

WHAT ARE PFAS? Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a group of human-made chemicals first introduced in the 1940s that have been used in industry and consumer products worldwide because they resist heat, oil, stains, grease, and water. PFAS are often called “forever chemicals” because they are not easily broken down or removed. There are thousands of different PFAS, some of which have been more widely used and studied than others. PFOA, PFOS, PFNA, PFHxS, GenX (HFPO-DA), and PFBS are some of the most studied and are the subject of new regulations.

HOW ARE THEY USED? PFAS are used in industrial, commercial, and consumer products, including firefighting foam. PFAS are primarily utilized to make products water-repellent, stain-resistant, or nonstick. PFAS are used in consumer goods such as:

- Nonstick cookware
- Stain-resistant and water-repellant carpet, furniture, and clothing
- Nonstick food packaging, such as French fry cartons, popcorn bags, and pizza boxes
- Personal care products, such as shampoos, dental floss, and makeup
- Paints, varnishes, and sealants

WHAT ARE THE BIGGEST SOURCES OF EXPOSURE TO PFAS? Due to their common use, these chemicals can be present in the soil, air, and water, as well as in materials found in our homes or workplaces. The U.S. EPA estimates that food, dust, air, and consumer products account for 80% of a person’s exposure to PFAS, while 20% of a person’s total exposure to PFAS comes from drinking water.

HOW CAN I LIMIT MY EXPOSURE TO PFAS? It is almost impossible to completely avoid PFAS because they are so commonly used and present in many consumer products. You can reduce your exposure by researching the products you use to determine whether they contain PFAS, then limit the use of those products. You can also help by contacting legislators and encourage them to ban the use of these chemicals, and by contacting product manufacturers to ask them to discontinue their use of PFAS.

ARE PFAS HARMFUL? According to the Ohio Department of Health, current scientific research suggests exposure to PFAS may cause health effects, but exposure to PFAS does not always mean a person will have health effects. Risk is dependent on three factors: duration of exposure, frequency of exposure, and how much PFAS a person was exposed (dose). Research continues into how different levels of exposure to different PFAS can affect our health; for more information, see the Ohio Department of Health’s PFAS fact sheets on their [website](#). Regulatory values set by U.S. EPA are typically based on a lifetime’s worth of exposure and are conservative to protect against health effects for the most sensitive populations.

HOW DO PFAS GET INTO DRINKING WATER? Because they are incorporated into thousands of industrial and consumer products, PFAS chemicals are released into the environment during the ordinary use and disposal of those products. Additionally, PFAS can enter soil, groundwater, and surface water near places where these chemicals were manufactured or utilized for industrial purposes. Two primary sources of the water we drink are surface water - such as rivers, lakes, and streams - and groundwater, often from wells. This water is then treated to remove many contaminants; however, PFAS are not easily broken down or removed – so if the water is not treated by advanced methods, the chemicals may pass through into drinking water.

HOW ARE PFAS REMOVED FROM DRINKING WATER? Current treatment methods to remove PFAS include activated carbon, ion exchange, or high-pressure membranes (nanofiltration, or reverse osmosis), but removing even low levels of PFAS can be difficult and very expensive. Because of the cost and complexity to remove them, [it is essential to ensure our sources of the water we treat are not contaminated by PFAS](#).

WHAT ARE THE NEW FEDERAL STANDARDS FOR PFAS IN DRINKING WATER? On April 10, 2024, U.S. EPA finalized the National Primary Drinking Water Standards for 6 PFAS compounds. Within this

rule, they established maximum contaminant levels (MCL) for 5 compounds – PFOS, PFOA, PFHxS, PFNA, and GenX – plus a hazard index for certain combined PFAS compounds. The Columbus Department of Public Utilities (CDPU) is currently reviewing these requirements to ensure we will meet all standards. Additional information about the new standards can be found at [U.S. EPA's website](#).

WHAT DO THE NEW PFAS MCL NUMBERS MEAN? PFAS compounds are regulated as chronic contaminants, meaning the MCLs set by U.S. EPA are typically based on a lifetime's worth of exposure and are conservative to protect the most sensitive populations. MCLs are set as close as possible to the value in which no health effects will occur, while accounting for economic feasibility (cost of treatment), and quantitation limits (the ability to measure the compound). For most chronic contaminants, a consumer would need to drink 2 liters of water above the MCL every day over the course of their entire lifetime to significantly increase their chance of developing health effects from the compound. Because of this, compliance with the MCL is based on an average of the most recent samples, and not on a single sampling event. In some instances, single samples may slightly exceed the MCL, but because of how the MCL is designed, this does not always pose an immediate health threat. Once the rule is effective, CDPU will calculate an average of the most recent 4 quarters after each sampling event to determine compliance with the rule, known as a running annual average. If the running annual average is below the MCL, we are in compliance with the rule. Visit U.S. EPA's website [How EPA Regulates Drinking Water Contaminants](#) for more information on how MCLs are established.

WHEN WILL CDPU BEGIN TESTING FOR PFAS? CDPU began monitoring its finished (tap) water this year as part of the 5th round of the Unregulated Contaminant Monitoring Rule (UCMR5). Current results indicate that we will be in compliance with the new standards. Additional monitoring will take place in May, August, and November of this year. CDPU has also been monitoring for PFAS in its source waters for several years to evaluate if treatment may be needed in the future. CDPU prides itself on being protective of public health; should sampling results indicate we will not be in compliance with the federal standards, we will install additional treatment methods to ensure we meet them.

WILL THIS ADDITIONAL REGULATION CAUSE MY WATER BILL TO INCREASE? The most cost-effective way to eliminate PFAS in our drinking water is to eliminate the sources that contaminate our water supply. The City of Columbus does not use or produce PFAS, but must remove it when our source waters are contaminated by manufacturing or industrial uses. Should the scenario arise that Columbus is out of compliance with the new MCL, CDPU will install and operate new treatment facilities, currently estimated to cost up to \$300 million, to ensure we are protecting public health. If this happens, CDPU will do everything possible to reduce the impact to our ratepayers – but rates may increase.

BOTTOM LINE, IS IT SAFE TO DRINK OUR WATER? We turn on the tap every day. We drink it. Our children drink it. And we want the public to know the water coming from their tap meets all federal and state standards. Simply put, we stand behind the water that we treat and distribute and are confident in our ability to proactively address evolving regulatory requirements for contaminants like PFAS.

WHERE CAN I LEARN MORE ABOUT PFAS?

- Columbus Department of Public Utilities: [Per- and Polyfluoroalkyl Substances \(PFAS\)](#)
- Ohio EPA: [PFAS in Drinking Water](#)
- U.S. EPA: [Per- and Polyfluoroalkyl Substances \(PFAS\)](#); [PFAS Strategic Roadmap](#)