



# Flame Retardants

## Why am I being warned about potential exposure to flame retardants?



- Certain flame retardants are on the [Proposition 65](#) list because they can cause cancer. Exposure to these chemicals 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 are flame retardants?

- Flame retardants are chemicals used in a variety of consumer products to reduce their flammability.

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## What flame retardants am I being warned about?

- A number of chemicals that have been used either as flame retardants, or to enhance the flame-retardant properties of other chemicals, are on the Proposition 65 list.
- Some common flame retardant chemicals are on the Proposition 65 list because they can cause cancer:
  - ▶ [Antimony trioxide](#).
  - ▶ [Chlorinated tris](#) [tris(1,3-dichloro-2-propyl)phosphate, TDCPP, and TDCIPP].
  - ▶ [Pentabromodiphenyl ether \(PentaBDE\) mixture \[DE-71 \(technical grade\)\]](#).
  - ▶ [Tetrabromobisphenol A \(TBBPA\)](#).
  - ▶ [Tris\(2-chloroethyl\) phosphate \(TCEP\)](#).

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## What types of products may contain these Proposition 65-listed flame retardants?

- These chemicals may be found in some products made with polyurethane foams, textiles, and plastics, including some:
  - ▶ Upholstered furniture, mattresses, carpet, and carpet padding.
  - ▶ Interior features of motor vehicles, including seats.
  - ▶ Electrical and electronic products.
  - ▶ Building insulation.
  - ▶ Camping tents and gymnastics equipment.

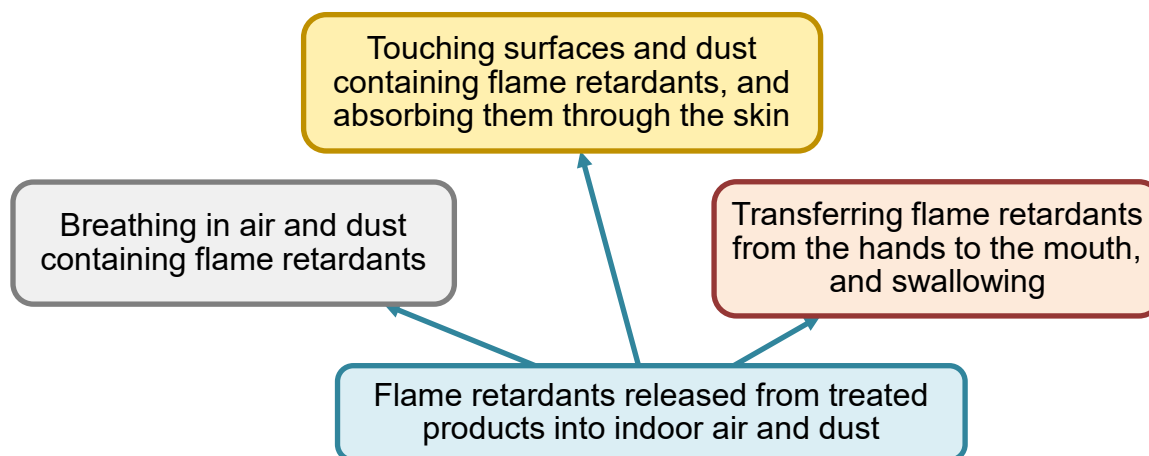
- California regulates flame retardant use.
  - ▶ As of January 2020, [California has banned](#) the sale and distribution of new upholstered furniture, replacement components of reupholstered furniture, foam in mattresses, and certain children's products made for residential use if these products contain more than 0.1% of certain chemicals used for flame retardant purposes, including antimony trioxide, chlorinated tris, TBBPA, and TCEP.
  - ▶ In 2006, California banned the manufacture, processing, or sale of products with more than 0.1% of PentaBDE.

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### How does exposure to these Proposition 65-listed flame retardants occur?

