Perfluorooctanoic Acid (PFOA)

Why am I being warned about potential exposure to perfluorooctanoic acid (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.
- Proposition 65 requires businesses to determine if they must provide a warning about exposures 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).
- PFOA is widespread and persistent in the environment, and can be found in groundwater and water supplies. The chemical builds up over time in humans and wildlife. Most people have detectable levels of PFOA in their blood.

When and how has PFOA been used?

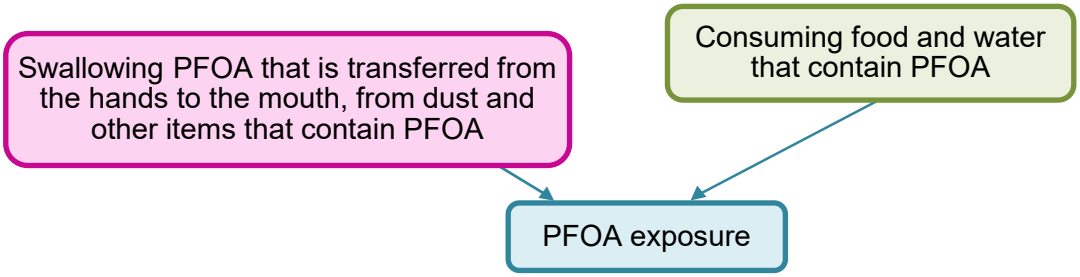
- Starting in the 1940s, PFOA was used in many consumer and industrial products, including carpets, rugs, upholstered furniture, and non-stick cookware. PFOA has also been present in some firefighting foams used at airports, firefighter training facilities, and military airfields.
- In 2006, as part 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 imported products.

How does exposure to PFOA occur?

- Fish and shellfish can take up PFOA from water contaminated with the chemical.
- PFOA can be found in some microwavable popcorn bags, where it can migrate into popcorn.
- PFOA can be released into the air and into food from some older non-stick cookware.
- Some consumer products, including some older carpets, rugs, and upholstered furniture, can release PFOA into the air. PFOA then settles on floors and other surfaces, accumulating in dust.
- Some imported consumer products, including non-stick cookware, and stain- or water-resistant textiles, can contain PFOA and result in exposure to the chemical.

- 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.
- PFOA has been found in drinking water supplies in various parts of the United States, including California. PFOA can enter groundwater from manufacturing and processing plants, or from airports, firefighter training sites, and military installations where it is used in firefighting foam. It can also enter water from PFOA-containing products in landfills.
- During pregnancy, PFOA can pass from mother to baby.

Main ways you can be exposed to PFOA:



How can I reduce my exposure to PFOA?

- ✓ Consider choosing non-stick cookware identified as PFOA- or PFAS-free.
  - If you use other types of non-stick cookware, including older items, it is best to use low or medium heat. Avoid overheating these items.
- ✓ When purchasing carpets, textiles, or outdoor gear, ask if the products contain PFOA or PFASs. Some manufacturers are eliminating these chemicals from their products, and may label their products as PFC-free. (PFC stands for perfluorinated chemicals, or perfluorocarbons, which are part of the larger class of PFASs.)
- ✓ If you consume prepackaged microwavable popcorn, look for popcorn bags identified as PFOA- or PFAS-free.
- ✓ Reduce your exposure to dust, which can contain PFOA:
  - Wash your hands and your child's hands frequently, especially before preparing food and 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)
  - Basic Information on PFAS
    https://www.epa.gov/pfas/basic-information-pfas
  - Fact Sheet: 2010/2015 PFOA Stewardship Program
    https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program
- California Environmental Protection Agency (CalEPA)
  California State Water Resources Control Board (SWRCB)
  - Per- and Polyfluoroalkyl Substances (PFAS)
    https://www.waterboards.ca.gov/pfas/

  Office of Environmental Health Hazard Assessment (OEHHA)
  - Perfluorooctane Sulfonate (PFOS)
    https://www.p65warnings.ca.gov/fact-sheets/perfluorooctane-sulfonate-pfos

Scientific Information on PFOA

- US Environmental Protection Agency (US EPA)
  - Technical Fact Sheet - Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA)
    https://www.epa.gov/sites/production/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf
  - Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)
    https://www.epa.gov/sites/production/files/2016-05/documents/pfoa_health_advisory_final-plain.pdf
  - Health Effects Support Document for Perfluorooctanoic Acid (PFOA)
    https://www.epa.gov/sites/production/files/2016-05/documents/pfoa_hesd_final-plain.pdf
- California Environmental Protection Agency (CalEPA)
  California State Water Resources Control Board (SWRCB)
  - Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS)
    https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/PFOA_PFOS.html
- Biomonitoring California
  - California Regional Exposure (CARE) Study
    https://biomonitoring.ca.gov/care

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