# GenX Information

## What is GenX?

GenX is the trade name for a chemical that is a member of a large group of man-made chemicals known as per- and polyfluoroalkyl substances (PFAS). PFAS have been used in commercial products such as food packaging, nonstick coatings, and firefighting foam. GenX is used in manufacturing nonstick coatings, as a replacement for other PFAS, and can also be produced as a byproduct of some manufacturing processes.

## How can I be exposed to GenX?

GenX and other PFAS can be found in the environment near facilities where they are made or in areas where products containing PFAS are often used. People can be exposed to GenX and other types of PFAS through food, indoor dust, consumer products, and workplaces such as manufacturing facilities where PFAS are used.

Most exposure to GenX occurs through drinking contaminated water. Groundwater (including well water) and surface water (including water from rivers, lakes, and streams) may contain elevated levels of GenX and other PFAS.

Research is limited regarding exposures through skin, but the current science indicates that only a small amount of GenX can get into the body through skin, so very little GenX exposure occurs during swimming, bathing, or showering in water contaminated with PFAS.

## What drinking water regulations exist for GenX?

In April 2024, the U.S. Environmental Protection Agency (EPA) implemented new drinking water regulations known as maximum contaminant levels (MCLs) for six PFAS chemicals including GenX (Table 1). The MCLs are part of the National Primary Drinking Water Regulations, which are legally enforceable primary standards and treatment techniques that apply to public water systems. The MCLs reflect levels that protect human health and that water systems can achieve using the best available treatment technologies.

**TABLE 1: MAXIMUM CONTAMINANT LEVEL – GENX**

| PFAS CHEMICAL | FINAL MAXIMUM CONTAMINANT LEVEL (MCL) |
|---|---|
| HFPO-DA (GenX Chemicals) | 10 ppt* |
| *Parts per trillion (ppt) can also be expressed as nanograms per liter (ng/L). | |

## How can I reduce my exposure to GenX and other PFAS?

It is difficult to fully prevent GenX exposure because GenX and other PFAS are present at low levels in some foods and in the environment. However, there are steps you can take to reduce your PFAS exposure.

- If you live near known sources of PFAS contamination or your drinking water contains PFAS, you may want to use a different water source or filter your water before drinking, cooking, and preparing infant formula. See below for more information on water supply testing.

- Reduce your use of products containing PFAS (packaged foods, products with non-stick or stain resistant coatings, and some personal care products). If you have questions about the products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772.
- Check for fish advisories before eating fish from local bodies of water.
- Boiling water will NOT remove PFAS.

## Who's responsible for testing my water? How often should it be tested?

### Water from a Private Well

- If you live in the Fayetteville area or lower Cape Fear region, you may be eligible for free testing. Visit the North Carolina Department of Environmental Quality (NCDEQ) website or contact the Chemours Fayetteville Works Plant to request well testing:
  - Bladen, Cumberland, Robeson, and Sampson counties: (910) 678-1101
  - New Hanover, Brunswick, Pender, or Columbus counties: (910) 678-1100
  - Those with GenX levels exceeding the EPA MCL or other PFAS contamination may be eligible for replacement drinking water supplies or filtration systems at no cost.
- Other private well owners should regularly test their wells for various contaminants that may be impacting their well water. Information on PFAS testing and filtration is available at PFAS Water Testing and Filtration Resources. Routine well testing information can be found at Well Water Testing FAQs.
- EPA provides training and technical assistance to private drinking water well owners. This includes test kits for emerging contaminants, including PFAS and assistance when test results indicate there is contamination.

### Water from a Public Water Supply

- Reach out to your water utility provider with questions regarding concentrations of PFAS in your public water supply. Based on the National Primary Drinking Water Regulations implemented in April 2024, water systems must take action to reduce the levels of these PFAS in drinking water if the levels exceed MCLs. Public water systems have 5 years to meet this new requirement.
- Several utilities in the lower Cape Fear region are already implementing treatment systems to limit levels of GenX and other PFAS in municipal drinking water supplies.

## How can GenX affect my health?

Whether you develop health problems after being exposed to GenX depends on how much and for how long you are exposed, and personal factors including age, lifestyle and how healthy you are. Communities with known contamination from GenX and other PFAS should take special care to reduce exposure.

According to new science evaluated by the EPA, exposures to GenX via ingestion have been associated with liver problems, kidney problems, changes in blood cells, reduced immune system response, developmental/reproductive effects, and cancer. Much of this knowledge is based on laboratory studies of animals, but relevance to human health cannot be fully understood without more human research studies.

This information will continue to be updated as more health research becomes available. Additionally, residents who are concerned about exposure to GenX and other PFAS can use the NCDHHS Clinician Memo to talk to their doctor about their concerns.

## What is being done to reduce GenX in the environment?

NC government agencies are working on all fronts to continue to reduce exposures to GenX and other PFAS. This includes continuing efforts to reduce emissions and discharges from the Chemours plant and efforts to reduce GenX and other PFAS as much as possible in drinking water. The NC Department of Environmental Quality's PFAS Roadmap details NC DEQ's priorities and planned actions to reduce PFAS in our state. The US EPA's PFAS Roadmap details national policies, priorities, and actions planned for the next five years.

## For more information:

- NCDHHS
  - PFAS Information: https://epi.dph.ncdhhs.gov/oee/a_z/pfas.html
  - Fish Advisories: https://epi.dph.ncdhhs.gov/oee/fish/advisories.html
  - Clinician Memo: https://epi.dph.ncdhhs.gov/oee/pfas/UpdatedDHHSClinicianMemoFinal.pdf
- NCDEQ: https://deq.nc.gov/news/key-issues/genx-investigation
- CDC: www.atsdr.cdc.gov/pfas/index.html
- EPA: www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas
- Food and Drug Administration: www.fda.gov/food/chemicals/and-polyfluoroalkyl-substances-pfas
- If you have additional questions or concerns about PFAS-related health effects, contact NCDHHS at (919) 707-5900.