

A North Carolina research study assessing exposure to GenX and related chemicals in people living in the Cape Fear River Basin.

From the Principal Investigator, Dr. Jane Hoppin



Dear Study Participants,

Thank you for being part of the GenX Exposure Study. Your time and effort in coming to sample collection events is helping us learn how PFAS exposure may affect health. We truly appreciate your support of the study.

In this newsletter, you will find information about the study and people in the study, what we have learned so far, and what is next for the GenX Exposure Study.

Overall, we are seeing PFAS levels in blood come down in people throughout the Cape Fear River Basin. While this is good news, we know that past levels of PFAS in blood may influence health in the future. We have funding from the National Institute of Environmental Health Sciences (NIEHS) to continue following study participants, sharing our findings with the public, and analyzing the data we have already collected.

Since 2017, we have received over \$10 million from the NIEHS and over \$2 million from the North Carolina Collaboratory to do this important work. Currently, federal grant funding is challenging. Right now, we do not have funding needed to collect more blood samples. We hope to sample blood again in the future. For now, we will use the data we already have collected to understand more about how PFAS affects our health. To learn more about how we fund the study, please visit our website.

We will continue this research and keep you informed. For the latest information, visit the study website. Please feel free to contact our team with any questions or comments. We look forward to connecting with you at future community meetings and study events.

Best wishes,





Jane Hoppin, ScD



Visit our website by
scanning the QR code!

Please keep us updated

-  Have you recently moved?
-  Have you changed your phone number/email?

Please contact us to update your participant information:
genx-exposure-study@ncsu.edu or 855-854-2641

About the Study

How We've Grown

We began the GenX Exposure Study in November 2017 by enrolling 344 people in Wilmington to test their blood for GenX and other PFAS chemicals. To build on this work, the project grew from an exposure study into a health study.

In November 2020, we started the GenX Exposure Health Cohort Study. This study, which we still call the GenX Exposure Study to keep things simple, will follow participants for up to 20 years to learn more about how PFAS affect human health and how long these chemicals stay in our bodies.

Who is in the study?



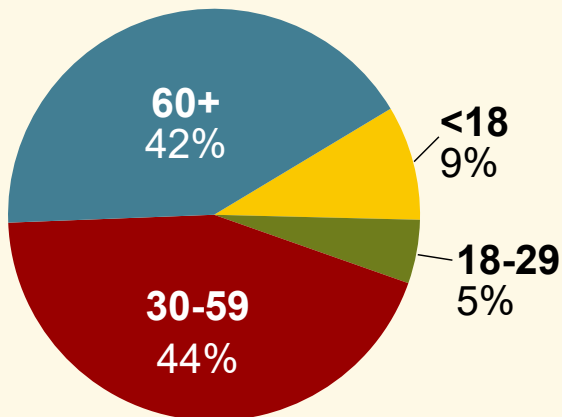
60% Female



40% Male

70% of participants have lived in their community for at least 10 years.

Age of the Cohort (years)



Communities We Work With



Between November 2020 and May 2025, we enrolled **1,100 people** in the health cohort study. These people came from three areas of North Carolina with PFAS in their drinking water.

Pittsboro, NC - a community that relies on the Haw River for drinking water and upriver of the Fayetteville Works plant

Fayetteville, NC - the Private Well Community around the Fayetteville Works Plant

Lower Cape Fear - communities that rely on the Cape Fear River for their drinking water in New Hanover and Brunswick counties

Visit our website by scanning this QR code!



What have we learned?

