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Lead in Children's Foods and Baby Foods
Frequently Asked Questions

A few points to remember, always, about lead:

1. ***There is no safe level of lead, especially for children.***

2. ***Lead causes problems throughout the body, especially for children.***

3. ***The effects can be subtle but permanent, long after childhood.***

4. ***Lead exposures and effects are cumulative, over time and from multiple sources.***

5. ***Three sources of lead continue to contaminate the environment and food supply: decades of pesticide application, leaded gasoline, and airborne lead from coal-fired power plants.***

Children's food products were tested in nine different categories: ***grape juice, packaged peaches, packaged pears, packaged carrots, fruit cocktail and baby foods that include apples or peaches or pears or sweet potatoes***. Lists of the products tested sorted by those with lead levels high enough to require a warning under Proposition 65 ("Prop 65") and those that did not test high enough to require a warning are provided here: [LINK] Please note that although ELF also originally identified apple juice as another category where some products contain lead, that is not the subject of the lawsuit at this time as additional research is being done.

Information about Proposition 65 and how it works is contained in the "Proposition 65 in Plain Language" from the California EPA's Office of Environmental Health Hazard Assessment, appointed as "Lead Agency" for Prop 65 by the Governor. www.oehha.ca.gov/prop65/background/p65plain.html

Frequently Asked Questions:

Has ELF filed a lawsuit?

Yes. ELF filed a lawsuit on September 28, 2011. Before it was filed, ELF sent notices of the violation to each alleged violator and to law enforcement officials. Beginning in June 2010 and continuing through August, ELF delivered "Notices of Violation" to the California Attorney General, 58 county District Attorneys, and the manufacturers, retailers and distributors of the suspect foods. They were notified that a number of foods and beverages that are prominent parts of childrens' and babies' diets contain lead at levels that require a warning under the Safe Drinking Water and Toxic Enforcement Act of 1986 (aka "Proposition 65" or "Prop 65"). After a year of discussion and further research, the time has come to enforce the law and force warning labels to protect consumers. A copy of the Complaint is here: [LINK]

Why did you decide to file this lawsuit?

ELF has a twenty-year history of attacking and reducing lead exposures. ELF believes it is critically important for parents to be educated regarding preventable lead exposures in food and beverages so that they can make informed, healthy choices for their families. Proposition 65 is a right-to-know law; its very purpose is to require companies that are exposing Californians to toxic chemicals that cause cancer, birth defects or other reproductive harm to inform consumers. Lead was one of the very first chemicals listed by the State of California in 1987 as a "chemical known to the state" to cause cancer, developmental and reproductive toxicity. Prop 65 litigation has had a successful history of reducing lead exposures to consumers from plumbing fixtures, crystal and ceramic food containers, diet supplements, balsamic vinegar and other food-related items.

Who is ELF?

The Environmental Law Foundation is a non-profit, public interest organization committed to the enforcement of environmental, toxics, and community right-to-know laws. Its website is www.envirolaw.org. ELF has been enforcing Prop 65 and other laws that protect consumers, communities and the environment for nearly twenty years. For example, ELF brought and won the largest Prop 65 case ever, against the world's largest provider of school bus services for children, resulting in a $34 million court-supervised program in 2008 to

repair, retrofit and replace dirty diesel school buses throughout the state. ELF's attorneys were recognized as "Attorneys of the Year" by California Lawyer magazine for that work.

Why does ELF care about lead levels in the food supply?

For over two decades, ELF has fought for consumer protection from lead exposures in faucets and plumbing fixtures, drinking water, rental housing, playgrounds and most recently in the food supply. Through enforcing the law, ELF has learned two things: 1) when pressed to do so, companies can almost always reduce or eliminate lead from their products, and 2) because lead poses such a threat to public health, particularly children, we all have an obligation to reduce exposures wherever we can.

ELF believes that the lead legacy in the food supply is fundamentally the result of short-sighted public health, energy, and food-safety policies. Future generations deserve better going forward.

How did ELF choose the food products you included in the notice letters?

