CLINICIANS FAQ



1. What signs or symptoms should I look for?

There is evidence linking certain PFAS (e.g., PFOA and PFOS) to adverse health effects in humans, with more evidence for some effects than for others.

Potential health effects include:



Certain types of cancers



High cholesterol



Impaired hormonal and immune systems



Altered kidney and liver function



Impacts on pregnancy and the development of infants and fetuses, including preeclampsia, low birth weight, and preterm birth

For more information, see the University of Michigan Lifestage Environmental Exposures and Disease Center's infographic presenting some of the potential PFAS health effects.

2. How can I link a patient's illness to PFAS exposure? And how do I treat it?

Almost all people in the U.S. have a measurable amount of PFAS in their blood.

There are currently no medical interventions that will remove PFAS from the human body, but identifying sources of PFAS and preventing known exposures may help to lower risks.



Since multiple environmental and biological factors can contribute to these health effects, there is no way to know if PFAS exposure is the sole cause of a given illness. It is important to consider a patient's medical history and

results from routine health screenings when making a diagnosis. Blood tests will show the level of PFAS in the blood; however, this may not necessarily be predictive of future health concerns.

Almost all people in the U.S. have a measurable amount of PFAS in their blood. The health impacts associated with PFAS may have different causes, so it is difficult to link current health issues directly to PFAS exposure.

There are currently no medical interventions that will remove PFAS from the human body, but identifying sources of PFAS and preventing known exposures may help to lower risks. You should investigate other causes







of symptoms as well and treat the symptoms as needed. If possible, patients should try to mitigate exposure, especially if PFAS are detected above the state's advisory or regulatory levels.

For more information, see Agency for Toxic Substances and Disease Registry's (ATSDR's) Guidance for Clinicians.

3. How do I test for PFAS exposure?

There is currently no established PFAS blood level that clearly links PFAS to health problems.

PFAS exposure can be determined through blood testing. However, it is important for patients to know that <u>blood</u> testing does not provide a clinical diagnosis or definitively say if a patient's health has been or will be affected. Test results indicate the level of PFAS in patients' blood at the time of testing, which can then be compared to the relative blood levels of other groups.

If patients request biomonitoring, make sure they understand what the results mean. There is currently no established PFAS blood level that clearly links PFAS to health problems. In select areas where a definitive source of PFAS has been identified, biomonitoring may be offered to certain communities by the state. If you are in one of these areas, please check your state health or environmental agency website or contact the agencies or other professionals for more details.

4. How can I address patients' concerns about uncertainty?

In addition to addressing knowledge gaps, it is important to keep in mind that patients may also need <u>support</u> with coping and accepting uncertainty, both emotional and physical (e.g., using an alternate water source when it is required, exhibiting or not having symptoms from exposure, or lacking resources for limiting exposure).

For more on these practical principles, see the journal article "Navigating the Unknown: Shared Decision-Making in the Face of Uncertainty."

It is important to take an empathetic approach and apply principles of honesty, openness to emotions, hope, referral coordination, willingness to revisit patient concerns, respect for personal decisions, willingness to help clarify goals, and acceptance of indecision. You may direct patients to ATSDR's <u>factsheet</u> on coping with the stress that environmental contamination can cause.

It is also important to emphasize that in some cases, reducing future exposures can be accomplished through lifestyle changes. This may include using an alternate water source for patients who have known contaminated drinking water, using consumer products that are not known to contain PFAS, and avoiding eating contaminated fish. For more tips, visit ATSDR's PFAS Exposure resources.





