

NC Department of Health and Human Services

PFAS Community Survey

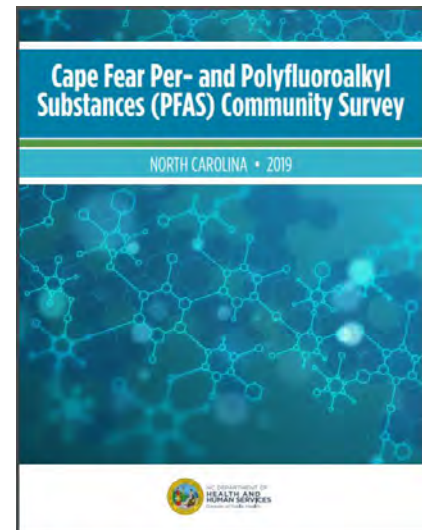
Virginia Guidry, PhD, MPH

**Occupational and Environmental Epidemiology
Branch Head, NC Division of Public Health**

February 26, 2020

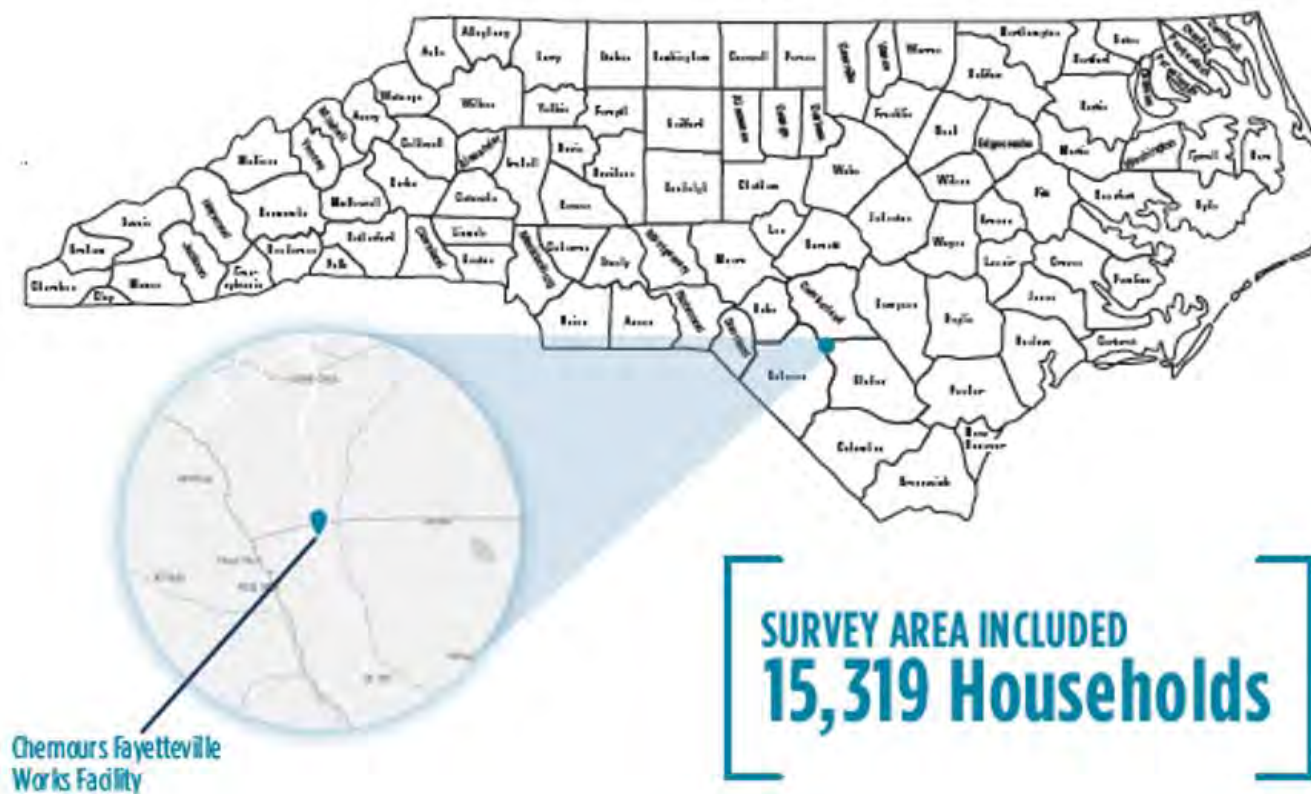
What was the purpose of the Community Survey?