Because children and fetuses are at the greatest risk of harmful effects from exposure to lead, ELF focused on foods and beverages that children and babies eat and drink on a regular basis. Resource constraints prevented us from testing all such products. ELF first evaluated which types of food products were likely to be in violation of Proposition 65 based on publicly available government-sponsored testing and published studies. After identifying the categories of foods that studies revealed had lead, ELF scoured the marketplace to attempt to test as many brand names within those product categories as it could find in California, to determine which ones are in violation of the law. A list of the products that had lead levels high enough to require a warning under Proposition 65 is provided – as well as those that do not require a warning can be found here: [LINK].

Is lead in everything?

No, lead is not in everything. Government-sponsored testing for lead in food products occurs regularly around the globe.[1] Thankfully, most foods do not contain lead, and even among the

[1] *See, e.g., Total Diet Study*, United States (updated through 2008): http://www.fda.gov/downloads/Food/FoodSafety/FoodContaminantsAdulteration/TotalDietStudy/UCM184301.pdf; *see also: Total Diet Study United Kingdom*, Food Standards

product categories ELF tested, ELF nearly always found at least one (or more) brands that did not have enough lead to trigger the warning requirement.

How did the lead get in these food products?

That's a question for the companies who sell the products; the data on lead contamination has been public for a long time. ELF can only surmise precise sources of lead, and it will doubtless differ from category to category, even product to product.

However, nearly all of the high levels found in the environment are a result of human activities. Despite claims that some or all of the lead is"naturally occurring" there is no conclusive evidence of this from the industry, which can source raw materials for their product from around the globe and at different times of the year. Levels of lead in the environment have increased more than 1,000-fold over the past three centuries as a result of human activity. The greatest increase occurred between the years 1950 and 2000, and reflects increasing worldwide use of leaded gasoline. Lead has also been introduced to our environment through mining activity, coal burning by utilities, the use of lead-based paint and the application of pesticides that contained metals, such as lead arsenate used in fruit orchards. Because lead does not degrade, these former uses leave their legacy as higher concentrations of lead in the environment.[2]

In 1979, cars released 94.6 million kilograms (208.1 million pounds) of lead into the air in the United States. In 1989, when the use of lead was limited but not banned, cars still released 2.2 million kg (4.8 million pounds) to the air. The EPA did not ban the use of leaded gasoline for highway transportation until 1996.[3] Leaded gasoline continues to be used throughout the globe, including countries from which the United States increasingly imports its food supply.

Electrical utilities emit lead from the burning of fuels, particularly coal, in which lead is a

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Agency (2007).

[2] *See, e.g., Toxicological Profile for Lead,* U.S. Department Of Health And Human Services, Public Health Service Agency for Toxic Substances and Disease Registry (2007).

[3] *Id.*

contaminant. For example, a electric power plant boiler burning a million pounds of lignite coal will release 420 pounds of lead into the atmosphere.[4]

Lead arsenate was an extensively used insecticide on fruit orchards.[5] Lead arsenate pesticides were widely used in apple orchards from 1925 to 1955.[6] Lead arsenate insecticide was used in Australia, Canada, New Zealand, and the U.S. It also was used in England, France, and North Africa.[7]

Whatever its source, lead that falls from the atmosphere both adheres to growing fruit, and also onto soil where it sticks strongly to soil particles and remains in the upper layer of soil. Since it does not degrade over time, this contamination problem continues. Lead can be taken up by growing plants. Airborne lead can also be deposited onto plants and fruits. Last, processing may introduce lead contamination if it involves passage through bronze plumbing parts, lead in water or other sources.

Is the lead being complained about here dangerous to me and my children?

The American Academy of Pediatrics has stated that there is no "safe level" of lead for children.[8] In fact, acceptable lead exposure limits have been repeatedly lowered over the years and current scientific understanding suggests that neurological damage can occur at blood lead levels much lower than previously believed.

There is widespread consensus among scientists and public health agencies that there is no safe level of lead in the body and that children and fetuses are at greatest risk of harmful

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[4] EPA. 2001. *Lead and lead compounds. Guidance for reporting releases and other waste management quantities of toxic chemicals.* Washington, DC: U.S. Environmental Protection Agency.

[5] Peryea F.J. 1998. *Historical use of lead arsenate insecticides, resulting in soil contamination and implications for soil remediation.* Proceedings, 16th World Congress of Soil Science, Montpellier, France. 20-26.

