

Forever Chemicals

A validated test for measuring PFAS

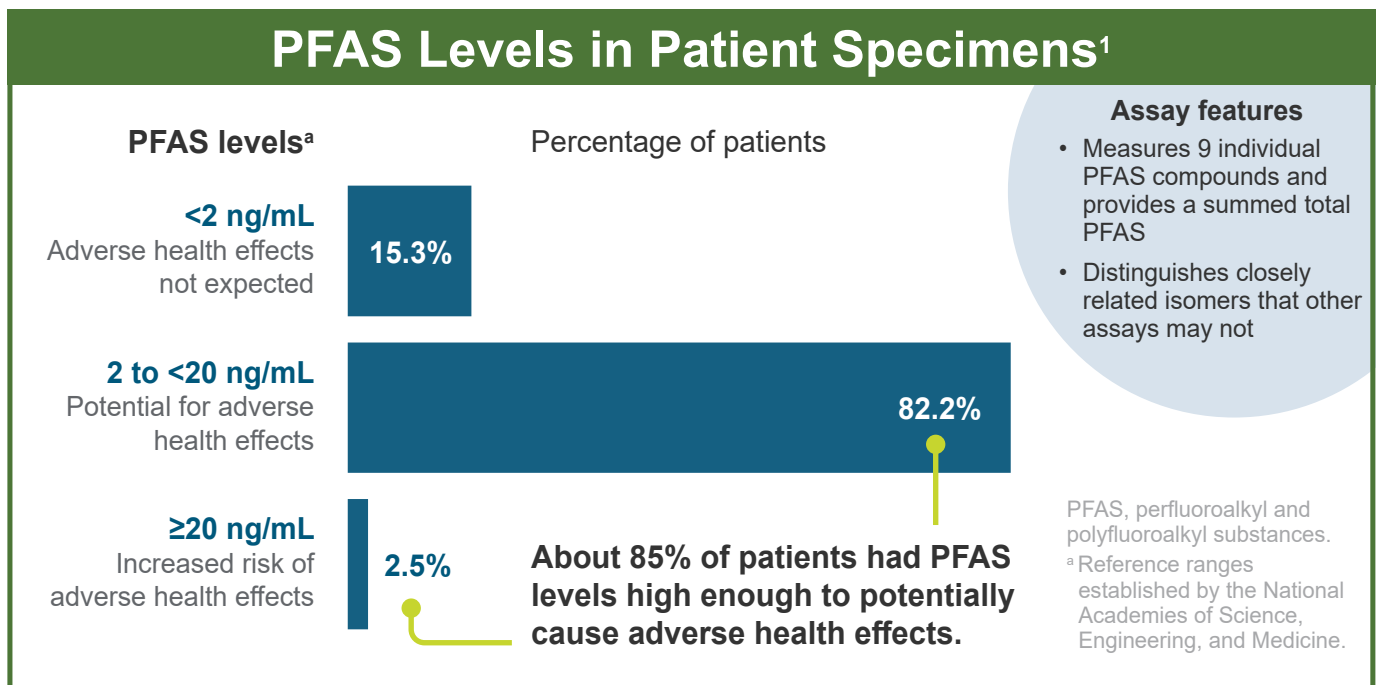
? What do the results of a recently developed test for PFAS levels in humans reveal about levels in the overall population?

Background

Elevated PFAS (per- and polyfluoroalkyl substances) exposure in humans is associated with many health problems, including cancer and pregnancy complications. Public health organizations (eg, CDC) support or encourage more testing. The findings of a recently developed and validated test to detect PFAS in human serum/plasma specimens are reported.

Methods and Results

Donor and remnant specimens (n=1,023) from a large US clinical diagnostics laboratory were used in this validation study of a liquid chromatography-tandem mass spectrometry (LC-MS/MS) method for the measurement of PFAS and PFAS isomers.



→ An LC-MS/MS method for measuring PFAS in human specimens was developed and validated; results indicate a substantial percentage of study patients have potentially adverse levels of PFAS. This method may provide clinical utility in addressing global PFAS challenges.

1. Dui W, Smith MP, Bartock SH. Development, validation, and clinical assessment of a liquid chromatography-tandem mass spectrometry serum assay for per- and polyfluoroalkyl substances (PFAS) recommended by the National Academies of Science, Engineering, and Medicine (NASEM). *Anal Bioanal Chem*. Published September 13, 2024. doi:10.1007/s00216-024-05519-y

For more information about Quest Diagnostics publications, please visit the [Clinical Education Center](#).