Lead in Jewelry FAQs

GENERAL QUESTIONS

Q. Why is lead used as an ingredient in jewelry?

A. Lead is used in jewelry-making for several reasons. First, it makes the base metal easier to shape and form. Second, it makes jewelry heavier, so it seems more substantial. Lastly, lead is cheaper to use than other metals, such as zinc. Lead is also sometimes used as a stabilizer in some plastics, such as polyvinyl chloride (PVC), which is often incorporated into children’s jewelry items.

Q. Why is lead-containing jewelry a concern?

A. Excessive exposure to lead can cause many health effects, ranging from behavioral problems and learning disabilities to organ failure and even death. Children 6 years old and younger are more susceptible to adverse health effects because their bodies are growing quickly and their brains are still developing. Lead-containing jewelry poses a particular concern because children often place jewelry in their mouths, which can result in lead absorption at dangerous levels or very serious health effects if the jewelry is accidentally swallowed.

Q. What is being done to prevent jewelry containing high levels of lead from entering the marketplace?

A. California’s Metal-Containing Jewelry Law places limitations on the lead content of jewelry. Anyone who manufactures, ships, sells or offers for sale jewelry for retail sale or promotion in California must comply with the restrictions specified in the law. This law incorporates the terms of a consent judgment resulting from a 2006 Proposition 65 lawsuit regarding lead in jewelry, applying the requirements of that judgment to all parties that manufacture, ship, sell or offer for sale jewelry for retail sale or promotion in California.

Other states and cities have also enacted legislation and/or regulations to limit the lead content in jewelry, or propose to do so in the future. As of February 10, 2009, the federal Consumer Product Safety Improvement Act (CPSIA) has new limits for lead in consumer products intended for children 12 years old and under. The U.S. Consumer Product Safety Commission (CPSC) has also issued a number of recalls recently for lead containing children’s jewelry.
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Q. How does the California Department of Toxic Substances Control (DTSC) enforce the Metal-Containing Jewelry Law?

A. DTSC responds to complaints of jewelry suspected to be out of compliance with the law, in addition to conducting marketplace surveillance. DTSC’s enforcement of the law is primarily limited to those who were not signatories to a 2006 Proposition 65 settlement involving a large number of jewelry retailers and businesses (see http://ag.ca.gov/prop65/pdfs/amendedConsent.pdf).

Q. How does jewelry containing high levels of lead make its way into the marketplace?

A. Jewelry containing high levels of lead is often manufactured in other countries and imported into the United States. Most of the jewelry subject to recent U.S. Consumer Product Safety Commission (U.S. CPSC) recalls was manufactured in China, although some recalled jewelry was manufactured in India and other foreign countries.

Q. How widespread is jewelry containing high levels of lead?

A. In the past few years, the U.S. Consumer Product Safety Commission (U.S. CPSC), which is the federal agency charged with protecting the public from unreasonable risks of serious injury or death from consumer products, has announced numerous jewelry recalls, mainly for jewelry manufactured in China. These recalls were initiated because the U.S. CPSC determined that the jewelry contained dangerous levels of lead, thus posing a risk of lead poisoning in children. In the recent past, one or more jewelry recalls were announced nearly every month, suggesting that the prevalence of lead-containing jewelry may be widespread.

Q. How do stores know if their vendors are providing jewelry containing high levels of lead?

A. California’s Metal-Containing Jewelry Law requires that manufacturers provide certification that their jewelry meets the requirements of the law either by:

- Providing such certification, upon request, to a person selling the manufacturer’s jewelry; or
- Prominently displaying the certification on the shipping container or the jewelry packaging.
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Q. How should I dispose of jewelry if it contains lead and I no longer want it?

A. Parents should immediately take jewelry believed to contain lead away from their children. DTSC has not yet determined if jewelry containing lead above the levels allowed under the Metal-Containing Jewelry Law would be considered a hazardous waste if it is disposed of. Until this determination is made, DTSC recommends that all suspected lead-containing jewelry be disposed of in a manner that eliminates any access by children.

Q. How do I know if my jewelry is safe?

A. You cannot tell if a piece of jewelry contains lead just by looking at it. A lead measurement (using a chemical or spectroscopic test) must be performed. A lead swab test, such as those purchased from a hardware store for lead paint detection, might indicate if the surface of the jewelry contains lead, but it will probably not detect lead present beneath the surface coating. In any case, if parents allow their children to wear jewelry, they should monitor their children to ensure jewelry is not placed in their mouths.

Q. Can lead be absorbed through the skin?

A. Exposure to lead occurs mainly from ingestion, such as eating or putting objects into the mouth, putting young children particularly at risk. Exposure to lead can also occur from inhalation, such as breathing lead that is scattered in the air as dust, fume or mist. Absorption of lead through the skin from wearing jewelry is not likely to pose as large a risk.