[6] Robinson et al.:*Assessment of Contamination from Arsenical Pesticide Use on Orchards in the Great Valley region, Virginia and West Virginia, USA,* J. Environ. Qual., Vol. 36, May–June 2007, 654-663.

[7] Peryea, 1998.

[8] www.aap.org/advocacy/washing/News-Release_Press-Statements/01-05-08-EPA-Lead.pdf

effects from exposure to lead.[9] For example, in a published statement regarding lead levels in the blood of children, the Centers for Disease Control and Prevention ("CDC") states that "there is no evidence of a threshold below which adverse effects are not experienced."[10] Unfortunately, children absorb lead into their bodies at higher rates than adults.[11] Furthermore, lead adversely effects the brain and central nervous system, which are still forming in children and fetuses.

Exposure to small amounts of lead can be harmful. The body stores lead in bones, and small amounts of lead can build up in the body and cause lifelong learning and behavior problems. In particular, small amounts of lead in the body can make it difficult for children to learn, pay attention and succeed in school.[12] Furthermore, lead is released from a mother's bones during pregnancy, enters the bloodstream, and crosses the placenta, resulting in harmful effects on the fetus.[13] Thus, preventable exposures to lead should be avoided.

Last, exposures to lead are cumulative, which means they can add up over time from repeated exposures to the same product that has low but detectable lead levels, to other products that have lead, and from other food groups that have lead. For example, picture a child's lunch box, which might have several samples of the food categories tested here: a grape juice box, plus one or more containers of fruit. Lead exposures add up. A warning may be required for each.

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[9] *E.g., Toxicological Profile for Lead,* U.S. Department Of Health And Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry at 10 ("No safe blood lead level in children has been determined."); 24; 25 ("Most importantly, no threshold for the effects of lead on IQ has been identified."); 222 ("Children and developing organisms in general, are more susceptible to lead toxicity than adults."); 364 (2007).

[10] Centers for Disease Control and Prevention, "Why not change the blood lead level of concern at this time?" (June 1, 2009), www.cdc.gov/nceh/lead/policy/changeBLL.htm

[11] *Toxicological Profile for Lead,* U.S. Department Of Health And Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, at 7 & 158 (2007).

[12] California Department of Health, Childhood Lead Poisoning Prevention Branch, www.cdph.ca.gov/programs/CLPPB/Pages/FAQ-CLPPB.aspx.

[13] *E.g., Toxicological Profile for Lead,* U.S. Department Of Health And Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry at 10 222 & 364 (2007).

Additional information regarding the adverse health effects from exposure to lead can be found at:

California Department of Health, Childhood Lead Poisoning Prevention Branch, www.cdph.ca.gov/programs/CLPPB/Pages/FAQ-CLPPB.aspx

Centers for Disease Control and Prevention, "Why not change the blood lead level of concern at this time?" (June 1, 2009), www.cdc.gov/nceh/lead/policy/changeBLL.htm

Toxicological Profile for Lead, U.S. Department Of Health And Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, 2007, www.atsdr.cdc.gov/toxprofiles/tp.asp?id=96&tid=22

Sometimes my child's lunch has 3 different items that are from your list! What should I do?

The most important step you can take is to become informed. Find out about the levels of lead in the fruits, juices and other items your child consumes regularly. Some useful sources for the information may be found at the links listed in the question above. Decide for yourself and your family whether there are more protective alternatives you can choose. Stay informed and support efforts to clean up our food supply. And remember, the American Academy of Pediatrics has long recommended placing limits on the amount of juice consumed by children.[14]

Does it matter which country the product comes from?

We do not have enough information to answer this question at this time. Lead arsenate and leaded gasoline were used all over the world, and in some places these practices continue. In addition, lead emissions from burning coal occur everywhere and, being airborne, may fall far from their origin. Small particles of lead can travel windborne for many miles, and do not stop at any particular country's border.

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[14] "*The Use and Misuse of Fruit Juice in Pediatrics*," PEDIATRICS Vol. 107 No. 5 (May 2001, reaffirmed October, 2006).

If the lead is there from so long ago, why start warning me about it now?

