



Questions and Answers about Lead in Ceramic Tableware

Contra Costa Health Services / Lead Poisoning Prevention Project



Do I need to worry about lead in my dishes?

Lead is a toxic substance that can affect people of any age. It is especially harmful to children, pregnant women, and unborn babies. Lead accumulates in your body, so even small amounts can pose a health hazard over time. Lead is used in the glazes or decorations covering the surface of some ceramic dishes. This lead can get into food and drink prepared, stored, or served in the dishes.

How important is tableware as a source of lead exposure?

For most people, tableware alone does not pose a significant risk of lead exposure. Other sources of lead, such as lead in paint or soil, are much more

likely to be a problem. In some cases, however, lead in tableware can be a serious health threat. Some dishes contain enough lead to cause severe lead poisoning. Even dishes with lower lead levels may contribute to a person's overall lead exposure.

Why is lead still used in ceramic dishes?

Lead has long been used in ceramicware, both in glazes and in decorations. When used in a glaze, lead gives a smooth, glasslike finish that allows bright colors and decorative patterns underneath to show through. It provides strength and keeps moisture from penetrating into the dish. In decorations, lead is often associated with rich or intense colors.

How does lead get from dishes into the body?

Lead can be released from the glaze or decoration on the surface of the dish and pass into the food or drink in the dish. This is called “leaching.” Then, when you eat the food, the lead gets into your body. The amount of lead that leaches from a dish depends on the amount of lead in the dish, the type of glazing, how the dish is used, what kind of food is put in it, and how long food is left in the dish.

What types of dishes and glazes may contain lead?

What should I look for?

There are many thousands of kinds of ceramics used for cooking, serving, or storing foods and liquids. No one has tested them all and you cannot tell for sure whether a dish has lead just by looking at it. However, some types of dishes are more likely to have lead. Watch for:

- **Traditional glazed terra cotta (clay) dishware made in some Latin American countries, such as Mexican bean pots. They are often quite rustic and usually have a transparent glaze. Use of these pots is especially hazardous. Do not use them for cooking, serving or storing food.**
- Highly decorated traditional dishes used in some Asian communities.
- Homemade and hand-crafted tableware, either from the U.S. or a foreign country, unless you are sure the maker used a lead-free glaze.
- Bright colors or decorations on inside dish surfaces that touch the food or drink. This includes the upper rim of a cup or bowl.
- Decorations on top of the glaze instead of beneath it. If the decorations are rough or raised, if you can feel the decoration when you rub your finger over the dish, or if you can see brush strokes above the glazed surface, the decoration is probably on top of the glaze. If the decoration has begun to wear away, there may be an even greater lead hazard.



- Antique tableware handed down in families or found in antique stores, flea markets and garage sales. These dishes were made before lead in tableware was regulated.
- Corroded glaze, or a dusty or chalky gray residue on the glaze after a piece has been washed.
Tableware in this condition may represent a serious lead hazard. Stop using it at once.

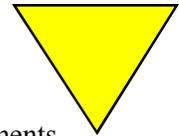
Lead is rarely found in plain white dishes. Lead-containing glazes or decorations on the outside of dishes or non-food surfaces are generally not a problem.

Are there any laws against selling tableware that contains lead?

The U.S. Food and Drug administration regulates the sale of tableware that contains lead. Tableware exceeding the FDA levels cannot be sold legally in the U.S.

In California, Proposition 65 requires businesses to provide warnings when they expose the public to hazardous chemicals like lead. Proposition 65 standards for lead in dishes are much stricter than the FDA standards.

Proposition 65 does not ban any tableware from sale. It does require that a warning be posted if dishware leaches more lead than Proposition 65 allows. A yellow triangle and a warning message must be placed on or next to these dishes when they are sold or displayed for sale. Be aware that some small businesses are exempt from the warning requirements, and that there is no system of inspections to monitor compliance with Proposition 65. Tableware with lead levels below Proposition 65 standards is considered safe to use.



What's the difference between “lead-free” and “lead-safe”?

Lead-free tableware contains NO lead.

Lead-safe tableware contains some lead, but the amount of lead that can get into food does not exceed the California Proposition 65 standards. Either there is very little lead in the tableware, or very little of the lead actually passes into food with use.

How can I find out if my dishes are safe?

