



[Insert Date]

[Name

Address

City, State, Zip code]

Dear [Insert Name],

Thank you for being a part of the CDC/ATSDR PFAS exposure assessment. We are grateful to you for allowing us to collect samples from your home for this project. We tested your household drinking water and indoor dust for per- and polyfluoroalkyl substances (PFAS). This letter gives your test results along with what they mean. You may share these results with others if you would like – it's your choice.

### **The Results of Your Drinking Water Test**

Table 1 provides a list of all the specific PFAS that we measured in your drinking water. The table also lists the acronyms for the PFAS.

Table 1 also shows any federal or state drinking water concentration screening values for these PFAS. These values serve as a screening tool to help public health professionals decide where to look more closely at potential health effects from the environment.

Your results are in units of micrograms per liter ( $\mu\text{g/L}$ ). One  $\mu\text{g/L}$  equals one part per billion, equivalent to about one drop of ink in a large tanker ship.

**Table 1: Your PFAS drinking water levels compared to federal and state screening values.**

PFAS	Abbreviation	Your Tap Water Level in µg/L	USEPA Health Advisory Levels <sup>a</sup> / State Screening Levels <sup>b</sup> in µg/L
perfluorobutane sulfonic acid	PFBS	[insert level]	[insert level] / [insert level]
perfluorodecanoic acid	PFDA		
perfluorododecanoic acid	PFDoA		
perfluoroheptanoic acid	PFHpA		
perfluorohexane sulfonic acid	PFHxS		
perfluorononanoic acid	PFNA		
perfluorooctanoic acid	PFOA		0.07 <sup>c</sup> / [insert state level or NA]
perfluorooctanesulfonic acid	PFOS		0.07 / [insert state level or NA]
N-ethyl perfluorooctanesulfonamidoacetic acid	EtFOSAA		
N-methyl perfluorooctanesulfonamidoacetic acid	MeFOSAA		
perfluoroundecanoic acid	PFUnA		
hexafluoropropylene oxide dimer acid	HFPO-DA		
perfluorohexanoic acid	PFHxA		
perfluorotetradecanoic acid	PFTA		
perfluorotridecanoic acid	PFTrA		
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS		
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS		
4,8-dioxa-3H-perfluorononanoic acid	DONA		
perfluorooctanoic acid + perfluorooctanesulfonic acid	PFOA + PFOS <sup>d</sup>		0.07 / [insert state level or NA]
ND – Not detected (Reporting limit = 0.005 µg/L for HFPO-DA; 0.002 µg/L for all others) NA – Not available <sup>a</sup> <a href="https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos">https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos</a> . <sup>b</sup> Will include reference for applicable state screening levels, if available. <sup>c</sup> 0.07 µg/L (or parts per billion, ppb) is equal to 70 µg/L (or 70 parts per trillion, ppt)			

<sup>d</sup> US EPA recommends that the combined levels of PFOA and PFOS also be compared to the health advisory of 0.07 µg/L.

If any of your PFAS drinking water results are in **bold**, then they exceed the lowest available screening level for that PFAS. This means that your drinking water contains one or more PFAS at levels that are higher than what is recommended by a federal or state environmental or health agency.

*[Include text below only if one or more PFAS levels exceed a screening value.]*

Since concentrations of [insert list of PFAS that exceed applicable screening criteria] in your drinking water were measured at concentrations above screening levels, we recommend that you consider options to reduce risk, such as seeking an alternative drinking water source or using an appropriate filter, or in the case of parents of formula-fed infants, using formula that does not require adding water. It is not necessary to consider using an alternative water source for bathing, washing dishes, doing laundry, or for other activities that do not cause you to swallow water.

## **The Results of Your Indoor Dust Test**

Table 2 provides a list of all the specific PFAS that we measured in your indoor dust. The table also lists the acronyms for the PFAS. Your results are in units of micrograms per kilogram (µg/kg). One µg/kg equals one part per billion, equivalent to about one grain of sand in a sandbox.

This exposure assessment is one of the first to measure PFAS in indoor dust. Because of this, we cannot tell you what a safe level of PFAS in indoor dust is.

However, your results will help us to understand how people are exposed to PFAS in indoor dust. We will share our findings with you in our final report.

