



# PFAS Chemical Test

## Who Will Benefit from the PFAS Chemical Test?

The PFAS Chemical Test monitors exposure to perfluoroalkyl and polyfluoroalkyl chemicals, commonly called 'PFAS.' PFAS are used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. PFAS are found in the air, soil, and water, and in everyday consumer goods, including:

- Clothing
- Furniture
- Adhesives
- Electrical wires insulation
- Heat-resistant non-stick cooking surfaces
- Food packaging and foods
- Drinking water.

**PFAS chemicals persist in the environment and can migrate in air, soil, and water, and bioaccumulate (build up) in fish, animals, wildlife, and humans.**

The Agency for Toxic Substances and Disease Registry and the National Health and Nutrition Examination Survey (NHANES) monitor and conduct exposure assessments of PFAS chemicals in urine and blood samples to identify American's exposure to PFAS. One NHANES biomonitoring study found PFAS in 97% of samples from American adults and adolescents, while another detected PFAS in 60% of children age 3-11 years old. It is unknown what is a 'safe' level of PFAS exposure, and research is ongoing on the short- and long-term harms to humans from PFAS exposure.

As Americans of all ages and stages of the lifecycle are exposed to the harms of PFAS, many may benefit from monitoring their exposure to PFAS. This includes those who live in areas with known PFAS contamination or who may be exposed to PFAS through work.

## What are the Harms of PFAS Exposure?

- Altered risk of asthma, allergies, and altered antibody response to infections and vaccines
- Puberty timing, sex hormones, and thyroid hormones changes
- Diabetes risk
- Changes in body weight, size, and growth
- Increased risk of kidney disease
- Bone mineral content and density changes
- Changes in cardiac event risk
- Increased risk of kidney, testicular, pancreatic, breast, and other types of cancers
- Skin irritation and sensitization
- Increased inflammation and oxidative stress
- Changes in DNA methylation
- Increased cell toxicity and cell mortality

## Why is This Test Important?

- Exposure to PFAS is constant in modern society. PFAS bioaccumulation (build up) can increase the risk of long-term harms.
- Toxins can bioaccumulate and persist in the body for decades, breaking down slowly or not at all. Toxic build-up can impair detoxification, compromise immunity, and increase oxidative stress.
- Testing for PFAS can reveal the status of toxic metabolites in the body.
- The PFAS Chemical Test will aid in identifying toxicity from environmental sources.
- Knowing your PFAS exposure level is the first step to reducing toxic risk and creating a personalized detox and wellness plan to achieve better health.

## The Vibrant Wellness Advantage

- **Simple testing with robust results.** Perform the PFAS Chemical Test in the comfort of your home.
- **Unparalleled specificity and sensitivity.** The Vibrant Wellness PFAS Chemical Test is performed using liquid chromatography-mass spectrometry (LC-MS). LC-MS methods enable analysis and identification of PFAS chemical analytes in a highly reproducible bioanalytical assay with high throughput and sensitivity. Our LC-MS technology detects 21 PFAS chemicals that reflect exposure to the most common PFAS.
- **Validated and accredited.** Science-backed testing and analysis based on rigorous, ongoing research by clinical experts.

## What to Expect from the Test

1. Follow our simple instructions to perform this urine test at home.
2. Before testing: No need to fast. Your provider may ask you to adjust medications or dietary supplements. Speak with your wellness provider to learn more.
3. Send the test to our labs for analysis and work with your care provider to understand the results.

## About Vibrant Wellness

**Vibrant Wellness** is a leading CLIA-certified and CAP-accredited biotech company based in San Carlos, CA. We deliver life-transforming lab testing that enables health and wellness providers to discover the root of patient health issues.

We're at the forefront of modern medicine and research, providing personalized health analytics using cutting-edge, high-quality technology. We believe that anyone can achieve better health and vibrant longevity through individualized solutions based on testing—not guessing.

### References:

- Agency for Toxic Substances and Disease Registry. (2022, September 22). *PFAS exposure assessments*. Retrieved from <https://www.atsdr.cdc.gov/pfas/activities/assessments.html>
- Centers for Disease Control and Prevention. (2022, May 2). *Per- and polyfluorinated substances (PFAS) fact sheet*. Retrieved from [https://www.cdc.gov/biomonitoring/PFAS\\_FactSheet.html](https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html)
- Lewis, R. C., Johns, L. E., & Meeker, J. D. (2015). Serum Biomarkers of Exposure to Perfluoroalkyl Substances in Relation to Serum Testosterone and Measures of Thyroid Function among Adults and Adolescents from NHANES 2011-2012. *International Journal of Environmental Research and Public Health*, 12(6), 6098–6114. <https://doi.org/10.3390/ijerph120606098>
- National Academies of Sciences. (2022, July 28). *Report calls for expanded PFAS testing for people with history or elevated exposure, offers advice for clinical treatment*. Retrieved from <https://www.nationalacademies.org/news/2022/07/new-report-calls-for-expanded-pfas-testing-for-people-with-history-of-elevated-exposure-offers-advice-for-clinical-treatment>
- PFAS-TOX Database. (No date). *Health outcomes*. Retrieved from <https://pfastoxdatabase.org/>
- Ye, X., Kato, K., Wong, L. Y., Jia, T., Kalathil, A., Latremouille, J., & Calafat, A. M. (2018). Per- and polyfluoroalkyl substances in sera from children 3 to 11 years of age participating in the National Health and Nutrition Examination Survey 2013-2014. *International Journal of Hygiene and Environmental Health*, 221(1), 9–16. <https://doi.org/10.1016/j.ijheh.2017.09.011>

### Regulatory Statement

The general wellness test intended uses relate to sustaining or offering general improvement to functions associated with a general state of health while making reference to diseases or conditions. This test has been laboratory developed and its performance characteristics determined by Vibrant America LLC and Vibrant Genomics, a CLIA-certified and CAP-accredited laboratory performing the test. The PFAS Chemical Test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). Although FDA does not currently clear or approve laboratory-developed tests in the U.S., certification of the laboratory is required under CLIA to ensure the quality and validity of the tests.