PFOA Blood Levels of Hoosick Residents Compared to Residents from Other Communities

Take Away Messages:

- The other communities are good comparisons because they were exposed to PFOA in drinking water.
- Other community levels are reported as averages. Hoosick Falls levels are reported as 50th percentile meaning half the people had a result below and half had a result above 64.2 and 28.3 micrograms per liter of PFOA.
- The levels of PFOA in Hoosick Falls public water users’ blood is within the range seen in other communities with drinking water exposures.
- The levels of PFOA in blood of residents of communities with drinking water exposures are significantly higher than the U.S. level of PFOA in people’s blood.
- The U.S. population is included to compare levels between exposed communities to national PFOA levels in blood.

Sources:
How Long Does PFOA Stay in the Body?

- Studies of other communities show that PFOA levels in blood go down after carbon filtration systems are installed.
  - In a Minnesota study, blood levels continued to decrease after filtration systems were installed for public and private wells.
  - In a Lubeck, West Virginia study, average PFOA blood levels were reduced by 26% after one year of drinking filtered water.
- The figure below estimates a 3-year half-life of PFOA levels in blood at different starting levels of exposure. Actual rates of decline could be faster or slower than the 3-year projection shown. A half-life is the amount of time it takes for PFOA levels in blood to be reduced by half.

How Long it Might Take for PFOA Blood Levels to Decline
Assumes a 3-year half-life (Micrograms per Liter)

EPA sets health advisories at levels that consider animal studies, human studies, vulnerable populations, and other exposures that people may have in their environment. This information is used to establish an advisory level that provides a wide margin of protection because it is set far below levels that cause health effects.

The chart information is based on daily consumption of drinking water. Levels are rounded for illustration purposes.
February–April 2016 PFOA Blood Testing:
All Participant Group Level Results

Group level results help people compare their results with those of other participants, while keeping individual results confidential. These visual aids show results for adults tested from February through April 2016. Individual participant results are being sent to people who were blood tested and to their health care providers. A full report will be prepared when the project is complete.

### Data Summary of Blood Test Results for People Tested February–April 2016

<table>
<thead>
<tr>
<th># of Participants</th>
<th>Total (including children)</th>
<th>2,081</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total adults (age 18 and over)</td>
<td>1,728</td>
</tr>
<tr>
<td></td>
<td>Adults who drank Village water</td>
<td>960</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Totals by gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
</tr>
<tr>
<td>Males</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Totals by age group</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
</tr>
<tr>
<td>18-39</td>
</tr>
<tr>
<td>40-59</td>
</tr>
<tr>
<td>60 and older</td>
</tr>
</tbody>
</table>

- The data show results for all people tested on February–April 2016, with a focus on adults who used Village of Hoosick Falls public water (see poster, February–April 2016 PFOA Blood Testing Participant Results: In-depth Look at Adults Using Public Water).
- Group level results for children is presented separately.
- People on private wells and people who formerly lived in the Village of Hoosick Falls will be presented in future updates.

### PFOA Blood Test Results for All Participants Tested Compared to Those Who Used Village Water

(Micrograms per Liter)

- This bar chart shows the middle PFOA level in blood (50th Percentile) of participants, meaning that half of the people tested had a blood level below and half of the people tested had a blood level above the level shown.
- Results show that people who drank public water have higher levels of PFOA in their blood than the total results of all tested.
February–April 2016 PFOA Blood Testing Participant Results
In-depth Look at Adults using Public Water

- These data focus on adults whose main exposure to PFOA was from drinking Village public water.
- Separating out blood test results of the adults who drank Village public water from all adult blood test results can help us better understand PFOA exposures from public drinking water.
- These data include February–April 2016 adult participants only. Results may change when all blood test results are analyzed.
- All bar charts show the middle PFOA level (50th Percentile) of adult participants, meaning that half of the adults tested had a blood level below and half of the people tested had a blood level above the level shown.

<table>
<thead>
<tr>
<th># of Participants</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults on Village water</td>
<td>960</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adults by Gender</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>536</td>
</tr>
<tr>
<td>Males</td>
<td>424</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adults by Age Groups</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18-39</td>
<td>257</td>
</tr>
<tr>
<td>40-59</td>
<td>381</td>
</tr>
<tr>
<td>60 and older</td>
<td>322</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adults by Length of Residence in the Village</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10 years</td>
<td>264</td>
</tr>
<tr>
<td>10 to 24 years</td>
<td>325</td>
</tr>
<tr>
<td>25 to 40 years</td>
<td>198</td>
</tr>
<tr>
<td>Greater than 40 years</td>
<td>173</td>
</tr>
</tbody>
</table>

PFOA Blood Test Results for Adults on Village Water Supply by Gender (Micrograms per Liter)

- Females: 60.3
- Males: 72.6

PFOA Blood Test Results for Adults on Village Water Supply by Age (Micrograms per Liter)

- 18-39: 32.8
- 40-59: 72.6
- 60 and older: 91.3

PFOA Blood Test Results for Adults on Village Water Supply by Length of Residence (Micrograms per Liter)

- Less than 10 years: 35.6
- 10 to 24 years: 66.6
- 25 to 40 years: 84.4
- Greater than 40 years: 98.3
PFOA Blood Testing Participant Results for Children (under age 18)  
In-depth Look at Children Tested February–April 2016

- These data focus on children in the Village of Hoosick Falls and Town of Hoosick tested from February through April 2016.
- Data are presented by age group and drinking water source.
- All bar charts show the middle PFOA level in blood (50th Percentile) of children participants, meaning that half of the adults tested had a blood level below and half of the people tested had a blood level above the level shown.
- Comparing the PFOA levels among groups of children with different drinking water sources show that children currently served by Village water have higher PFOA levels in blood than children who are no longer served or who were never served by Village water.
- For children served by Village water, the PFOA levels are highest for the youngest children, under age six. This finding fits with other studies of communities with PFOA in drinking water.
- PFOA is thought to build up or concentrate more in the youngest children from exposures occurring before birth and from breastfeeding or formula feeding if tap water is used. Other possible reasons for the higher levels in the youngest children are that small children may consume more water for their body size and may excrete PFOA more slowly than adults.
- More in-depth information for children will be available in the final report.

**Data Summary for Children on**

**By Age Group and Drinking Water Source**

<table>
<thead>
<tr>
<th># of Participants</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All children</td>
<td>353</td>
</tr>
<tr>
<td>By Age Groups</td>
<td></td>
</tr>
<tr>
<td>Younger than age 12</td>
<td>199</td>
</tr>
<tr>
<td>Ages 12-17</td>
<td>154</td>
</tr>
<tr>
<td>By Drinking Water Source</td>
<td></td>
</tr>
<tr>
<td>Currently served by Village public water</td>
<td>212</td>
</tr>
<tr>
<td>Formerly served by Village public water</td>
<td>55</td>
</tr>
<tr>
<td>Never served by Village public water</td>
<td>86</td>
</tr>
</tbody>
</table>

**Currently Served by Village Public Water by Age Group**

| Younger than age 6 | 38 |
| Ages 6 to 10       | 64 |
| Ages 11 to 17      | 110 |

**PFOA Blood Test Results for All Children by Drinking Water Source**

(Micrograms per Liter)

- Currently served by Hoosick Falls public water: 33.8
- Formerly served by Hoosick Falls public water: 12
- Never served by Hoosick Falls public water: 5.2

**PFOA Blood Test Results for Children on Village Water by Age Group**

(Micrograms per Liter)

- Younger than age 6: 43.5
- Ages 6 to 10: 34.1
- Ages 11 to 17: 28.1