

## SUPPLEMENTAL INFORMATION:

**Table S1.** Analytes for Targeted LC-MS/MS and their limits of quantification (LOQ).

Name	Acronym	Classification	Limit of Quantification (ng/mL)
Perfluorobutanoate	PFBA	Short-chain	0.05
Perfluoropentanoate	PFPeA	Short-chain	0.02
Perfluorohexanoate	PFHxA	Short-chain	0.05
Perfluoroheptanoate	PFHpA	Short-chain	0.04
Perfluorooctanoate	PFOA	Long-chain	0.02
Perfluorononanoate	PFNA	Long-chain	0.02
Perfluorodecanoate	PFDA	Long-chain	0.065
Perfluoroundecanoate	PFA <sub>n</sub> DA	Long-chain	0.02
Perfluorododecanoate	PFD <sub>o</sub> DA	Long-chain	0.02
Perfluorotridecanoate	PFT <sub>r</sub> DA	Long-chain	0.02
Perfluorotetradecanoate	PFTDA	Long-chain	0.02
Perfluorohexadecanoic acid	PFH <sub>x</sub> DA	Long-chain	0.05
Perfluorooctadecanoic acid	PFO <sub>c</sub> DA	Long-chain	0.05
Perfluorobutane sulfonate	PFBS	Short-chain	0.02
Perfluoropentane sulfonate	PFPeS	Short-chain	0.02
Perfluorohexane sulfonate	PFH <sub>x</sub> S	Long-chain	0.03
Perfluoroheptane sulfonate	PFHpS	Long-chain	0.02
Perfluorooctane sulfonate	PFOS	Long-chain	0.04
m2-perfluorooctane sulfonate	Dimethyl-PFOS	Long-chain	0.02
3,4,5-m-perfluorooctane sulfonate	3/4/5-m-PFOS	Long-chain	0.04
6, 2-m-perfluorooctane sulfonate	6/2-m-PFOS	Long-chain	0.05
Perfluoro-1-methylheptane sulfonate	1-m-PFOS	Long-chain	0.02
Perfluorononane sulfonate	PFNS	Long-chain	0.02
Perfluorodecane sulfonate	PFDS	Long-chain	0.02
Perfluorododecane sulfonate	PFD <sub>o</sub> DS	Long-chain	0.02

Perfluorobutane sulfonamide	FBSA	PFSA precursor	0.04
Perfluorohexane sulfonamide	PFHxSA	PFSA precursor	0.04
N-Methyl perfluorohexane sulfonamide	Me-PFHxSA	PFSA precursor	0.02
Perfluorooctane sulfonamide	FOSA	PFSA precursor	0.05
3:3 fluorotelomer carboxylic acid	3:3 FTCA	PFCA precursor	0.05
5:3 fluorotelomer carboxylic acid	5:3 FTCA	PFCA precursor	0.02
7:3 fluorotelomer carboxylic acid	7:3 FTCA	PFCA precursor	0.05
6:2 fluorotelomer carboxylic acid	6:2 FTUCA	PFCA precursor	0.03
8:2 fluorotelomer carboxylic acid	8:2 FTUCA	PFCA precursor	0.03
10:2 fluorotelomer carboxylic acid	10:2 FTUCA	PFCA precursor	0.03
4:2 fluorotelomer sulfonate	4:2 FTSA	PFCA precursor	0.02
6:2 fluorotelomer sulfonate	6:2 FTSA	PFCA precursor	0.02
8:2 fluorotelomer sulfonate	8:2 FTSA	PFCA precursor	0.02
10:2 fluorotelomer sulfonate	10:2 FTSA	PFCA precursor	0.02
Perfluorohexylphosphonic acid	PFHxPA	Potential precursor	0.05
C6/C6 perfluorophosphinic acid	C6/C6 PFPiA	Potential precursor	0.05
C6/C8 perfluorophosphinic acid	C6/C8 PFPiA	Potential precursor	0.05
C8/C8 perfluorophosphinic acid	C8/C8 PFPiA	Potential precursor	0.05
2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoate	HFPO-DA (GenX)	Novel species	0.02
4,8-dioxa-3H-perfluorononanoic acid	ADONA	Novel species	0.02
Perfluoroethylcyclohexane Sulfonate	PFECHS	Novel species	0.02
6:2 chlorinated polyfluoroalkyl ether sulfonic acid	6:2 Cl-PFESA	Novel species	0.02
8:2 chlorinated polyfluoroalkyl ether sulfonic acid	8:2 Cl-PFESA	Novel species	0.02

Table S2. Concentrations of target PFAS per subject (ng/mL), extractable organofluorine (EOF; ng/mL), and the concentration of fluorine attributable to total PFAS (F<sub>44</sub>PFAS; ng F/mL)<sup>1</sup>

