

PFOA

(Perfluorooctanoic Acid)

Why am I being warned about potential exposure to PFOA?



- PFOA is on the [Proposition 65](#) list because it can cause birth defects or other reproductive harm. Exposure to PFOA during pregnancy may affect the development of the child.
- PFOA is also on the Proposition 65 list because it can cause cancer. Exposure to this chemical may increase the risk of cancer.
- Proposition 65 requires businesses to determine if they must provide a warning about significant exposure to [listed chemicals](#).

What is PFOA?

- PFOA is a synthetic chemical used to make products resistant to stains, grease, soil, and water.
- PFOA is part of a class of chemicals called [per- and polyfluoroalkyl substances \(PFASs\)](#).

When and how has PFOA been used?

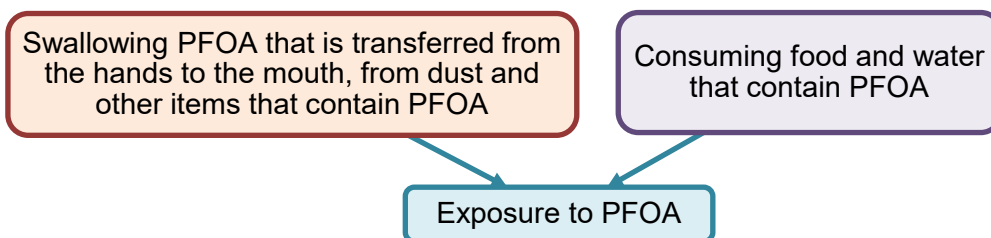
- Starting in the 1940s, PFOA was used in many consumer and industrial products, including carpets, rugs, upholstered furniture, and non-stick cookware. PFOA has also been present in some firefighting foams used at airports, firefighter training facilities, and military airfields.
- In 2006, as part of the [PFOA Stewardship Program](#) led by the US Environmental Protection Agency, eight major chemical companies committed to eliminating PFOA from products, and from emissions from their industrial facilities, by 2015.
- PFOA may still be present in some imported products.

Where can PFOA be found, and how does exposure occur?

- PFOA is widespread and persistent in the environment. Most people in California have [detectable levels of PFOA](#) in their blood.
- PFOA has been found in some [drinking water supplies](#) in California. PFOA can enter groundwater from multiple sources, including sewage treatment plants, industrial sites, landfills, and places where it is used in firefighting foam such as airports, firefighter training sites, and military installations.
- Fish and shellfish can take up [PFOA from water](#) contaminated with the chemical.
- PFOA can be released into the air and into food from some older non-stick cookware and some new imported non-stick cookware.

- Some older consumer products, including leather products, textiles, upholstered furniture, carpets, and rugs, can release PFOA into the air. PFOA then settles on floors and other surfaces, accumulating in dust.
- Some new imported consumer products, including leather products and stain- or water-resistant textiles, can contain PFOA and result in exposure to the chemical.

Some ways you can be exposed to PFOA:



- During pregnancy, PFOA can pass from mother to baby.
- Infants and young children can be exposed to higher levels of PFOA than adults. This is because they often crawl and play on the floor and on carpets, get dust on their hands, and then put their fingers, toys, and other objects in their mouths. Young children may also consume proportionally more PFOA in food, given their smaller body size.

How can I reduce my exposure to PFOA?

- ✓ Consider choosing non-stick cookware identified as PFOA- or PFAS-free.
 - ▶ If you use non-stick cookware that may contain PFASs, it is best to use low or medium heat. Avoid overheating these items.
- ✓ Minimize your exposure to dust, which can contain PFOA:
 - ▶ Wash your hands and your child's hands frequently, especially before preparing food and before eating.
 - ▶ Clean your floors regularly. If possible, use a wet mop or a vacuum cleaner with a high-efficiency particulate air (HEPA) filter.
 - ▶ Dust regularly, using a damp cloth.
- ✓ Contact your water supplier if you have questions or concerns about the possible presence of PFOA in your drinking water. Look for updates on California's efforts to monitor and report levels of [PFOA in drinking water supplies](#).

For more information:

General Fact Sheets and Resources

- US Environmental Protection Agency (US EPA)
 - ▶ Fact Sheet: 2010/2015 PFOA Stewardship Program
<https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program>
 - ▶ PFAS Explained
<https://www.epa.gov/pfas/basic-information-pfas>

- California Environmental Protection Agency (CalEPA)
California State Water Resources Control Board (SWRCB)
 - ▶ Welcome to the Water Boards' Per- and Polyfluoroalkyl Substances (PFAS) webpage
<https://www.waterboards.ca.gov/pfas/>
- Office of Environmental Health Hazard Assessment (OEHHA)
 - ▶ PFOS (Perfluorooctane Sulfonate or Perfluorooctane Sulfonic Acid)
<https://www.p65warnings.ca.gov/fact-sheets/perfluorooctane-sulfonate-pfos>

Scientific Information on PFOA

- US Environmental Protection Agency (US EPA)
 - ▶ Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)
https://www.epa.gov/sites/default/files/2016-05/documents/pfoa_health_advisory_final-plain.pdf
 - ▶ Health Effects Support Document for Perfluorooctanoic Acid (PFOA)
https://www.epa.gov/sites/default/files/2016-05/documents/pfoa_hesd_final-plain.pdf
- US Department of Health and Human Services (HHS)
National Toxicology Program (NTP)
 - ▶ Toxicology and Carcinogenesis Studies of Perfluorooctanoic Acid Administered in Feed to Sprague Dawley (Hsd:Sprague Dawley SD) Rats
<https://doi.org/10.22427/NTP-TR-598>
 - ▶ Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid (PFOA) or Perfluorooctane Sulfonate (PFOS)
<https://ntp.niehs.nih.gov/whatwestudy/assessments/noncancer/completed/pfoa/index.html>
- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - ▶ Notification Level Recommendations. Perfluorooctanoic Acid and Perfluorooctane Sulfonate in Drinking Water
<https://oehha.ca.gov/media/downloads/water/chemicals/nl/final-pfoa-pfosnl082119.pdf>
- California State Water Resources Control Board (SWRCB)
 - ▶ PFAS: Per- and Polyfluoroalkyl Substances
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html
- Biomonitoring California
 - ▶ Perfluoroalkyl and Polyfluoroalkyl Substances (PFASs)
<https://biomonitoring.ca.gov/chemicals/perfluoroalkyl-and-polyfluoroalkyl-substances-pfass>

Proposition 65

- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - ▶ Proposition 65: Background
<https://www.p65warnings.ca.gov/faq>
 - ▶ Proposition 65: The List of Chemicals
<https://www.p65warnings.ca.gov/chemicals>
 - ▶ Proposition 65: Fact Sheets
<https://www.p65warnings.ca.gov/fact-sheets>