Dear Medical Advisor,

The following information provides a cursory introduction to Per- and Polyfluoroalkyl Substances (PFAS, sometimes known as PFCs).

PFAS are man-made substances that are chemically and biologically persistent in the environment. Data from a comprehensive NHANES study concluded that 98% of the U.S. population may have PFAS in their blood. Current data from that study may be found here: https://www.cdc.gov/exposurereport/pdf/FourthReport_UpdatedTables_Volume2_Mar2021-508.pdf.

Why test? Due to widespread usage in consumer products, textiles (PFAS are used in the manufacture of some flame-retardant clothing, including the turnout gear worn by firefighters) and fire-fighting foams (AFFF), Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) are ubiquitous in the environment. PFAS have been detected in some drinking water sources and in the vegetation and fish we eat, as well as in cow's milk. Fire suppression foams, while serving an important need, are a global source of PFAS releases and can have a tremendous impact to our environment and our lives.

With the research done to date, many PFAS have been shown to bio-accumulate and bio-magnify. Once the source is eliminated, the half-life of these chemicals in the human body is days to years, depending upon the analyte. Toxicological data is limited but an active area of research.

Vista Analytical Laboratory (Vista) first developed a method for measuring PFOS in human serum in 2007, for an industrial client. Our analytical methods are accredited by the National Environmental Laboratory Accreditation Program (NELAP) for the analysis of environmental samples, including tissue. Because we are not a clinical laboratory and our data are not used for diagnostic purposes, Vista is not eligible for certification by CMS/CLIA.

PFOA and PFOS are commonly requested because they are the only PFAS with Drinking Water Lifetime Health Advisory values from EPA. However, Vista can quantify up to 35 different PFAS in serum currently. This list can be provided to you upon request.

If we may be of assistance, please contact our laboratory at (916) 673-1520 or via email at serum@vista-analytical.com for additional information regarding appropriate specimen collection, serum fraction preparation, preservation and shipping, as well as reporting options.