Q: What can I do if I believe my child has put lead-containing jewelry into his/her mouth?

A: You should consult your health care provider and request a blood test to determine whether your child has been exposed to lead recently. A blood lead test is the only way you can find out if your child has an elevated blood lead level; however, an elevated blood lead level will not tell you if the lead exposure came from lead-containing jewelry or another source of lead.
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SPECIFIC QUESTIONS:

Q. How do I locate an appropriate laboratory to have testing done, and at what expense?

A. The California Department of Public Health maintains a list of accredited laboratories at [http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx](http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx). You can contact a lab near you and request cost information for conducting EPA Methods 3050B, 3051A and 3052 to comply with the Metal-Containing Jewelry Law. Since lead limits vary depending on the type of jewelry component, each component type must be tested and analyzed separately. The price of testing may vary depending on the number of jewelry components and the complexity of the components you have tested; laboratories can give you pricing information.

Note: California’s Metal-Containing Jewelry Law requires the jewelry manufacturer or supplier to provide certification regarding the lead content of the jewelry. The manufacturer or supplier of jewelry or jewelry components providing the required certificate should ensure that the laboratory that tests the jewelry is qualified to do the type of testing required, i.e., the laboratory should have familiarity and experience with the specified sample preparation and testing techniques required by the law. It is in the manufacturer’s or supplier’s best interest to use a qualified laboratory. Additionally, the certificate should cover all of the jewelry materials that the law requires to be tested.

Q. I am a very small business owner. Is it my obligation to perform the testing described in EPA Methods 3050B, 3051A, and 3052?

A. If, as a "small business owner," you sell, offer to sell, or offer for promotion jewelry in California, it is your obligation to ensure you do not sell or offer to sell or promote jewelry that violates California's Metal-Containing Jewelry law. The law does not require you to perform lab testing, however.

California’s Metal-Containing Jewelry Law requires the jewelry manufacturer or supplier to provide certification that that manufacturer’s or supplier’s jewelry does not contain a level of lead that would prohibit the jewelry from being sold in California pursuant to the law. The manufacturer or supplier must provide that certification directly to the person who sells the jewelry or must display the certification prominently on the shipping container or packaging of the jewelry.

DTSC highly encourages businesses that sell, offer to sell, or offer for promotion jewelry in California, to obtain certificates of compliance and other detailed information about the composition of materials purchased from jewelry component suppliers. The law specifies various factors that will be considered when assessing penalties for violations, including whether good-faith measures were taken to comply with the law.
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**Q. What about people who sell vintage jewelry? How are we supposed to know if the jewelry contains lead? These pieces are often one of a kind and could contain lead since they were made a long time ago.**

**A.** Currently, the law does not make a distinction between new and vintage jewelry. However, EPA Methods 3050B, 3051A, and 3052 are destructive testing methods; therefore, jewelry cannot be salvaged after testing is conducted using these methods. DTSC acknowledges that it is not feasible to test one-of-a-kind vintage jewelry items using these destructive test methods. Since these older jewelry items were made prior to any awareness about the harmful properties of lead and they were produced on virtually a “one-of-a-kind” basis, DTSC is currently focusing its limited enforcement resources on primarily new and mass-produced jewelry.

However, as mentioned in the previous question, the only way to know for certain if an item is in compliance with the law is to have it analyzed by a laboratory using the methods specified in the law (EPA Methods 3050B, 3051A, and 3052). Some laboratories may be able to screen your jewelry without destroying it by using X-ray fluorescence (XRF) analyzers. XRF screening results can provide you with an estimate of the amount of lead and other constituents in your jewelry. However, since XRF results are only estimates, they may not necessarily agree with laboratory results using EPA Methods 3050B, 3051A, or 3052.

Vintage jewelry, like all jewelry — regardless of its lead content — should be stored in areas away from children. Children should also be monitored to ensure they do not put jewelry in their mouths.

**Q. I did not see copper or bronze listed anywhere in the suitable materials list. For artists/jewelers working in these materials, should we check with suppliers about the lead content?**

**A.** Copper and bronze would fall under Class 2 materials for adult jewelry. For purposes of complying with the law, requirements referring to metal include metal alloys, so the percentage of lead allowed in adult jewelry would depend on whether the copper or bronze is electroplated or unplated. Metallic materials used in children’s jewelry must be either a Class 1 material or contain less than 0.06% lead by weight, under California law. Please note, however, that under the federal Consumer Product Safety Improvement Act (CPSIA), all children’s products must currently contain less than 0.03% (300 ppm) lead by weight (this restriction will drop to 100 ppm August 14, 2011, if technically feasible). The CPSIA defines "children" as age 12 and under.
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DTSC strongly encourages you to check with your suppliers and obtain certificates of compliance and other detailed information about the composition of the materials you purchase from them.

