

PFAS Frequently Asked Questions

Fall 2022



BACKGROUND

What are PFAS?

Per and polyfluoroalkyl substances (PFAS) are a group of persistent manmade chemicals that have been used since the 1940s. PFAS compounds are of concern because they don't degrade naturally in the environment. There are several thousand compounds that make up the family of substances known as PFAS.

What are PFAS used for?

PFAS are used in the production of a variety of commercial products and industrial applications that need to be resistant to heat, water, or oil. Commercial household products that contained PFAS include stain- and water-repellent fabrics, nonstick products (e.g., Teflon), paints, lubricants, cleaning products, dental floss, cosmetics, firefighting foams, food packaging, and oil recovery.

Where have PFAS been found?

Due to their widespread use and pervasive nature, PFAS are present in our everyday lives. They are detectable in the bloodstream of nearly all those tested during studies. Human exposure to PFAS is at lower levels and originates from consumer products

How did PFAS become a concern?

Although PFAS have been in use since the 1940s, it was only in the early 2000s that concerns about environmental and PFAS-associated human health impacts led U.S. manufacturers to voluntarily phase out production of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), which are two of the most common PFAS compounds.

Are PFOA and PFOS still being used?

Although PFOA and PFOS are no longer manufactured in the United States, other countries still produce them, and products that contain them may be imported. This fact, combined with the legacy impacts of decades of PFAS use, results in increased regulatory scrutiny of PFOA and PFOS.

HEALTH ISSUES

Who is exposed to PFAS?

According to the federal Centers for Disease Control and Prevention (CDC), nearly everyone has been exposed to PFAS. There are numerous human exposure pathways for PFAS, but most human exposure is at low levels. PFAS are part of the products we use. They have also been found in the food and water we consume, and the products we use.

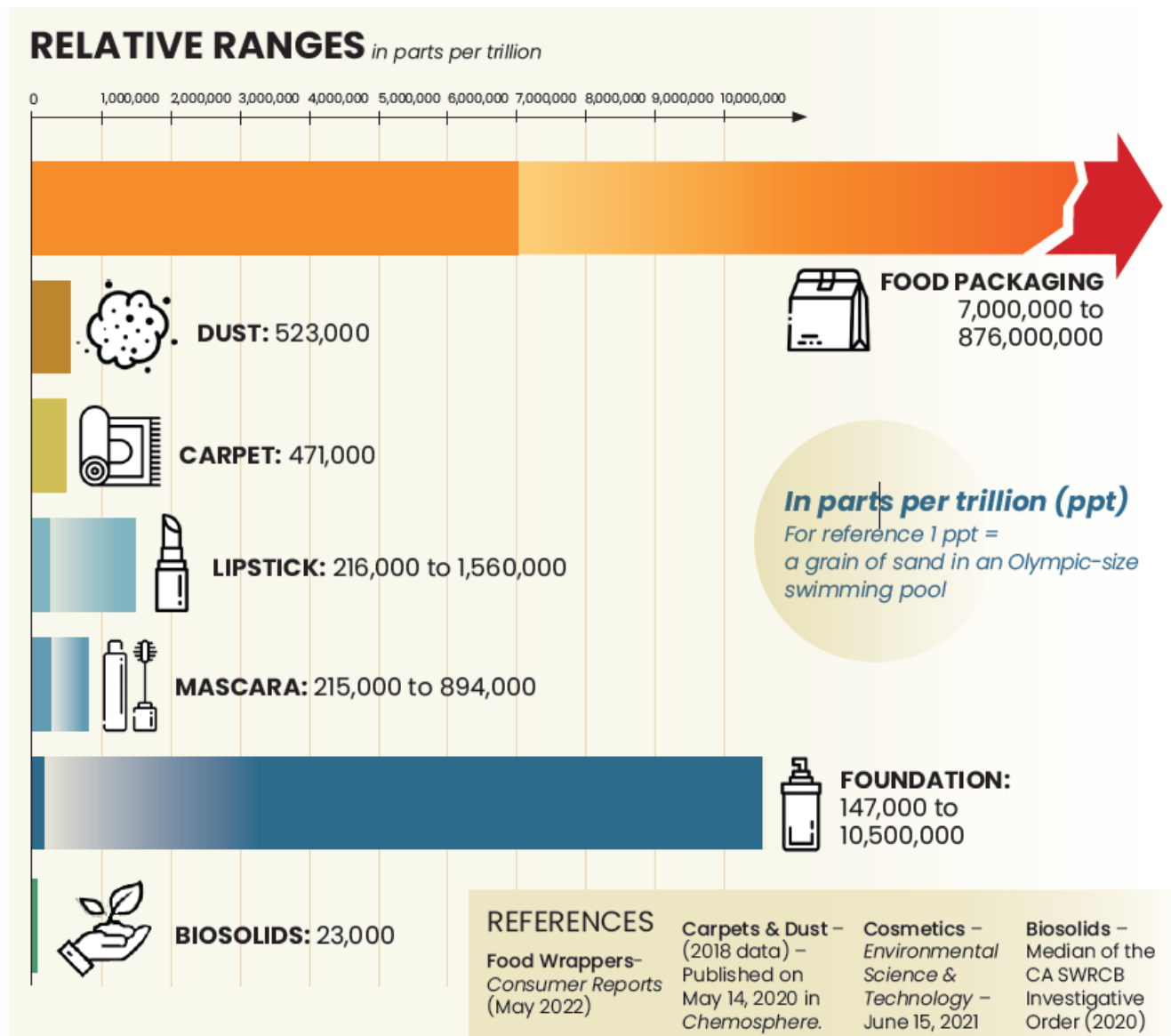
What are the health risks from PFAS?

