

Although there are currently thousands of per- and polyfluoroalkyl substances (PFAS) compounds in use, the U.S. Environmental Protection Agency (EPA) has prioritized research on a small number of these substances that may have health effects at very low concentrations. PFOA and PFOS are two PFAS compounds believed to have adverse health effects at very low concentrations.

On June 15, 2022, the EPA issued interim, updated Health Advisories (HAs) for PFOA and PFOS to provide technical information that federal, state, and local agencies can use to inform actions to address these PFAS in drinking water, including water quality monitoring; optimization of existing technologies that reduce PFAS; and strategies to reduce exposure.

The PFOA and PFOS HAs are to be applied to sampling conducted after June 15, 2022, and they are not applicable to wastewater results. They are intended to be in place during the time between an initial understanding of health effects and publication of the final health advisory or maximum contaminant level goal (MCLG) and a Maximum Contaminant Level (MCL).

As of June 15, 2022, the EPA's interim Health Advisory for PFOA is four (4) parts per quadrillion; it is twenty (20) parts per quadrillion for PFOS. These health advisory levels are challenging for water providers to work with because they are below the current reliable detection abilities of scientific equipment. The error rates for parts per quadrillion testing can be as high as 50%.

EPA's interim health advisories identify levels to protect all people, including sensitive populations and life stages, from adverse health effects resulting from a lifetime of exposure to PFOA and PFOS in drinking water.

When describing what a Health Advisory is, it is important to state what it is not. An HA is not an enforceable drinking water standard a water provider must meet by law, and the EPA clearly states health advisories are informational, non-enforceable, and non-regulatory.

A "lifetime health advisory" does not denote that a person's health is immediately at risk if they consume drinking water containing PFAS at the HA level. The EPA has stated a health advisory equals the level where an adult would have a trace elevated risk of cancer if they consumed two liters of drinking water a day over the course of a lifetime. It does recommend states, Tribes, territories, and drinking water utilities that detect PFOA and PFOS take steps to reduce exposure.

Because they are not drinking water standards, interim health advisories are typically lower than Maximum Contaminant Levels (MCLs). MCLs are drinking water standards that represent the maximum level allowed of a contaminant in water that is delivered to any user of a public water system. They are protective of public health while taking into account factors such as detectability and treatability, as well as the cost of the treatment required to meet the standards.