## Priority Classes of Chemicals of Significant Concern to Vulnerable Populations and Orcas

### Found In
- Wastewater Treatment Discharges
- Storm Water
- Sediments
- Fish and Wildlife
- Surface Water
- People
- Breastmilk
- House Dust

### Environmental Concerns
- PFAS (Poly- and perfluoroalkyl substances)
- Phthalates
- Organohalogen & Other Flame Retardants of Concern
- PCBs
- Alkylphenols (APEs)
- Bisphenols

### Human Health Effects
- Kidney and testicular cancer
- Thyroid disease
- Infertility
- Reproductive toxicity
- Early puberty
- Learning disabilities
- Thyroid disruption
- Lower IQ
- Hyperactivity
- Cancer

### Key Facts
- Persistence
- Mobility
- Immune Suppression
- Food web impacts
- Reproductive effects
- Hormone disruption
- Immune suppression
- Reproductive effects
- Food and wildlife
- Immune system effects
- Harm to brain development
- Reproductive effects
- Altered immune function
- Reproductive effects
- Hormone disruption
- Diabetes
- Learning issues
- Behavioral effects

### Uses
- Textiles and other products
- Food packaging
- Firefighting foams
- Personal care products
- Soft plastics
- Vinyl toys, flooring, and other products
- Foam products
- Furniture
- Children’s toys
- Indirectly produced in some dyes and inks
- Detected in packaging, paper products, and paints
- Personal care products including shampoo, lotions, and cosmetics
- Detergents, cleaning products
- Foams
- Plastics

### Nearly every person in the US has these industrial chemicals in their bodies.

1. Exposure to PFAS has been linked to immune suppression and die-offs in marine mammals.
2. Phthalates increased in Commencement Bay sediments despite years of cleanup.
3. Due to constant recontamination, phthalates increased in Commencement Bay sediments despite years of cleanup.
4. TCPP flame retardants are found in such high concentrations in wastewater treatment plant discharges, that loading to the Columbia River from a single treatment plant was estimated at up to 250 pounds per year.
5. Toddlers can have new generation flame retardants in their bodies at levels up to 5 times that in their mothers.
6. While levels of PBDE flame retardants have declined in some Puget Sound fish and wildlife, NOAA has expressed concern that newer chemicals will increase rapidly in the environment.
7. APEs have been found at some of the highest concentrations in wastewater treatment plant discharges, as well as in house dust.
8. BPA has been detected in Puget Sound fish, potentially contributing to feminization and reproductive problems.
Endnotes