

# PCBs and Human Health

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# Why Be Concerned About PCBs?

- PCBs, at environmentally relevant concentrations can:
  - Impair reproduction
  - Cause neurobehavioral and developmental deficits
  - Impair immune system and thyroid function (other systemic effects)
  - Increase cancer risk

# Reference Dose (Aroclor 1254)

- EPA RfD (0.00002 mg/kg/day)
  - Based on immunological alterations in monkeys
- ATSDR has intermediate MRL (0.00003 mg/kg/day)
  - Based on neurobehavioral changes in monkeys dosed from birth

# Developing Fetuses and Infants Are Most at Risk

- Bioconcentration
- Model estimates that infant average daily dose via breast milk is 20-50 times mothers lifetime average daily dose
- Neurobehavioral deficits persist for as long as they've been tracked