HEALTH GUIDELINES FOR PFAS IN DRINKING WATER

1 ppt = 1 nanogram/liter (ng/l)
1 ppb = 1 microgram/liter (µg/l)

Contaminant	EPA Health Advisory	WI Department of Health Services Safety Standard	
		individual	combined
Perfluorooctane sulfonate (PFOS)	0.02 ppt *	20 ppt 0.02 ppb	20 ppt 0.02 ppb
Perfluorooctanoic acid (PFOA)	0.004 ppt *	20 ppt 0.02 ppb	
Perfluorooctane sulfonamide (FOSA)	not yet established	20 ppt 0.02 ppb	
N-Ethyl perfluorooctane sulfonamidoethanol (NEtFOSE)	not yet established	20 ppt 0.02 ppb	
N-Ethyl perfluorooctane sulfonamide (NEtFOSA)	not yet established	20 ppt 0.02 ppb	
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	not yet established	20 ppt 0.02 ppb	
Perfluorobutanesulfonic acid (PFBS)	2,000 ppt *	450,000 ppt 450 ppb	
Hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX)	10 ppt *	300 ppt 0.3 ppb	
Perfluorobutanoic acid (PFBA)	not yet established	10,000 ppt 10 ppb	
Perfluorotetradecanoic acid (PFTeA)	not yet established	10,000 ppt 10 ppb	
Perfluorohexanoic acid (PFHxA)	not yet established	150,000 ppt 150 ppb	
Perfluorononanoic acid (PFNA)	not yet established	30 ppt 0.03 ppb	
Perfluorodecanoic acid (PFDA)	not yet established *	300 ppt 0.3 ppb	
Perfluoroundecanoic acid (PFUnA)	not yet established	3,000 ppt 3 ppb	
Perfluorohexanesulfonic acid (PFHxS)	not yet established	40 ppt 0.04 ppb	
Perfluorododecanoic acid (PFDoA)	not yet established	500 ppt 0.5 ppb	
Perfluorooctadecanoic acid (PFODA)	not yet established	400,000 ppt 400 ppb	
4,8-Dioxa-3H-perfluorononanoic acid (DONA)	not yet established	3,000 ppt 3 ppb	

* In June 2022, the US EPA announced updated health advisory levels for PFOA, PFOS, GenX chemicals, and PFBS. Based on the new data and EPA's draft analyses, the levels at which negative health effects could occur are much lower than previously understood. Learn more here.

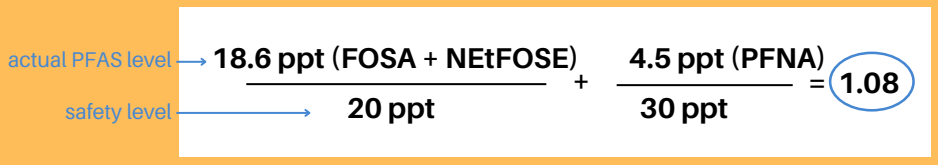
THE HAZARD INDEX

The hazard index is a tool designed to evaluate the health risk from exposure to multiple chemicals of concern that have similar adverse health effects.

The hazard index approach is used or recommended across the country by expert agencies and organizations, including the Agency for Toxic Substances and Disease Registry and the U.S. Environmental Protection Agency.

The Wisconsin Department of Health Services recommends using this approach to evaluate health risks from PFAS. The hazard index is particularly important when test results show levels of concentration for multiple PFAS that are below the individual or combined safety guidelines.

The hazard index is calculated by comparing the levels of each PFAS compound in drinking water to an available health guideline. For example:



If the Hazard Index is 1 or greater, your water utility should take action.

Note that both the combined FOSA and NEtFOSE level of 18.6 ppt and the individual PFNA level of 4.5 ppt are below DHS Safety Levels. When considering both values using the hazard index approach, however, it is clear that the health risk of exposure warrants action to protect public health.