir la exposicion a los PFAS disminuira el riesgo de problemas de salud. Hable con su medico sobre las normas recomendadas para estos efectos, especialmente si tiene niveles elevados de PFAS en el agua potable.

Según las investigaciones actuales, una mayor exposición a los PFAS aumenta el riesgo de:



infertilidad y bajo

peso al nacer



ciertos tipos de cáncer



retrasos en el desarrollo



problemas de tiroides y corazón



menor respuesta a vacunas

Los de mayor riesgo:

- infantes y niños pequeños que desarrollan rápidamente su cerebro y cuerpo
- mujeres embarazadas, en periodo de lactancia o que planean quedar embarazadas

Reducir la exposición a los PFAS

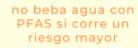
Los PFAS no tienen sabor, color, ni olor. La mejor manera de prevenir la exposición a los PFAS es evitar los productos y las fuentes que puedan contenerlos.



Utilice sistemas de tratamiento del agua o filtros de agua que eliminen los PFAS

Limitar el uso de productos resistentes al agua y a las manchas

Elija utensilios de cocina antiadherentes y sin PFAS





Más información sobre los PFAS:

















2021

How PFAS Chemicals Affect Women, Pregnancy, and Human Development

PFAS (per- and polyfluoroalkyl substances) are a class of thousands of "forever chemicals" constituting a global threat to public and environmental health.1 For decades people have been exposed to multiple PFAS at a time, only a fraction of which have been monitored and studied. Thus, the level of harm from PFAS is likely greater than what is currently recognized.

PFAS tend to share three problematic traits:

PERSISTENT

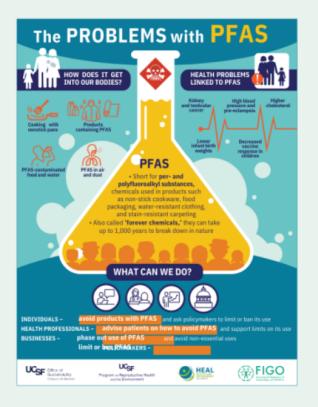
PFAS can take up to 1,000 years to break down in the environment and some don't break down at all. Due to widespread use, PFAS are in our water, food, homes, and nearly all our bodies.

HIGHLY MOBILE

PFAS can spread quickly from places of manufacture, use, or disposal to pollute the broader environment.

тохіс

PFAS are linked to serious health impacts, even at low levels of exposure. Firefighters and those living near PFAS producing plants are subject to much higher exposure levels than the general population. Health effects linked to PFAS exposure include kidney and liver damage, cancer, impaired fertility and immunity, and adverse pregnancy outcomes.2,3



Exposure to PFAS threatens women, pregnant women, and children4

Globally, PFAS are nearly ubiquitous due to their widespread commercial use and extreme persistence in the environment. As a result, routes of exposure vary.

Workplace exposure happens in manufacturing, and through contact with PFAS in firefighter, textile, and cleaning products. Other exposures occur via ingestion of PFAS-contaminated water and food, inhalation of household dust, and from consumer products such as non-stick cookware, grease-proof food packaging, cosmetics, "water-proof" clothing, and stain-resistant furniture and carpeting. Many of the most-studied PFAS persist in human tissues for years and can take decades to exit the body. PFAS cross the placenta, are detected in cord serum, as well as can be transmitted to newborns and infants via contaminated breast milk.2

PFAS exposure threatens fertility, reproductive health, and child development4

The growing list of harms from PFAS related to women's health, reproductive health, and child development, include low birthweight, thyroid disease, and asthma.2

Protective policies are essential for health

The science is clear that nearly everyone is continuously exposed to rising numbers of PFAS, including through breast milk and in the womb, and these cumulative yet little-monitored exposures harm our patients.4 Evidence is also emerging on the health harms from exposures to newer versions of PFAS. Our efforts to protect our patients' health are incomplete without advocating for policy change. **We must reduce the use, marketing, widespread contamination, and harm of these "forever chemicals" – today and into the future.**

What can clinicians do?

COUNSELPATIEN

- Reduce possible exposure to PFAS
- Avoid water-, grease- and stain-resistant products, including water-proof clothing, stain-resistant carpet, and grease-proof food packaging (such as fast-food packaging and microwave popcorn).
- Replace non-stick cookware with safer alternatives, such as cast iron and stainless steel.
- Beware "PFOS/PFOA-free" product labels in favor of the broader, more protective "PFAS-free" label.

A D V O C A T E F O R P U B L IC POLICIE:

Support policies that protect ourselves and our patients from current and future exposures to PFAS.

EN S U R E C L E A N W A T E I

• Ask your government or water provider to test for PFAS. If they have been found, demand installation of treatments that remove them, or provision of alternative water sources.

LE AD BY EXAMPLE

 Urge your clinic or hospital to buy PFAS-free furniture, fabric covers, carpet, clothing, and food packaging.

References

1 Carol F Kwiatkowski, et al., "Scientific Basis for Managing PFAS as a Chemical Class," Environ. Sci. Technol. Lett. 2020, 7(8): 532–543, https://doi.org/10.1021/acs.estlett.0c00255. 2 Agency for Toxic Substances and Disease Registry, "Toxicological profile for Perfluoroalkyls," https://www.ncdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=1117&tid=237 (January 29, 2021). 3 National Toxicology Program (NTP 2020). NTP Technical Report on the Toxicology and Carcinogenesis Studies of Perfluoroactanoic Acid (CASRN 335-67-1) Administered in Feed to Sprague Dawley (Hsd:Sprague Dawley* SD*) Rats. Technical Report Series No. 598. US Department of Health and Human Services. https://ntp.niehs.nih.gov/ntp/htdocs/lt_rpts/r598_508.pdf.