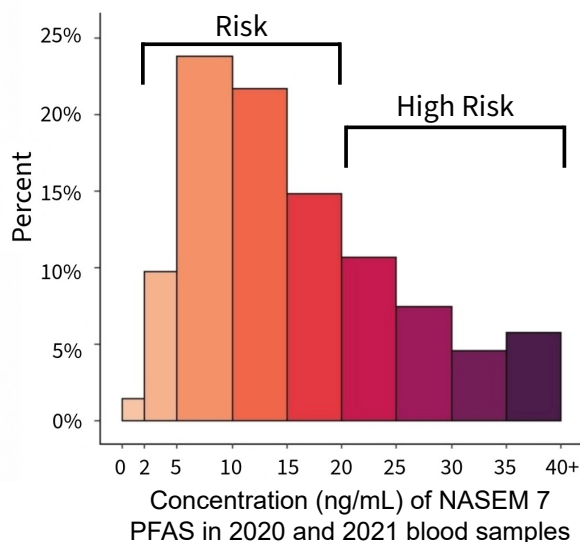
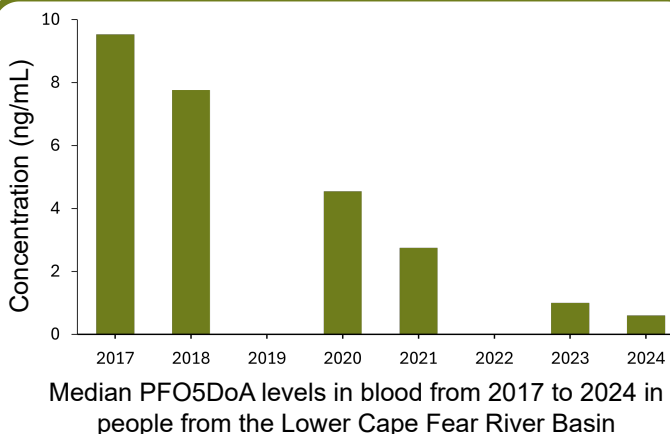
On average, **PFAS levels in blood were lower in 2024** than they were in 2017 when the study began. PFAS blood levels are still higher than most people in the US. While this is good news, not everyone's PFAS levels are coming down. We want to learn why.

PFOA
PFOS
PFHxS
PFNA

These four PFAS are found in everyone in the US. However, most people in the study have higher levels of these PFAS than the average American.

PFO5DoA
Nafion-
byproduct 2

People living in the Lower Cape Fear region and around the Fayetteville Works plant also had PFAS related to the plant in their blood samples. These PFAS blood levels have come down a lot since 2017.



Clinical Guidance

The National Academy of Science, Engineering, and Mathematics (NASEM) published clinical guidance for 7 types of PFAS commonly found in blood. People with summed levels above 2 ng/mL for these 7 PFAS are at risk of health problems. People with summed levels above 20 ng/mL are at high risk of health problems.

The graph shows **almost all of people in the study have summed PFAS levels above 2 ng/mL** for these 7 types of PFAS. This total does not include other PFAS found in blood. To learn more about NASEM's guidance on PFAS, visit our website or contact us.

We have learned a lot about PFAS from the blood samples you have donated. We especially want to thank people who gave samples more than once. Having more than one sample helps us understand how PFAS levels change over time.

View the NASEM Clinical Guidance by scanning this QR code.



What's next for the GenX Exposure Study?

While we do not have funding to collect blood samples again soon, we will keep studying the data we already have collected. We will share what we learn with you and your communities. Learn more about what we are working on below.

Scientific Papers

In Spring 2025, we published a paper about PFAS in the dust of homes near the Fayetteville Works Plant. We found that homes closer to the plant had higher levels of some PFAS. Every home tested had at least one type of PFAS in its dust. Home dust is a source of PFAS exposure for people in homes nearby the Fayetteville Works plant.

Read the paper by visiting go.ncsu.edu/genx_scientific_papers.

View the slides from our community meeting by visiting go.ncsu.edu/genx_community_meetings

We have several other research papers that will be published soon. Check our website and social media for updates!



Read our scientific papers by scanning the QR code!



Data Dashboard

We are making an online data dashboard where people can compare PFAS levels in blood across different communities and over time. The dashboard will be free and open to everyone. It will be available on our website by the end of 2025.

Meet The Team

Left to right: Justin Bell, Undergraduate Research Assistant; Britney Paul, PhD Student; Jenny Williams, Study Manager; Hanna Bailey, Community Engagement Specialist; Jane Hoppin, Principal Investigator; Michael Cuffney, Data Manager; Nebiyou Tafesse, Postdoctoral Researcher, Mariana Linares, Undergraduate Research Assistant

Not pictured: Katelyn Register, Community Engagement Lead; Nate Wiecha, PhD Student; Jason Lu and Bing Chen Undergraduate Research Assistants



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