### 1. Should you expect to find PFOA in your blood?

Yes. Studies show that human exposure to perfluorooctanoic acid (PFOA) is widespread and that nearly all people in the United States have PFOA in their blood. People can be exposed to PFOA through air, water or soil contaminated from industrial sources, and from PFOAcontaining consumer products. When PFOA is present in drinking water, we expect blood levels of PFOA to be higher than the U.S. average.

#### 2. How high will PFOA levels be in blood?

When PFOA is present in drinking water, PFOA levels in blood are expected to be much higher than levels in drinking water.

### 3. Will the PFOA blood levels ever go down?

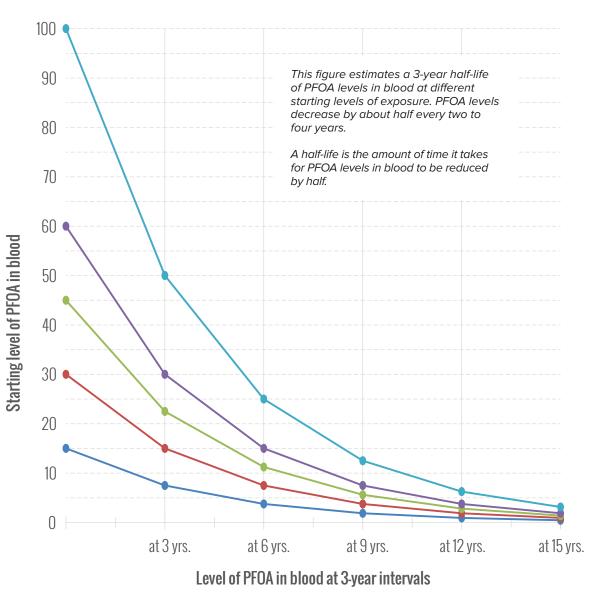
Yes. Studies in other communities showed that levels of PFOA in blood declined after filtration systems were installed on their public and private drinking water sources. However, PFOA can be measured in blood for years after exposure. PFOA levels decline in blood naturally by about half every 2-4 years, assuming there is no additional exposure. This is known as a half life. Your health care provider and the resources listed in #9 can discuss this with you further if you have questions.

## 4. Can your blood level tell you if you are likely to have health problems?

Knowing your PFOA blood level cannot tell you whether you have or will have a health effect related to the PFOA levels in your body.

#### How Long it Might Take for PFOA Blood Levels to Decline

Assumes a 3-year half-life (Micrograms per Liter)



Bartell SM, Calafat AM, Lyu C, et al. 2010. Rate of decline in serum PFOA concentrations after granular activated carbon filtration at two public water systems in Ohio and West Virginia. Environ Health Perspect. 118(2):222-8

### 5. What do the studies show about health effects and PFOA exposure?

Some human health studies have found associations between PFOA exposure and health effects and others have not. In addition, the studies that found associations were not able to determine with certainty if the health effects were caused by PFOA or some other factors. The New York State Health Department is conducting an investigation to see if there are unusual elevations of cancer among Village of Hoosick Falls residents because of PFOA exposures that occurred in the past from the public drinking water supply. The investigation is looking at total cancers and specific types of cancer diagnosed from 1995 through 2013 (latest available data), using data from the New York State Department of Health Cancer Registry, which receives reports on all cases of cancer occurring in New York State.

### 6. Do some people tend to have more PFOA in their blood than others?

Yes. Older people tend to have higher levels because the chemical builds up in the body over time. Please go to: health.ny.gov/DrinkingWaterResponse for more information.

### 7. How will you know how your level compares to others?

You will be able to compare your PFOA results to national data from the U.S. Centers for Disease Control and Prevention (CDC) and also to results for PFOA biomonitoring projects conducted in other communities in the U.S. Some examples are provided in the chart on the other side of this page.

#### Average PFOA Levels in Blood (Micrograms per Liter)

3M Workers, Decatur, AL		1,125
Dupont Workers, Parkersburg, WV	_	410
C8 Study: Little Hocking, OH		228
C8 Study: Lubeck, WV	92	
C8 Study: Tuppers Plains, OH	42	
Hoosick Falls area, NY	23.5*	* The level shown for PFOA in blood for the Hoosick Falls area is the geometric mean and is based on test results for 2,081 participants including people using Village water, people using private wells, people who work in the area, and former residents.
C8 Study: Mason County, WV	∎ 16	
U.S. Population	2	Geometric means are a way of calculating the middle level. They are used in science to prevent the highest and lowest values from distorting the average when rest of the data are close together.

#### 8. Were there other biomonitoring studies of PFOA exposure?

Some of the information we have in the above chart comes from people who were exposed to PFOA on the job, such as workers for 3M and Dupont. These workers usually have higher blood levels of PFOA and PFCs than the general population (PFCs are the group of chemicals to which PFOA belongs). A large study (called the "C8 Study") of 70,000 people was done in a number of water districts of the Ohio River Valley where the drinking water was contaminated and people were exposed to PFOA. Results are shown for Little Hocking, Lubeck Public Service District, Tuppers Plains, and Mason County. The testing in this large group found the average PFOA levels in blood were much higher when compared to the national average, but lower than what was found in workers who use PFCs in their job.

#### **9. How can you find out more?**

You can find more details and links to related studies at:

health.ny.gov/DrinkingWaterResponse If you have other questions about the biomonitoring program, contact the New York State Health Department by calling **518-402-7950** or emailing **beoe@health.ny.gov** 

In addition, physicians with environmental exposure expertise from the Mount Sinai Hospital in New York City are available by telephone at **1-866-265-6201** to help answer questions you may have about your PFOA blood test result.



#### Hoosick and Petersburgh Area

Questions and Answers about

# PFOA Blood Testing Program



June 2016