**Q. Can I sell jewelry containing lead as long as I label that it contains lead?**

**A.** The requirements under the Metal-Containing Jewelry Law are completely separate from Proposition 65 warning requirements. Complying with the Proposition 65 warning requirements does not relieve you of complying with the requirements in the Metal-Containing Jewelry Law. The Metal-Containing Jewelry Law places limitations on the amount of lead that can be present in jewelry but does not specify any warning requirements. You may still be responsible for warning requirements under Proposition 65 if you sell jewelry containing lead and/or other chemicals listed under Proposition 65. To find out if your business must comply with the warning requirements under Proposition 65, please visit the Office of Environmental Health Hazard Assessment’s Proposition 65 Web page at [http://www.oehha.ca.gov/prop65.html](http://www.oehha.ca.gov/prop65.html).

**Q. What are the requirements for body piercing jewelry?**

**A.** The law defines body piercing jewelry as “any part of jewelry that is manufactured or sold for placement in a new piercing or a mucous membrane but does not include any part of that jewelry that is not placed within a new piercing or a mucous membrane.” Beginning March 1, 2008, a person shall not manufacture, ship, sell, or offer for sale body piercing jewelry — the part of the jewelry that is placed directly within the new piercing or mucous membrane — for retail sale in California unless it is made up entirely of one or more of the following materials:

- Surgical implant-grade stainless steel,
- Surgical implant-grade of titanium,
- Niobium (Nb),
- Solid 14-karat or higher white or yellow nickel-free gold,
- Solid platinum, or
- A dense low-porosity plastic, including but not limited to Tygon or Polytetrafluoroethylene (PTFE), if the plastic contains no intentionally added lead.

DTSC will be focusing its enforcement resources on whether the materials used for new piercings or mucous membranes contain detectable levels of lead.

Jewelry that is not placed directly within a new piercing or mucous membrane, such as a bead on a belly button ring, must meet the requirements specified for other “jewelry.” Therefore, for adult jewelry, any components of the body piercing jewelry...
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not placed within a new piercing or mucous membrane must be made entirely from a Class 1, Class 2, or Class 3 material, or any combination of these three classes of materials. Any jewelry made for children ages 6 and under that is not placed directly within a new piercing or mucous membrane, such as any component attached to a starter earring stud that does not go directly through the piercing, must meet the requirements for “children's jewelry” as defined by the law.

**Q. Is leaded crystal, such as Swarovski crystal, allowed in jewelry? What are the requirements for using leaded crystal in children’s jewelry?**

**A.** Glass and crystal decorative components used in adult jewelry are considered Class 1 materials. There are no lead limits for Class 1 materials used for adult jewelry. Therefore, the use of leaded crystal, including Swarovski crystal, may be used in adult jewelry.

With regard to children's jewelry, the federal Consumer Product Safety Improvement Act (CPSIA) restricts lead in all children’s products to 300 ppm (0.03%). This restriction will be lowered to 100 ppm (0.01%) (if feasible) on August 14, 2011. Anyone selling children’s jewelry in California must keep these restrictions in mind, even when considering California law, as described in the following paragraph. For more information on the federal law, go to [http://www.cpsc.gov/ABOUT/Cpsia/cpsia.HTML](http://www.cpsc.gov/ABOUT/Cpsia/cpsia.HTML).

Under California law, the use of crystal or glass decorative components in children’s jewelry is limited to a total of 1 gram. The law specifies that glass or crystal decorative components that contain less than 0.02% (200 ppm) lead by weight and have no intentionally added lead are not part of the 1 gram calculation. In other words, the use of Swarovski crystal (or any other crystal 0.02% (200 ppm) or higher in lead) in children’s jewelry is limited to 1 gram total. Crystal or glass components containing less than 0.02% (200 ppm) lead by weight with no intentionally added lead may be used in children’s jewelry without any weight limitations. *This assumes the crystal components do not exceed the prevailing federal limit for children’s products.*

**Q. As a manufacturer or supplier of jewelry, do I need to provide certification no matter what type of material I use?**

**A.** The manufacturer or supplier of jewelry must be able to provide certification that the jewelry (including each component) does not contain a level of lead that would prohibit the jewelry from being sold or offered for sale in California, pursuant to California’s Metal-Containing Jewelry law, *no matter what material is used to make the jewelry.*
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Q. Does the law apply to anyone selling online and then shipping to California?

A. Yes, the law applies to anyone who manufactures, ships, sells, or offers for sale jewelry for retail sale in California, including online establishments.

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