- What is the community's current understanding of GenX and PFAS?
- How have community members changed their daily lives or activities since learning about GenX and other PFAS?
- What are the current exposure and health concerns of the community?
- What are the community's communication needs and preferences?



SOURCE:

Who was surveyed?



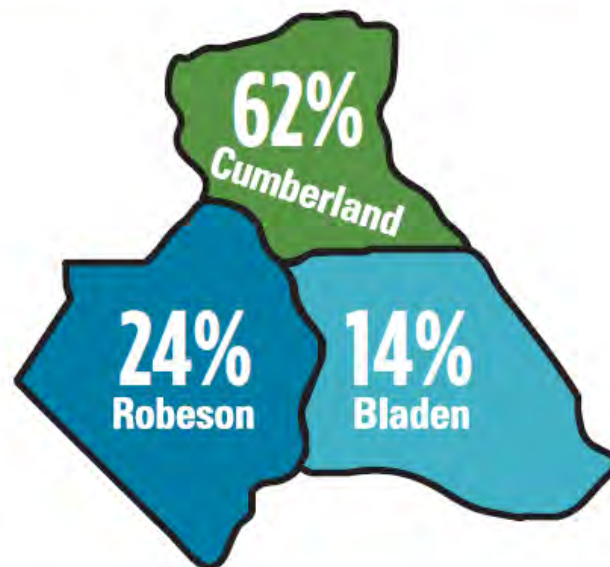
SOURCE:

Survey Results

1,858 Responses
12% OF SURVEYED HOUSEHOLDS

FIGURE 2. SURVEY RESPONSES BY COUNTY (N=1,837)

NOTE: 21 Respondents did not provide their county.



SOURCE:

Key Findings

Water Usage after Receiving Recommendations Not to Use



- **34% of households changed water use without being advised to change**

SOURCE:

Key Findings

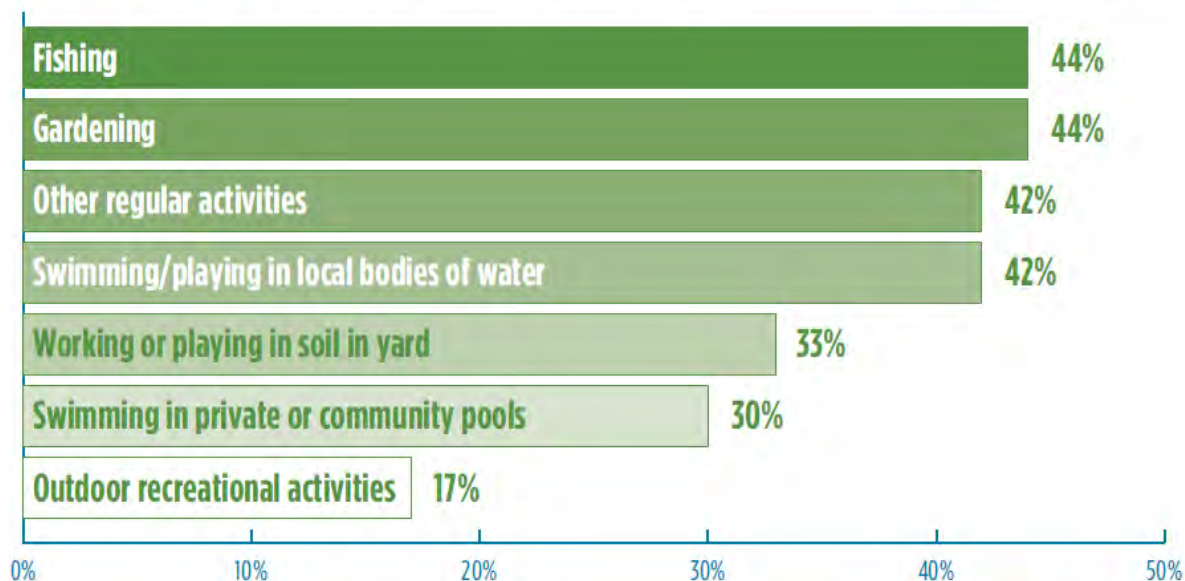
- **Change in Activities**

- **38% of households decreased activities such as fishing, gardening, and swimming**

FIGURE 7. BEHAVIORAL CHANGE AFTER LEARNING ABOUT GENX OR OTHER PFAS

Percentage of households decreasing activities • Questions #18 and 19* • N=709

*Respondents were able to select more than one activity.



