

# Per- and Polyfluoroalkyl Substances (PFAS)

Drinking  
Water  
Section

DPH

## An Emerging Contaminant in Drinking Water



# Overview

- What are PFAS?
- PFAS uses
- Brief history of PFAS sampling in drinking water
- What is State of Connecticut (CT) doing?
- What is CT Department of Public Health (DPH) Drinking Water Section doing?
- Learn more about PFAS
- Contact information

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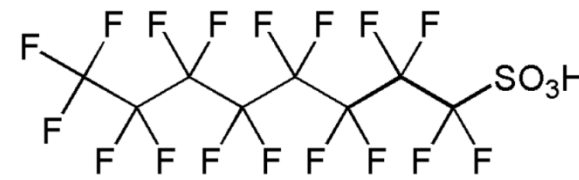
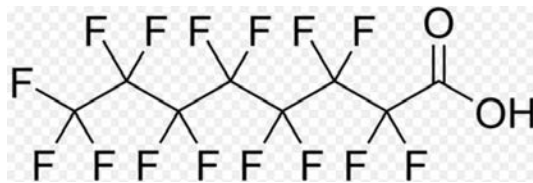
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# What are PFAS?

PFAS = per- and polyfluoroalkyl substances

- Manufactured compounds, not found naturally
- There are thousands of different PFAS
- Environmentally persistent and stable
  - Does not degrade readily in the environment or in the human body
- Phase out of larger chain PFAS, such as PFOA and PFOS, began in 2000s
  - PFOA = Perfluorooctanoic Acid ( $C_8HF_{15}O_2$ )
  - PFOS = Perfluorooctane Sulfonate ( $C_8HF_{17}O_3S$ )



# PFAS Uses – Not all inclusive

- Oil, water, and dirt repellent coatings
- Non-stick cooking surface coatings
- Coated paper for food packaging
- Personal care products, cosmetics
- Paints and adhesives
- Fluoro-elastomers (gaskets, O-rings, hoses)
- Mist suppressant in metal plating baths, esp. chromium
- Aqueous Film Forming Foam (AFFF)



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# PFAS Drinking Water History

2010-2015

- EPA – Third Unregulated Contaminant Monitoring Rule ([UCMR 3](#))
- Required all public water systems (PWS) that serve over 10,000 consumers to test for six PFAS, including PFOA and PFOS between 2013 and 2015
- None of the large PWS in Connecticut that tested for PFAS had detections above the reporting limit.
- These PWS serve over 2,400,000 daily consumers

