CONNECTICUT
Department of Public Health
PFAS: Responding to an Emerging Contaminant

INTRO
STRATEGY
CASE STUDY
LESSONS LEARNED

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WHO WE SERVE

- 2,550 Public Water Systems, serving 2.9 million people
- 550 community water systems
- 600 non-transient non-community systems
- 1,400 transient systems
- 150 reservoir systems
- 4,000 wells

CT Department of Public Health (CTDPH)
Regulates public drinking water under its Drinking Water Section (DWS)
- Primacy of the Safe Drinking Water Act
Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s. PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body – meaning they don’t break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.
PFAS CAN BE FOUND IN:

Food packaged in PFAS-containing materials, processed with equipment that used PFAS, or grown in PFAS-contaminated soil or water.

Commercial household products, including stain- and water-repellent fabrics, nonstick products (e.g., Teflon), polishes, waxes, paints, cleaning products, and fire-fighting foams (a major source of groundwater contamination at airports and military bases where firefighting training occurs).

Workplace, including production facilities or industries (e.g., chrome plating, electronics manufacturing or oil recovery) that use PFAS.

Drinking water, typically localized and associated with a specific facility (e.g., manufacturer, landfill, wastewater treatment plant, firefighter training facility).

Living organisms, including fish, animals and humans, where PFAS have the ability to build up and persist over time.
5.

**Fire Foam**

**Waste Release / Disposal**

**Landfills**

Figure 3. Conceptual site model for landfills and WWTPs.
Timeline

2013
PFAS

2014
Flint, Michigan

2016

- 2010-2015 Safe Drinking Water Act UCMR3
- EPA – Third Unregulated Contaminant Monitoring Rule (UCMR 3)
- Under the UCMR3 - No Public Water System in Connecticut that tested for PFAS had detections above the minimum reporting limits
- These Public Water Systems serve over 2,400,000 people

- EPA issues Health Advisory for PFOA and PFOS
- DWS issues a “Circular Letter” to public water systems and local health departments informing them of the Health Advisory and UCMR 3 results.
- DPH Environmental Health Section publishes a Drinking Water Action level for 5 PFAS
Connecticut Towns Served by Public Water Systems that have Tested for PFAS

2,435,776
Number of daily consumers served by systems that tested for and did not detect PFAS above the reporting limit.
CT DPH worked with Dept. of Energy and Environmental Protection (DEEP) Remediation on strategy development

- Identify areas where PFAS may have been released to the environment
- Identify public drinking water supplies that may be vulnerable to PFAS contamination
- Develop web pages (DWS and DEEP) and public information
- Propose actions if PFAS is found
Per- and Polyfluoroalkyl Substances

Per- and polyfluoroalkyl substances are a group referred to as PFAS. PFAS are used in a variety of consumer products, including cookware, upholstery, clothing, and firefighting foams. These substances are not biodegradable and are extremely persistent in the environment. It is estimated that there are approximately 4,000 different types of PFAS that have been produced and used worldwide.

The United States Environmental Protection Agency (EPA) has determined that the PFAS in water may be harmful to human health. The EPA has set drinking water limits for certain PFAS compounds, and states are required to monitor for these substances in their drinking water. Connecticut has established drinking water standards for PFAS, and the Connecticut Department of Public Health (DPH) is responsible for monitoring and regulating PFAS levels in drinking water.

In 2015, the EPA required that all public water systems in the United States test for PFAS. The test results showed that PFAS levels exceeded the federal health advisory limits in some water systems.

The DPH has developed a PFAS Drinking Water Section to address the issue of PFAS in drinking water. The PFAS Drinking Water Section is responsible for monitoring PFAS levels in water systems, developing regulations to limit PFAS levels, and providing guidance to water systems on how to monitor and reduce PFAS levels in their water.

The PFAS Drinking Water Section has implemented a PFAS Monitoring Program to monitor PFAS levels in water systems. The program includes regular monitoring of PFAS levels in water systems and the development of guidelines for reducing PFAS levels in water systems.

For more information on PFAS in drinking water, please visit the DPH website: [DPH website](https://health.gov/)

9.
Strategy

CT DPH receives call from New York Dept. of Health: PFAS contamination is identified in PWS wells on the NY/CT border in New York

CT DPH uses a GIS Mapping Tool to identify areas that are vulnerable to PFAS Contamination

CT DPH coordinates with Local Health
Greenwich, CT

- Receive direct support, involvement and direction from DPH Commissioner’s Office
- Focus on Health
- Work with, involve, and listen to Local Health Department
- Work with Team of agency experts including EPA
- Use PFAS strategy to identify who will be sampled
- Use DPH developed Action Level for PFAS (sum of 5 PFAS)
- Request EPA Chelmsford Lab assistance
Local Challenges and Team Approach – PFAS Strategy

- Working with differences between federal, State and local strategies
- Collaboration and coordination of all agencies (DPH, DEEP and EPA) for well water collection
- Communication and timing of mailing to owners of public/private well water supplies about PFAS contamination/scheduling water sampling
- Notification to media (general public) elected officials, boards, community groups, town agencies about PFAS contamination
Local Challenges and Team Approach – PFAS Strategy

• Handling resident reactions with knowledge of past general contamination problems in the community
• Dealing with public/political response to Westchester County Airport problems past/present
• Organization of local health availability to all impacted residents/facilities
• Handling media inquiries and local resident questions
Local Challenges and Team Approach – PFAS Strategy

- Organizing convenient location for DPH, DEEP and EPA well water supply team
- Organization of a convenient location for a public information session once well water sampling results were verified
- Dealing with problems associated with out of state contaminations and handling new information on PFAS
Collecting Samples in Greenwich
Community Outreach

- Held in the impacted community
- Provided Personal invitations plus press releases
- Facilitated by Local experts
- Staffed tables with hand-outs and display boards
- Guests were free to circulate and choose the programs to visit
- Convenient locations for confidential consultation
- Team Presentation at end of session
- Team members stayed to answer any and all questions
Lessons Learned From the Public Availability Session

- Hold the public session as soon as practical
- Directly and consistently Communicate with all entities sampled
- **Work with Local Health Department**
- Involve the team of experts in the session
- Format allowed for individual attention; affirmed that guests’ concerns were taken seriously
- Take the time to make sure that questions are answered satisfactorily
- **Admit what you don’t know**
- Important involvement from all levels, State, Local and Federal
- Assure the guests that you will continue to share information and engage
- Provide understandable, updated, science based information
- **Trust important at all levels**
Conclusion

- Knowledge of PFAS is evolving rapidly and we get frequent updates and webinar invitations.
- We are creating a list serve of those who would like the most up to date information, please email Patricia.Bisacky@ct.gov.