



# Potential Priority Chemicals

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# Criteria for recommending priority chemicals (SB 1379)

- ▶ The degree of potential *exposure* to the public or specific subgroups
- ▶ The *likelihood of a chemical being a carcinogen or toxicant* based on peer-reviewed health data, the chemical structure, or the toxicology of chemically related compounds
- ▶ The *limits of laboratory detection* for the chemical, including the ability to detect the chemical at low enough levels that could be expected in the general population
- ▶ *Other criteria* that the panel may agree to

# Potential priority chemicals

- ▶ Polychlorinated biphenyls (PCBs)
  - Those that are already designated
- ▶ Benzophenone-3
  - 2-Hydroxy-4-methoxybenzophenone
  - CDC category: environmental phenol



# Polychlorinated biphenyls (PCBs)

- ▶ Current exposure primarily via diet (e.g., meat, fish, dairy)
- ▶ High levels in certain fish; fish advisories
- ▶ High levels in adipose tissue from Californians (1990s)
- ▶ Listed under Proposition 65 as causing cancer and developmental toxicity
- ▶ Endocrine disruption (e.g., thyroid)



# PCBs (cont.)

- ▶ Can be extracted with PBDEs from same sample
- ▶ Laboratory methods already implemented
- ▶ Biospecimens available from 1960s, 1980s and 2000s
- ▶ Point of reference for emerging persistent, bioaccumulative chemicals (e.g., PBDEs)



# Benzophenone-3

- ▶ Common sun-blocking ingredient in sunscreen, lotions, conditioners, and cosmetics
- ▶ UV stabilizer in plastic surface coatings including food packaging
- ▶ Likely high use of sunscreens in California
- ▶ Suspected endocrine disruptor

# Benzophenone-3 (cont.)

- ▶ State lab has not yet developed methods
- ▶ Analysis can be bundled with Bisphenol A and other phenols

Chemical name	Lab	Biospecimen	Timeline for lab capability	Found in humans?	Reference
<b>Benzophenone-3</b>	CDPH	Urine	Not yet developed	Yes	CDC 4 <sup>th</sup> Report
<b>Polychlorinated biphenyls (already designated)</b>	DTSC	Blood	Now	Yes	CDC 4 <sup>th</sup> Report