																										6:2		6:2 Cl-	
Sex	Age	Σ <sub>44</sub> PFAS <sup>2</sup>	Σ <sub>5</sub> PFAS <sup>3</sup>	EOF <sup>4</sup>	F <sub>44</sub> PFAS	PFOS <sup>5</sup>	PFHxS	PFNA	PFOA	PFHpS	PFECHS	PFBS	PFUnDA	PFHpA	PFPeS	PFTTrDA	PFDODA	FOSA	FTSA	PFPeA	PFDA	FBSA	PFESA						
Reported Pharmaceutical Use	Male	50	4.99	4.71	7.36	2.79	2.87	0.80	0.31	0.66	0.07	0.26	0.02	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Male	32	9.76	9.50	6.34	2.14	5.48	1.67	0.39	1.73	0.24	0.24	0.01	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Male	47	9.86	8.68	6.08	2.77	5.01	1.78	0.54	1.26	0.09	0.72	0.08	0.07	0.24	0.02	<LOD	<LOD	<LOD	0.02	<LOD	<LOD	0.04	<LOD					
	Male	65	26.24	24.64	11.22	9.52	14.44	7.07	0.90	1.81	0.42	1.54	0.03	0.02	<LOD	0.01	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Male	36	17.21	15.93	10.92	6.28	7.00	4.90	0.91	2.83	0.29	0.99	0.04	0.03	0.20	0.02	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Female	74	5.22	4.67	8.72	2.67	2.47	0.92	0.35	0.86	0.06	0.19	0.02	0.05	<LOD	<LOD	<LOD	<LOD	0.01	<LOD	0.28	<LOD	<LOD	<LOD					
	Female	49	4.66	4.20	6.18	2.04	2.23	0.96	0.25	0.72	0.04	0.42	0.04	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Female	48	11.01	9.93	6.18	2.28	6.68	1.05	0.81	1.29	0.11	0.21	0.02	0.11	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	0.74	<LOD	<LOD					
	Female	38	2.88	2.72	3.66	1.05	1.52	0.43	0.24	0.47	0.06	0.08	0.03	0.05	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD					
	Female	62	3.25	3.09	2.67	0.53	1.61	0.70	0.27	0.47	0.05	0.12	0.04	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD					
No Pharmaceutical Use	Male	37	6.64	6.40	4.52	1.59	3.14	2.22	0.30	0.68	0.06	0.17	<LOD	0.06	<LOD	<LOD	0.01	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Male	30	5.68	5.47	6.07	3.27	2.53	1.61	0.37	0.87	0.09	0.14	0.03	0.04	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Male	59	14.90	13.88	10.04	6.99	8.46	2.81	0.59	1.77	0.24	0.63	0.05	0.12	0.15	0.02	0.03	0.02	<LOD	<LOD	<LOD	<LOD	<LOD						
	Male	46	8.72	7.83	5.30	3.95	3.98	1.90	0.45	1.38	0.12	0.37	0.07	0.05	0.37	<LOD	<LOD	<LOD	<LOD	0.01	<LOD	<LOD	<LOD	0.02					
	Male	52	6.06	5.87	6.84	1.86	3.28	0.97	0.60	0.93	0.09	0.15	0.04	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Female	28	3.95	3.87	2.02	0.38	0.57	3.14	0.15	<LOD	<LOD	0.01	<LOD	0.05	<LOD	<LOD	<LOD	0.02	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD					
	Female	57	8.61	8.49	7.74	4.66	5.23	1.45	0.42	1.26	0.13	0.07	0.02	0.03	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Female	55	3.16	3.05	7.09	1.63	1.64	0.55	0.25	0.56	0.05	0.03	0.01	0.05	<LOD	<LOD	0.01	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Female	33	3.16	3.16	2.31	1.37	1.80	0.47	0.27	0.57	0.05	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD						
	Female	52	4.55	4.46	8.67	1.19	2.58	0.71	0.34	0.77	0.07	0.05	0.01	<LOD	<LOD	<LOD	<LOD	<LOD	0.03	<LOD	<LOD	<LOD	<LOD	<LOD					

<sup>1</sup> Compounds not detected in any samples are not shown.

<sup>2</sup> Values reported below the LOD were replaced with zero to determine Σ<sub>44</sub>PFAS.

<sup>3</sup> Sum of compounds detected in >95% of samples and included in NHANES 2017-2018 (PFOS, PFHxS, PFNA, PFOA, PFHpS)

<sup>4</sup> **bold** values indicate lab reported values <LOQ.

<sup>5</sup> PFOS is represented as the sum of branched and linear isomers.

**Tables S3a-S3c:** Unexplained organofluorine (UOF) stratified by sex, race, and age.

**Table S3a:** Comparing concentration of UOF between male and female donors.

	Unexplained Fluorine (ng F/mL)					
	N	Mean	Median	SD	Minimum	Maximum
Female	10	3.74	3.49	2.08	0.94	7.48
Male	10	3.35	3.18	1.24	1.35	4.98

**Table S3b:** Comparing concentration of UOF between Black and Hispanic donors.

	Unexplained Fluorine (ng F/mL)					
	N	Mean	Median	SD	Minimum	Maximum
Black	8	3.32	3.12	1.17	1.35	4.98
Hispanic	12	3.70	3.61	1.98	0.94	7.48

**Table S3c:** Comparing concentration of UOF between donors above and below the median age (48.5).

	Unexplained Fluorine (ng F/mL)					
	N	Mean	Median	SD	Minimum	Maximum
Below Median Age	10	2.83	2.87	1.24	0.94	4.64
Above Median Age	10	4.27	4.35	1.81	1.70	7.48