# Heavy Metals in Infant Formula & Food

## New Regulations and How to Prepare Caregivers

2024 AAP National Conference & Expo

## Legislation

**Prop 65:** Requires manufacturers to inform consumers about chemicals in their products that may cause cancer, birth defects, or reproductive harm.

**AB 899:** (Effective January 1, 2024 in California) requires manufacturers of baby food to test for, and disclose the levels of certain heavy metals that may be present in products and adhere to certain labeling requirements. AB 899 does not apply to infant formula.

## FDA Initiative

**Closer to Zero:** An iterative approach to reducing childhood dietary exposure to food contaminants, while maintaining access to a diversity of nutritious foods.

## Clean Label Project

A national, non-profit organization that conducts rigorous contaminant testing on food (e.g., heavy metals, pesticides, mycotoxins, etc.). Awards are given to organizations that meet or exceed standards.

## In this Clinical Practice Resource:

- Significance & Impact of New Regulations
- Oversight & Third-Party Testing
- Reducing Exposure at Home

# A Provider's Guide to Heavy Metals in Infant Formula & Food

Heavy metals are ubiquitous in the environment, and they can easily end up in infant formula and other foods. Sources of contamination include, but are not limited to, the soil used to grow food, and food manufacturing and packaging equipment.[1,2] The susceptibility of heavy metal toxicity (e.g., those of public health concern including cadmium, lead, mercury, and arsenic) depends somewhat on the individual's age and size, meaning that infants and young children are especially vulnerable.[3]

### The First 1,000 Day of Life

The first 1,000 days of life make up a critical window of development, where insults (like those from heavy metal exposure) can significantly impact the developing neural architecture.[4] Heavy metal exposure in infants and children is associated with detriments such as organ damage and learning, behavioral, and cognitive impairments.[3]

### Important Legislation & FDA Initiative

Prop 65 helps consumers recognize the presence of certain chemicals in their food and environment, and AB 899 will allow consumers to see the levels of heavy metals present in baby food.[5-7] AB 899 does not apply to infant formula.

The FDA Closer to Zero Initiative aims to reduce childhood exposure to contaminants in foods. Read more about these measures in the sidebar.

### Third-Party Testing & Ingredient Selection

While the detriments of heavy metal exposure in infants and children are largely undisputed, one obstacle is that there are currently no universal limits on acceptable exposure thresholds in foods.[3] The FDA Closer to Zero Initiative aims to address this knowledge gap,[6] and strategic ingredient selection processes (like working directly with farmers to source only the cleanest ingredients grown in the soil) and voluntary third-party testing (such as the Clean Label Project)[8] are other valuable strategies that individual organizations can implement to produce clean, reliable products.

### Strategies to Minimize Heavy Metal Exposure at Home

Pediatricians can suggest strategic purchasing decisions and food preparation methods to help caregivers minimize exposure to heavy metals at home.[2] Find these conversation starters in the sidebar.

## Strategies For Caregivers

Offer a balanced diet of fresh produce, legumes, whole grains, and lean proteins

Prioritize fresh produce (including sliced and pureed) over fruit juices

Always wash fruits and vegetables prior to serving

Purchase packaged foods from brands that participate in third-party testing

Offer pouches with diverse ingredient profiles (e.g., ingredients other than sweet potato or applesauce)

Minimize intake of predatory fish, including shark and swordfish

Diversify grain intake beyond rice (e.g., barley, oats, farrow, etc.)

Consider alternatives to rice cereal as a first complementary food

Use water filtration systems to reduce contaminants in the home water supply

Avoid secondhand vape or cigarette smoke

Eliminate lead hazards in the home

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# Resources

## More Information on Heavy Metals in Infant Formula & Food for You and Your Patients

## Links for Further Reading and Sharing

**Assembly Bill 899: Food Safety – Baby Food:**
https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB899&firstNav=tracking

https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20Document%20Library/FDB/FoodSafetyProgram/PFR/AB899FrequentlyAskedQuestions.pdf

**Closer to Zero: Reducing Childhood Exposure to Contaminants in Food:**

https://www.fda.gov/food/environmental-contaminants-food/closer-zero-reducing-childhood-exposure-contaminants-foods