**Table 2: Your PFAS indoor dust levels.**

PFAS	Abbreviation	Your Level in µg/kg
perfluorotetradecanoic acid	PFTA	[insert level or ND/ [reporting limit] ]
perfluorotridecanoic acid	PFTrA	
perfluorododecanoic acid	PFDoA	
perfluoroundecanoic acid	PFUnA	
perfluorodecanoic acid	PFDA	
perfluorononanoic acid	PFNA	
perfluorooctanoic acid	PFOA	
perfluoroheptanoic acid	PFHpA	
perfluorohexanoic acid	PFHxA	
perfluoropentanoic acid	PFPeA	
perfluorobutanoic acid	PFBA	
perfluorodecane sulfonic acid	PFDS	
perfluorononane sulfonic acid	PFNS	
perfluorooctane sulfonic acid	PFOS	
perfluoroheptane sulfonic acid	PFHpS	
perfluorohexane sulfonic acid	PFHxS	
perfluoropentane sulfonic acid	PFPeS	
perfluorobutane sulfonic acid	PFBS	
perfluorooctanesulfonamide	PFOSA	
fluorotelomer sulfonic acid 8:2	FtS 8:2	
fluorotelomer sulfonic acid 6:2	FtS 6:2	
fluorotelomer sulfonic acid 4:2	FtS 4:2	
N-ethyl perfluorooctanesulfonamidoacetic acid	EtFOSAA	
N-methyl perfluorooctanesulfonamidoacetic acid	MeFOSAA	
perfluorododecanesulfonate	PFDoS	
N-methylperfluorooctanesulfonamide	N-MeFOSA	
N-ethylperfluorooctanesulfonamide	N-EtFOSA	

N-methylperfluorooctanesulfonamidoethanol	N-MeFOSE	
N-ethylperfluorooctanesulfonamidoethanol	N-EtFOSE	
Perfluoro-2-propoxypropanoate	HFPO-DA	
4-dioxa-3H-perfluorononanoate	ADONA	
9-chlorohexadecafluoro-3-oxanonane-1-sulfonate	9Cl-PF3ONS	
11-chloroeicosafluoro-3-oxaundecane-1-sulfonate	11Cl-PF3OUdS	
ND – Not detected; reporting limits for PFAS that were not detected are included in brackets		

## Next Steps

***If participant's tap water results are higher than the EPA lifetime health advisory, we will use this text:***

Your tap water sample contained PFAS at a level higher than the EPA lifetime health advisory. EPA's health advisory levels were calculated to offer a margin of protection against adverse health effects to the most sensitive populations: fetuses during pregnancy and breastfed infants. EPA's health advisory levels are calculated based on the drinking water intake of lactating women, who drink more water than other people and can pass these chemicals along to nursing infants through breastmilk.

ATSDR recommends that you consider options to reduce risk, such as seeking an alternative water source or using an appropriate filter for any activity in which you might swallow water:

- Drinking,
- Food preparation,
- Cooking,
- Brushing teeth, and
- Preparing infant formula.

***If participant's tap water results are higher than the EPA lifetime health advisory and a state guideline, we will use this text:***

Your tap water sample contained PFAS at a level higher than the EPA lifetime health advisory and [insert state guideline level]. EPA's health advisory levels were calculated to offer a margin of protection against adverse health effects to the most sensitive populations: fetuses during pregnancy and breastfed infants. EPA's health advisory levels are calculated based on the drinking water intake of lactating women, who drink more water than other people and can pass these chemicals along to nursing infants through breastmilk.

ATSDR recommends that you consider options to reduce risk, such as seeking an alternative water source or using an appropriate filter for any activity in which you might swallow water:

- Drinking,
- Food preparation,
- Cooking,
- Brushing teeth, and
- Preparing infant formula.

***If participant's tap water results are higher than a state guideline, we will use this text:***

Your tap water sample contained PFAS at a level higher than [insert state guideline level].  
[Insert description of state level derivation similar to language for EPA level above.]

ATSDR recommends that you consider options to reduce risk, such as seeking an alternative water source or using an appropriate filter for any activity in which you might swallow water:

- Drinking,
- Food preparation,
- Cooking,
- Brushing teeth, and
- Preparing infant formula.

***This information will be included in all letters:***


Please call CAPT Tarah Somers at 617-918-1493 to discuss any questions you may have. Your test results will be kept private. Your results may be combined with other participants in your community and used in a summary report; however, no one will be able to identify you.

## **More Information**

- If you or your doctor have any medically related questions about these results or wish to further discuss these results, please contact CAPT Tarah Somers RN, MSN/MPH by phone at 617-918-1493 or email at [tv4@cdc.gov](mailto:tv4@cdc.gov).
- For additional information about PFAS from the CDC and the Agency for Toxic Substances and Disease Registry, please visit: <http://www.atsdr.cdc.gov/pfas/index.html>.
- For more information about remediation technologies and methods for PFAS, [https://pfas-1.itrcweb.org/wp-content/uploads/2018/03/pfas\\_fact\\_sheet\\_remediation\\_3\\_15\\_18.pdf](https://pfas-1.itrcweb.org/wp-content/uploads/2018/03/pfas_fact_sheet_remediation_3_15_18.pdf).
- For additional information about PFAS from the U.S. Environmental Protection Agency, please visit: <https://www.epa.gov/PFAS>.
- For more information about the EPA Lifetime Health Advisories for PFOA and PFOS, please visit:

[https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories\\_pfoa\\_pfos\\_updated\\_5.31.16.pdf](https://www.epa.gov/sites/production/files/2016-06/documents/drinkingwaterhealthadvisories_pfoa_pfos_updated_5.31.16.pdf).

Thank you again for being part of the PFAS exposure assessment.



Bradley P. Goodwin, PhD  
LT, U.S. Public Health Service