There is evidence that higher exposures to certain PFAS may have health risks. According to the CDC, exposure to PFOA and PFOS over certain levels may cause adverse health effects, including effects to reproduction; immune system, thyroid, and liver effects; and cancer. Consumer products may contribute to the largest exposure to PFAS, but that risk is being reduced due to the phasing out of

PFOA and PFOS. PFAS in wastewater and biosolids typically reflect the lower background levels of PFAS in the environment.

PFAS Concentrations

For perspective, biosolids produced and removed from wastewater have relatively low concentrations of PFAS compared to other common household items. The chart below, developed by the California Association of Sanitation Agencies, demonstrates the relative concentrations of some common materials containing PFAS.



ADDRESSING PFAS

What has the government done to protect human health?

There are comprehensive efforts at the federal and state level to help prevent PFAS from being released into the air, drinking water systems, and food supply. Some of these efforts will expand cleanup efforts to remediate the impacts of these harmful pollutants.

What's the long-term solution?

Legislators, regulators, drinking water agencies, wastewater agencies, and others are working collaboratively to examine how to deal with PFAS in the environment and understand their potential human health impacts. The goal is to determine the most effective steps to reduce human exposure and protect public health through product manufacturer responsibility, as well as thorough cleanup and remediation at highly contaminated sites. The most urgent action should focus on the places where the levels of PFAS contamination are highest.

REGIONAL SAN'S ACTIONS

What has Regional San been doing about PFAS?

The Sacramento Regional County Sanitation District's (Regional San's) number one mission is to protect public health and the environment, and we take that responsibility very seriously. Regional San and numerous other wastewater utilities are committed to better understanding how PFAS may be entering wastewater treatment systems and impacting treated wastewater effluent, recycled water, and biosolids. We will continue to rely on sound, emerging science for guidance, and we are supporting further research.

Regional San is currently taking part in a multi-agency study being conducted by the Water Research Foundation to evaluate the PFAS issues that impact wastewater treatment plants. This study will help us better understand how much PFAS are present in our sewer system and how we compare with other wastewater utilities. Finally, we are members of several industry associations that are currently urging federal and state regulators to focus on stopping these chemicals at their source through appropriate controls on industrial and other uses—before they enter drinking water supplies, sewer systems, or the environment.

Regional San is working with regulators, technical experts, and our partners across the wastewater industry to better understand the issues that face wastewater utilities. We will advocate for regulatory actions that have the best chance to reduce PFAS contamination throughout our community and, more specifically, in the wastewater that flows into our treatment plant.

Additional Information

- United States EPA: www.epa.gov/pfas
- US Department of Food and Agriculture: www.fda.gov/food/chemicals/and-polyfluoroalkyl-substances-pfas
- California State Water Resources Control Board: [www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA PFOS](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS)
- California EPA Office of Health Hazard Assessment: <https://oehha.ca.gov/water/report/perfluorooctanoic-acid-pfoa-and-perfluorooctane-sulfonic-acid-pfos-drinking-water>
- California Association of Sanitation Agencies: [CASA PFAS Fact Sheet](#)
- National Association of Clean Water Agencies: [NACWA PFAS Fact Sheet](#)
- April 5, 2022 State Water Board Informational Item # 5 - Update on PFAS Statewide Investigation <https://www.youtube.com/watch?v=pGtg26tN4PM>