**Prop 65 : About Proposition 65:**

https://oehha.ca.gov/proposition-65/about-proposition-65

**Clean Label Project: The Consumer Standard for Food and Consumer Product Quality and Safety:**

https://cleanlabelproject.org/

**Pediatric Environmental Health Specialty Unit: Heavy Metals in Baby Foods and Fruit Juices:**

https://mail.google.com/mail/u/0/#label/ByHeart/FMfcgzQVxtwrSWqJrxSjmvpDQSZpRDWP?projector=1&messagePartId=0.7

**AAP: FDA Proposes Limits on Lead in Baby Foods:**

https://publications.aap.org/aapnews/news/23265/FDA-proposes-limits-on-lead-in-baby-foods?autologincheck=redirected

**Healthy Children: Heavy Metals in Baby Food:**

https://www.healthychildren.org/English/ages-stages/baby/feeding-nutrition/Pages/Metals-in-Baby-Food.aspx

**Harvard Health: Heavy Metals in Food? What Parents Should Know and Do:**

https://www.health.harvard.edu/blog/heavy-metals-in-baby-food-what-parents-should-know-and-do-2021030522088

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5. AB 899 Frequently Asked Questions (FAQs). Accessed August 26, 2024. https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20Document%20Library/FDB/FoodSafetyProgram/PFR/AB899FrequentlyAskedQuestions.pdf
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7. About Proposition 65 - OEHHA. Accessed August 26, 2024. https://oehha.ca.gov/proposition-65/about-proposition-65
8. Homepage - Clean Label Project. Accessed August 26, 2024. https://cleanlabelproject.org/

# FAQ

# Heavy Metals in Baby Foods

## The Top 10 Questions Asked By Parents & Caregivers About Heavy Metals in Foods Intended for Infants and Children

With new state regulations mandating the disclosure of heavy metal levels in baby food, alongside heightened consumer, media, and regulatory scrutiny, medical providers should anticipate an increase in questions from concerned parents and caregivers. Drawing on seven years of experience in addressing consumer inquiries, Clean Label Project—a national nonprofit dedicated to transparency in product labeling and the organization behind the largest study on heavy metals in baby foods and infant formula—has identified the top questions providers may face. This resource turns complex issues into actionable advice, empowering informed decisions for children's health.

### What are heavy metals, and why are they in baby food?

Heavy metals like lead, arsenic, mercury, and cadmium are naturally found in soil and water, which can result in their presence in crops used for baby food.Heavy metals are in our food source - these metals aren't added intentionally but can be absorbed by plants as they grow. They are of particular focus in baby food and infant formulas because babies are small and the first 1000 days of life is an extraordinary time of brian and immune system development.

### Is it safe to feed my baby commercial baby food and formula?

Commercial baby foods and formulas are generally safe. Offering a variety of foods is a smart way to minimize potential exposure to heavy metals from any one source.

### How do heavy metals affect my baby's health?

Long-term exposure to high levels of heavy metals can impact brain development and disrupt other bodily functions, but occasional low-level exposure is generally not harmful.

### Which baby foods are most likely to contain heavy metals?

Rice-based products, root vegetables, and certain fruits like apples and grapes may have higher levels of heavy metals. Offering a variety of foods is a smart way to minimize any potential exposure to heavy metals from any one source.

### How can I reduce my baby's exposure to heavy metals?

Offer a diverse range of foods, especially those rich in iron and calcium, to support the reduction of heavy metal absorption. Choose products featuring the Clean Label Project certification seal, which indicates that brands are committed to sourcing ingredients and formulating products with stringent measures to minimize heavy metals and other contaminants.

### Are homemade baby foods safer than store-bought?

Homemade foods can be a good option, but generally heavy metals are naturally present in soil and water. This means they can be found in both store-bought and homemade baby food.

### Is organic baby food free from heavy metals?

Organic baby foods may have lower levels of pesticides but are not necessarily free from heavy metals, which are present in the environment. The issue of heavy metals is applicable to all foods.

### Should I avoid rice-based products entirely?

Rice-based products should be limited, but they don't need to be entirely avoided. Alternatives like oats and barley can be offered.

### What is the government doing to regulate heavy metals in baby food?

Ongoing efforts at the state and federal level are being made to reduce heavy metal content in baby food. In the meantime, choosing brands with Clean Label Project certification seal is a good step as these companies are proactively and voluntarily going above current requirements to monitor and minimize heavy metals and other contaminants in their products.

### Should I get my baby tested for heavy metal exposure?

If you have concerns, let's talk about your child's potential exposure risks and whether testing might be beneficial. While food is one possible source, other exposure routes could include water, soil, and even paint, particularly in older homes.

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