



# GenX Exposure Study

## Newsletter

MAY 2020 | ISSUE 2

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



Dear GenX Exposure Study Members,

As I write to you in late March, I hope this letter finds you healthy and safe. I know this pandemic has taken its toll on everyone. I hope you have some peace during these difficult times.

Like almost everyone, the GenX Study has moved to working at home. While our dogs, cats, and families may be enjoying that, it does limit what we can do. We had to stop chemical analyses on March

20, 2020. We will have to wait until we can have researchers in the lab and safely restart the instrument to continue chemical analyses.

But, that doesn't mean we aren't moving forward! We're using this time to get our files in order, share information with you via the website ([genxstudy.ncsu.edu](http://genxstudy.ncsu.edu)), write some papers, and, most importantly, get ready to start more fieldwork!

In March, NC State was awarded a Superfund Research Center grant, which will allow us to build on and expand the GenX Exposure Study. This new funding will allow us to continue to follow all of you, and enroll an additional 500 people so that we can better understand how these chemicals move through our bodies, and how they may impact human health. We'd like to thank the community leaders, local organizations, and fellow researchers for their support in helping us secure this additional funding. And a big thank you to you for your continued engagement and feedback during this process.

In April, we sent out water report back letters to Fayetteville study participants. If you did not get your letter, please contact us.

Please keep in touch with us. Please let us know if you move, get a new phone number or email address so we can keep you informed about our study activities.

My best wishes to each and every one of you as we weather these difficult times. Take good care of yourselves,

Jane Hoppin



## Sharing Water PFAS Results in the Fayetteville Community

As part of our research efforts in Fayetteville, in February 2019, we collected tap and well water samples from 85 homes located nearby the Chemours Fayetteville Works facility. These water samples were analyzed for 31 PFAS. Over time, our team has gotten more analytical standards for PFAS analysis which means we can quantify more PFAS now than we could before.

We detected GenX in most well water samples, and there was a wide range of GenX concentrations. We also frequently detected in wells many other PFAS related to manufacturing at the Fayetteville Works facility (e.g., PMPA, PFO2HxA, and PEPA). All of these PFAS have been detected in samples from the Cape Fear River at one point or another. We have been reanalyzing our tap water samples from Wilmington to determine concentrations of PFAS that we could not quantify in our earlier analysis. Copies of all of the letters that participants have received are on our website ([genxstudy.ncsu.edu/communicating-results/](http://genxstudy.ncsu.edu/communicating-results/)). In light of the current situation, we have not held community meetings in Fayetteville to further discuss those results. Instead, we will be posting videos explaining results on our website and we encourage you to check them out.

If we visited your house in Fayetteville and you have not received your letter, please contact us and let us know. We'll send you a copy of your letter via email.

## Paper Highlight



pubs.acs.org/journal/estlcu

Letter

### Assessing the Effectiveness of Point-of-Use Residential Drinking Water Filters for Perfluoroalkyl Substances (PFASs)

Nicholas J. Herkert, John Merrill, Cara Peters, David Bollinger, Sharon Zhang, Kate Hoffman, P. Lee Ferguson, Detlef R. U. Knappe, and Heather M. Stapleton\*

We've received some questions about water filters to remove PFAS, and though we do not provide recommendations, we want to highlight a recent paper by researchers at Duke and NC State (including Detlef Knappe, GenX Study investigator).

Researchers tested how effective different home water filters were at removing PFAS. One of the important things about this study is that they evaluated systems being used in people's homes in the Wilmington and Triangle areas of North Carolina. Overall, reverse osmosis (RO) filters were most consistently effective at removing all PFAS evaluated. Other activated carbon filters, such as refrigerator filters, faucet filters, and pitcher filters, partially removed PFAS and were more effective at removing longer chain PFAS, such as PFOA or PFOS, than shorter chain, such as GenX.

You can read the full article here: <https://pubs.acs.org/doi/10.1021/acs.estlett.0c00004>. This study did not evaluate filters currently being used in Fayetteville. For Fayetteville residents, we recommend getting in touch with NC DEQ at 919-707-8200 to find out more about the consent decree.