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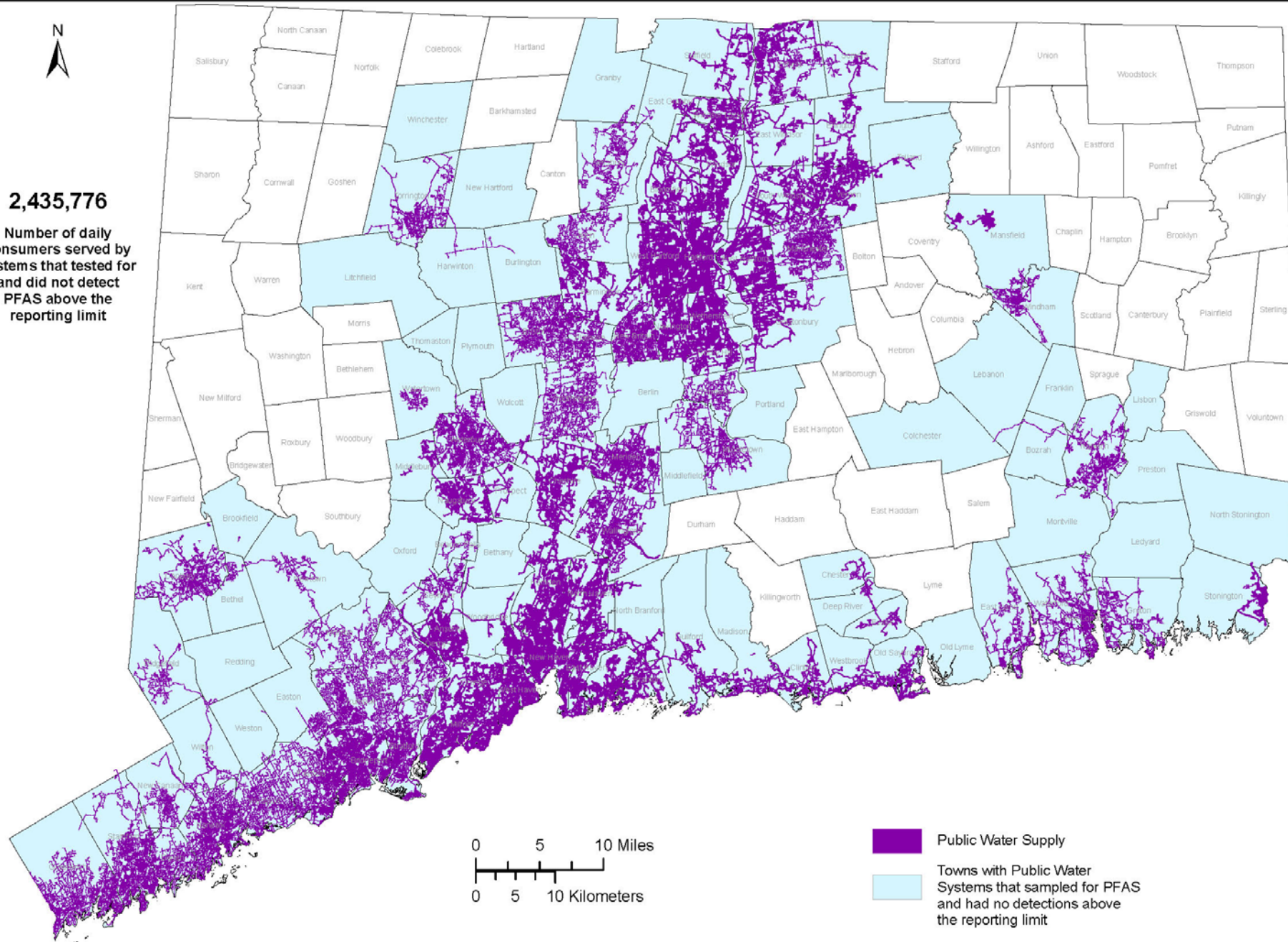


# Connecticut Towns Served by Public Water Systems that have Tested for PFAS

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**2,435,776**  
Number of daily  
consumers served by  
systems that tested for  
and did not detect  
PFAS above the  
reporting limit





# What is State of CT doing?

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- Created an interagency team with Department of Energy and Environmental Protection (DEEP)
- Drafted a strategy to minimize human exposure to PFAS through drinking water
- Trained an interagency team in collecting drinking water samples for analysis for PFAS
- Developed public outreach communication materials and websites
- Collaborating with agency counterparts in the Northeast and Nationally



# What is the CT DPH Drinking Water Section doing?

- Currently using an analysis tool developed by EPA Region 1 to identify PWS that serve less than 10,000 consumers that may be vulnerable to sources of PFAS in the environment
  - Pilot-testing analysis results by conducting water sampling in conjunction with the State Public Health Laboratory staff in two areas of the state
- The DWS will directly contact public water systems that have been identified as being in vulnerable areas
  - Recommending that PWSs with vulnerable sources monitor for the six PFAS that were required under UCMR3
  - Utilizing experience gained during pilot test to ensure effective technical assistance is provided to vulnerable PWSs
- Providing input to the [Connecticut State Water Plan](#) on addressing the challenge of emerging contaminants in drinking water.

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# Learn More about PFAS

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- DPH Drinking Water Section – [Per and Polyfluoroalkyl Substances](#)
- DPH Fact Sheet: [Perfluoroalkyl Substances \(PFAS\) in Drinking Water Health Concerns](#)
- DPH Private Well Drinking Water Action Level [determination](#)
- CT Department of Energy and Environmental Protection: [Emerging contaminants & PFAS](#)
- EPA Information:
  - [Background on PFAS](#)
  - [Fact sheet](#)
  - [Health Advisory for PFOA and PFOS](#)

# Contact Information

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- **Questions about drinking water from Public Supplies and treatment options:** DPH Drinking Water Section: 860-509-7333
- **Questions on drinking water from Private Wells and treatment options:** DPH Private Well Program: 860-509-7296
- **Questions about PFAS Health Effects:** DPH Environmental & Occupational Health Assessment Program: 860-509-7740
- **Questions on PFAS Sources:** DEEP Remediation Division: 860-424-3705