- These chemicals can be inhaled, ingested, or absorbed through the skin. They may, for example:
  - ▶ Be gradually released from treated products into indoor environments such as houses, schools, day care centers, offices, and cars, where they settle on floors, furniture, and other surfaces.
  - ▶ Be released into air, soil, and water from treated consumer and industrial products after they are disposed of.
  - ▶ Be present in and around industrial sites where flame retardants were produced or used in the past.
- Infants and young children may be exposed to higher levels of some flame retardants in air, dust, and on surfaces. This is because they often crawl and play on the floor, getting dust on their hands, and putting their hands in their mouths.
- These flame retardant chemicals can pass from mother to baby during pregnancy.
  - ▶ PentaBDE can remain in the body for years. If a woman is exposed to this chemical and later becomes pregnant, her baby can be exposed to PentaBDE during the pregnancy.

### Main ways you can be exposed to these Proposition 65-listed flame retardants:



**How can I reduce my exposure to these Proposition 65-listed flame retardants?**

- ✓ Where possible, avoid choosing upholstered furniture products labeled as containing chemical flame retardants. These may contain the chemicals discussed in this fact sheet.
- ✓ For upholstered furniture products, check the flame retardant label commonly found under the furniture seat cushion. There are two kinds of labels:
  - ▶ For furniture manufactured and sold in California starting in 2015, the TB117-2013 ([Technical Bulletin 117-2013](#)) label tells you whether or not the product contains added flame retardants, but it does not identify them by name.
  - ▶ For furniture manufactured and sold in California before 2015, the TB117 (Technical Bulletin 117) label *does not* tell you if the product contains added flame retardants.
  - ▶ To learn more about which flame retardants, if any, have been added to the product, contact the manufacturer.
- ✓ Where possible, consider replacing older upholstered furniture products that may have flame retardants, especially if they are torn, or have crumbling foam.
- ✓ Safely dispose of electrical and electronic equipment. Do not disassemble or burn them. [E-waste products](#) must be taken to a designated handler or recycler.
- ✓ Minimize your exposure to dust, which may contain flame retardants:
  - ▶ 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 vacuum cleaner with a high-efficiency particulate air (HEPA) filter.
  - ▶ Dust regularly, using a damp cloth.

**For more information:****General Fact Sheets and Resources**

- US Department of Health and Human Services (HHS)  
National Institute of Environmental Health Sciences (NIEHS)
  - ▶ Flame Retardants  
[https://www.niehs.nih.gov/health/topics/agents/flame\\_retardants/index.cfm](https://www.niehs.nih.gov/health/topics/agents/flame_retardants/index.cfm)
- US Environmental Protection Agency (US EPA)
  - ▶ Consumer Fact Sheet on Flame Retardants  
<https://www.epa.gov/saferchoice/consumer-fact-sheet-flame-retardants>
  - ▶ Fact Sheet: Assessing Risk from Flame Retardants  
[https://19january2017snapshot.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-assessing-risks-flame-retardants\\_.html](https://19january2017snapshot.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-assessing-risks-flame-retardants_.html)

- California Department of Consumer Affairs (DCA)  
Bureau of Household Goods and Services (BHGS)
  - ▶ Upholstered Furniture; Flame Retardant Chemicals. Frequently Asked Questions (FAQs)  
[https://bhgs.dca.ca.gov/forms\\_pubs/19094\\_faq\\_0619.pdf](https://bhgs.dca.ca.gov/forms_pubs/19094_faq_0619.pdf)
  - ▶ Assembly Bill 2998 (Bloom) – Consumer Products: Flame Retardant Materials. Frequently Asked Questions (FAQs)  
[https://bhgs.dca.ca.gov/forms\\_pubs/ab2998\\_faq.pdf](https://bhgs.dca.ca.gov/forms_pubs/ab2998_faq.pdf)
- California Environmental Protection Agency (CalEPA)  
CalRecycle
  - ▶ What Is E-Waste?  
<https://www.calrecycle.ca.gov/Electronics/WhatIsEWaste/>

### **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>