

Attachment: Laboratory information for per- and polyfluoroalkyl substances (PFAS) serum testing

The following information regarding laboratories that can measure various PFAS in serum was collected and compiled by NC DHHS and is, to the best of our knowledge, current as of May 2020. NCDHHS does not endorse any specific lab or serum testing. It is important for providers to explain to their patients that there are certain limitations to PFAS serum testing. The blood test will not provide information to predict a health problem, nor will it provide information for treatment. Test results will only tell you the levels of PFAS in your blood. PFAS blood test results will not indicate whether a current illness can be attributed to past or current PFAS exposure. Neither will it predict or rule out the development of future health problems related to a known or suspected PFAS exposure. There are no health-based screening levels for specific PFAS that clinicians can compare to concentrations measured in blood samples. As a result, interpretation of measured PFAS concentrations in individuals is limited in its use.

Table 1. Private laboratories that can measure various PFAS compounds in human serum samples

Lab Name	Contact Info	PFAS Measured	Cost	Other Information
Vista Analytical Laboratory	1104 Windfield Way El Dorado, CA 95762 916-673-1520	PFBA, PFPeS, PFPeA, PFHxS, PFHxA, PFHpS, PFHpA, PFOS, PFOA, PFDS, PFNA, 4:2 FTS, 6:2 FTS, 8:2 FTS, PFDA, PFUnA, PFDoS, PFOSA, PFTrDA, MeFOSAA, PFTeDA, EtFOSAA, PFBS	Approximately \$850 for single individual	Volume discount can apply if multiple specimens
Quest Diagnostics	1-866-697-8378	PFBS (as the linear isomer) PFHpA (as the linear isomer) PFHxS (as the linear isomer) PFNA (as the linear isomer) PFOS (as the linear isomer) PFOA (as the linear isomer)	\$657	No minimum samples, physician can order. The tests are sent out to NMS labs for analysis.
NMS Labs	1-866-522-2206 200 Welsh Road Horsham, PA 19044-2208 Phone: (215) 657-4900 Fax: (215) 657-2972 e-mail: nms@nmslabs.com	PFBS (as the linear isomer) PFHpA (as the linear isomer) PFHxS (as the linear isomer) PFNA (as the linear isomer) PFOS (as the linear isomer) PFOA (as the linear isomer)	\$617	No minimum samples. Physician can order.
SGS AXYS	1-888-373-0881 https://sgsaxys.com Contact: Donald G. Patterson Jr., Ph. D Environment, Health and Safety Business Development Manager Cell: 1-770-367-4931 Email: Donald.patterson@sgsaxys.com Field Office: 715 Antrim Glen Road Hoschton, GA 30548	PFBA , PFDS, PFPeA, PFDoS, PFHxA, PFHpA, PFOA, 4:2 FTS, 6:2 FTS, 8:2 FTS, PFNA, PFOSA, PFDA, MeFOSAA, PFUnA, EtFOSAA, PFDoS, N-MeFOSA, PFTrDA, N-EtFOSA, PFTeDA, N-MeFOSE, PFBS, N-EtFOSE, PFPeS, HPFO-DA, PFHxS, ADONA, PFHpS, PFOS, PFNS, 9CI-PF3ONS, 11CI-PF3OUdS	Minimum batch size of 8 samples is \$455. The cost is dependent on how many samples.	SGS runs batches of samples, individual physicians can submit minimum of 8 samples. SGS can measure 33PFAS in 0.5 mL of serum.

Table 2. PFAS names and abbreviations

Acronym	Name
PFBA	Perfluorobutanoic acid
PFBS	Perfluorobutane sulfonic acid
PFPeA	Perfluoropentanoic acid
PFPeS	Perfluoropentane sulfonic acid
PFHxA	Perfluorohexanoic acid
PFHxS	Perfluorohexane sulfonic acid
PFHpA	Perfluoroheptanoic acid
PFHpS	Perfluoroheptane sulfonic acid
PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonic acid
PFNA	Perfluorononanoic acid
PFNS	Perfluorononane sulfonic acid
PFDA	Perfluorodecanoic acid
PFDS	Perfluorodecane sulfonic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFDoS	Perfluorododecane sulfonic acid

PFT _r DA	Perfluorotridecanoic acid
PFT _e DA	Perfluorotetradecanoic acid
MeFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid
EtFOSAA	N-Methylperfluorooctanesulfonamidoacetic acid
PFOSA	Perfluorooctanesulfonamide
N-MeFOSA	N-Methylperfluorooctanesulfonamide
N-EtFOSA	N-Ethylperfluorooctanesulfonamide
N-MeFOSE	N-Methylperfluorooctanesulfonamidoethanol
N-EtFOSE	N-Ethylperfluorooctanesulfonamidoethanol
HFPO-DA (GenX)	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propanoic acid
ADONA	4,8-dioxa-3h-perfluorononanoic acid
9CI-PF3ONS	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid
11CI-PF3OUdS	11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid
4:2 FTS	4:2 fluorotelomersulfonate
6:2 FTS	6:2 fluorotelomersulfonate
8:2 FTS	8:2 fluorotelomersulfonate