The health effects associated with human exposure to lead have been a subject of on-going research for decades. That process has brought awareness and attention on the part of the scientific community to the adverse health effects of lead exposure on children and adults, even at low levels. It is now widely accepted that there is no safe level of lead for the human body,[15] and that, even at low levels, lead can damage mental and physical development.[16]

While much of the lead that contaminated our environment was deposited some time ago, many exposures can be avoided, while some cannot. Lead in portions of our food supply is an important exposure pathway that can be avoided or eliminated. At a minimum, consumers have the right to know which products have lead in them and which do not so that they can make informed decisions about what they and their children are eating.

Which products have lead in them?

Due to resource constraints, ELF could not test every product with potential lead exposures. Thus, ELF reviewed publicly available government-sponsored testing and published studies to determine which types of products were likely to have lead. ELF then selected categories of foods and beverages with lead that are also foods children and babies eat and drink on a regular basis. ELF then tested as many specific product brands within each category as it could find in California to determine which ones have – and which do not have – enough lead to require a warning about it under Proposition 65. The results of the data showing which products require a warning and which did not can be found here: [LINK]

How high are the levels of lead in the products you tested?

The link here [LINK] lists the products that had (and did not have) test data above the level that requires a warning under Proposition 65. Proposition 65 requires warnings to be issued at relatively low levels because Proposition 65 recognizes that cumulative exposures over time or from multiple sources add up, and that people deserve a warning and information

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[15] *Lead Fact Sheet,* Center for Disease Control (Nov. 2009)

[16] *Toxicological Profile for Lead,* U.S. Department Of Health And Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry, 2007, at 32.

before they are harmed, so that they can make informed choices. Other laws use higher trigger levels, but that is because they are not primarily warning statutes, but laws that affirmatively require limits on lead, require medical intervention, or ban the products from sale or use.

Since lead is listed by California as known to cause reproductive harm, companies selling lead-contaminated products in California are required to warn about this exposure unless the exposure occurs at or below the "safe harbor" number set by the State. The safe harbor number, also known as the maximum allowable dose level, for lead is 0.5 micrograms/day. Thus, the law requires a warning for exposures to lead that exceed 0.5 ug/day. The data show that consuming a single serving of some products tested results in an exposure to lead above 0.5 ug. It is those products which ELF named in its lawsuit.

Is ELF Releasing the Specific Testing Data on Each Product?

No. First, that is confidential information provided to a law enforcement agency about a possible violation of law. Under Proposition 65 a private party who sends a notice of violation to the Attorney General must accompany that notice with a confidential "certificate of merit" including the scientific studies or data on which the notice is based. The law says that "The Attorney General may provide the factual information submitted. . .to any district attorney, city attorney, or prosecutor within whose jurisdiction the violation is alleged to have occurred, or to any other state or federal government agency, *but in all other respects the Attorney General shall maintain, and ensure that all recipients maintain, the submitted information as confidential official information to the full extent authorized in Section 1040 of the Evidence Code."* Cal. Health and Safety Code section 25249.7(I). Second, the data showed a lot of variability that is confusing – ELF feels it is best to do what the laws does: simply state whether the levels are high enough to require a warning, and that's what the lists here [LINK] show.

I only buy organic foods, do I need to worry about this?

Unfortunately, yes. ELF found lead at levels that violate Proposition 65 (i.e., above the maximum allowable dose level of 0.5 ug/day) for a single serving in some organic products. *See* [LINK]. While an "organic" label conveys a great deal of confidence about certain growing, harvesting and packaging practices, it is not a "lead-free" guarantee.
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Can anything be done to get the lead out?

Scientists, environmentalists and other concerned professionals continue to work on methods to reduce the toxic legacy left behind by lead use. Some successful strategies have been implemented – excavation of contaminated soil, soil blending, and soil capping. Other measures that can be undertaken include: selection of source fruit or ingredients that are lead-free; careful manufacturing processes to ensure that lead is not introduced into packaged foods and beverages; regular testing for lead contamination; and better protocols for the cultivation and picking of fruit, its washing, and its processing. In short, there are many actions that can be taken to minimize the introduction of lead, and to improve the removal of lead, before fresh produce is packaged for consumption by children.

What can consumers do?

Make informed choices.
Demand information before you buy.
Advocate for cleaner food and more comprehensive environmental health policies.