North GA PFAS Pilot Study

Blood testing conducted to help address community concerns about PFAS exposure

EMORY ROLLINS SCHOOL OF PUBLIC HEALTH

What are PFAS?

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of man-made chemicals used in everyday products, including non-stick cookware, water-resistant fabric, and cleaning products.

PFAS are water soluble and easily transported via water.

What did we want to learn?

How do PFAS levels in Rome and Calhoun residents compare to those in the general U.S. population?

Why is this important?

PFAS chemicals are often called “forever chemicals” because they stay in the environment for decades.

PFAS chemicals can accumulate in the body.

PFAS particularly affect the liver, kidneys, thyroid, and the immune system.

What did we do?

1. We tested the blood from 177 residents in Rome and Calhoun, GA, for PFAS chemicals.
2. We asked participants a series of questions relevant to PFAS exposure.

What are the preliminary findings?

76% of study participants had total PFAS levels within the range to warrant prioritized medical screening.*

23% of study participants had total PFAS levels high enough to warrant additional medical evaluation and lab testing.*

Total PFAS is the sum of seven different individual PFAS chemicals measured in the blood.

**Clinical guidelines published by the National Academies of Sciences, Engineering, and Medicine (2022).*

Compared to the General U.S. Population

Elevated PFOA and PFHxS levels were found relative to the U.S. population.

PFAS Chemical	Percent of Study Participants Above the U.S. 95th Percentile
PFOS	7.3%
PFOA	**40.1%**
MePFOSAA	5.7%
PFDA	7.9%
PFHxS	**11.9%**
PFNA	2.3%
PFUnDA	2.3%

Source for U.S. Population: National Health and Nutrition Examination Survey (2017-2020)

Residential Years & Water Source

On average, for every 10 years of residence in the area, total PFAS levels increased by 7.7% in Gordon and Floyd counties.

Drinking bottled water was associated with a decrease in PFOA, PFHxS, and PFNA levels.

Note: All results are preliminary. Analyses are ongoing. These results have not been peer-reviewed.

ngapfas@emory.edu

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