Health Concerns

Household Health Concerns

Question #20 • N=1,409



Health Concerns

| THEME* | DESCRIPTION OF THEME | N | % |
|----------------------------------|--|-----|----|
| Uncertain | Don't know, unknown, not sure, uncertain, what are the effects?, need more information | 237 | 35 |
| Cancer | Cancer, carcinogen, cancerous | 162 | 24 |
| Other health** | Other health effects noted less frequently, including headaches/dizziness, developmental effects, neurological effects, diabetes, stress or fear, allergies, liver effects, etc. | 109 | 16 |
| Long-term/Chronic effects | Long-term effects, chronic health, concern about future health effects | 72 | 11 |
| Animals | Animals' health (e.g. livestock, chickens, horses, dogs, cats, pets) | 49 | 7 |
| General health | General health risk, all health concerns, anything | 47 | 7 |
| Skin | Skin, eczema, rashes, itching, boils | 46 | 7 |
| Respiratory | Asthma, lung effects, COPD, coughing, sinus issues, respiratory effects | 40 | 6 |
| Gastrointestinal | Stomach, esophageal, gallbladder, intestinal, or gastrointestinal effects, digestive issues, indigestion, nausea | 38 | 6 |

Some studies of people have shown certain PFAS may:

- **Affect growth, learning, and behavior of infants and older children**
- **Lower a woman's chance of getting pregnant**
- **Interfere with the body's natural hormones**
- **Increase cholesterol levels**
- **Affect the immune system and**
- **Increase the risk of cancer**

Communication Needs

- Need for better and more timely communication, especially information about exposure
- Most households want communication by mail

FIGURE 11. PREFERRED METHODS OF COMMUNICATION

Upcoming events • Questions #27* • N=1,701

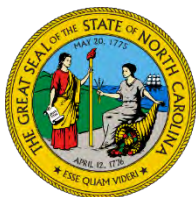
*Respondents were able to select more than one communication method.



DHHS Response:

- **Updated health education**
 - Webpages
 - Factsheets on GenX and PFAS
- **Outreach**
 - Repository at Annie H McEachern Library – 223 W Broad Street St. Pauls
 - Public meetings
 - Newsletters
- **Collaboration**
 - Community groups
 - State and local government partners (NCDEQ, local health departments)
 - Researchers

For more information:



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**
Division of Public Health

Occupational and Environmental Epidemiology Branch

Phone: (919) 707-5900

E-mail: nchace@dhhs.nc.gov

NCDHHS **Epidemiology** North Carolina Public Health

OEE HOME
A-Z Contaminants
GenX
Facts & Figures
Programs & Services
Reports by County
Contact Us
Quick Links
Fish Consumption Advisories
Well Water & Health
Related Programs
Water Quality (DEQ)
Related Sites
Agency for Toxic Substances & Disease Registry
Centers for Disease Control & Prevention
U.S. Environmental Protection Agency

OEHHS > DEH > Ep > Occupational & Environmental > A-Z > GenX

Occupational & Environmental Epidemiology

Cape Fear Per- and Polyfluoroalkyl Substances (PFAS) Community Survey Report

In early 2019 NCDHHS conducted a survey of residents near the Chemours Plant to document concerns about GenX and other PFAS chemicals. These survey results will be used to tailor health education activities to better meet community needs. Results from that survey are summarized in this [report](#) (PDF) and [appendix](#) (PDF).

GenX in the Lower Cape Fear River Basin

What is GenX?

GenX is a member of a large group of man-made chemical compounds known as per- and polyfluoroalkyl substances (PFAS). PFAS are man-made chemicals that do not occur naturally in the environment. These chemicals have broad uses in commercial products such as food packaging, nonstick coatings, and firefighting foam.

GenX is a trade name for one unregulated PFAS used in manufacturing nonstick coatings and for other purposes. It is also produced as a byproduct of certain manufacturing processes.

Where is GenX found in the environment?

In June 2017, the North Carolina Department of Health and Human Services (NCDHHS) was notified of a chemical, called GenX, found in drinking water sourced from the lower Cape Fear River. GenX and other emerging PFAS were found in the river and drinking water in a [study](#) led by researchers at North Carolina State University. The Chemours facility in Fayetteville was identified as the source of the GenX chemical. Further investigation by the NC Department of Environmental Quality (NCEQ) found GenX in private