You can find out if your dishes meet Proposition 65 standards for lead if they are new or are still being sold by a major retail store. There are three ways to get this information:

- Ask at the store where the dishes are sold if the dishes meet Proposition 65 standards. If the salesperson can't tell you, ask for the customer service department, tableware buyer, or quality control manager.
- Find out from the manufacturer if the dishes meet Proposition 65 standards. The retail store can give you contact information for the manufacturer. Also, many manufacturers have toll-free "800" numbers for customer service. For "800" directory assistance, call (800) 555-1212.
- The Environmental Defense Fund (EDF) published a brochure several years ago called *What You Should Know About Lead in China Dishes*. It has a list of many dish patterns made by major manufacturers that meet Proposition 65 standards for lead. This list contains many, but not all, safe patterns. It also contains a list of some manufacturers' telephone numbers. To request a copy of the brochure, call (800) 684-3322. The list is also available online at: <http://www.environmentaldefense.org/article.cfm?ContentID=952>

Other types of tableware must be tested to detect the presence of lead. This includes tableware that is:

- purchased outside of the United States;
- hand-crafted;
- older or no longer available for purchase;
- purchased in a small independent retail outlet (like a neighborhood store);
- acquired in any other situation where the manufacturer can't be contacted.

Can I use a home test kit to check my tableware for lead?

The only way to determine if certain tableware has lead is to test it. Home lead test kits can tell you if the dishes have leachable lead. These tests are most

useful in detecting high levels of lead. In many cases, they are not sensitive enough to tell whether the dishes meet Proposition 65 standards, or to detect lower levels which might still represent a lead hazard.

Home test kits use a "quick color test" system. These kits contain chemicals that turn color when applied to a surface which contains significant quantities of leachable lead. There are several brands of lead test kits on the market. They can usually be found at hardware, paint, and home improvement stores. Each brand is different.

Be sure to carefully read and follow the instructions provided with the test kit.

"Quick color tests" are especially useful in detecting high levels of lead in tableware. However, they only detect the PRESENCE of lead, not the AMOUNT. The only way to find out the exact amount of lead that dishes leach is to send them to a laboratory for testing. In addition to being expensive, this can damage the dish.

Is it safe to use leaded crystal?

Occasional use of leaded crystal will not expose you to large amounts of lead, unless liquids have been stored in a leaded crystal container. Nevertheless, children should never eat or drink out of leaded crystalware. Do not store food or alcohol in leaded crystal decanters or containers. The longer food or drink sits in crystalware, the greater the chances are that lead will leach into it. In addition, the amount of lead that leaches into the food or drink will increase with time.

Does washing leaded dishes in the dishwasher affect the lead?

If a dish contains lead, using the dishwasher can damage the glazed surface. This can make it more likely to leach lead into food the next time it is used. In some cases, lead may also contaminate other dishes in the dishwasher.

Will the lead leach only if there are cracks or chips in the surface?

No. The lead-leaching process can still take place even if the surface is not broken or worn. However, if the surface is chipped, cracked, or worn there may be a greater exposure to lead.

Will the level of lead I am exposed to from my dishes increase or decrease over time?

The answer is not the same for all dishes. Under some circumstances, as dishes get older, they may leach more lead into food or drink.

How can I reduce the chances that my dishes will expose me to lead?

The safest practice is not to use tableware that you are unsure of with food or drink. **In particular, if you do not know whether a dish contains lead, do not use it in your everyday routine.** This is especially true for tableware used by children, pregnant women, or nursing mothers. Here are some general guidelines:

- Do not **heat** food in dishes that contain or might contain lead. Cooking or microwaving speeds the lead-leaching process.

- Do not **store** foods in dishes that contain or might contain lead. The longer food stays in contact with a dish surface that leaches lead, the more lead will be drawn into the food.
- Do not put highly **acidic** foods or liquids in dishware that contains or might contain lead. Acidic foods and drinks leach lead out of dishes much faster than non-acid foods. Common acidic foods include citrus fruits, apples, tomatoes, soy sauce, and salad dressing. Many drinks are also acidic, such as fruit juices, sodas (especially cola drinks), alcoholic beverages, coffee and tea. Common non-acidic foods include rice or potatoes; water and milk are non-acidic drinks.

Any combination of these three factors can increase the risk of exposing you to lead. An example would be storing spaghetti with tomato sauce in a lead-glazed ceramic dish, then heating it in the same dish in the microwave.

**For more information about lead in ceramics, or other lead sources, call:
1-866-FIX LEAD (toll-free in Contra Costa County)**

Information about lead poisoning in Contra Costa County is also on the website of Contra Costa Health Services at:
www.cchealth.org/topics/lead_poison

For more information about childhood lead poisoning in California, please visit:
www.dhs.ca.gov/childlead

For specific information about lead in tableware:
www.dhs.ca.gov/childlead/tableware/twhome.html

The Contra Costa County Lead Poisoning Prevention Project was created to provide services to lead-poisoned children and those at risk for lead exposure. In addition, the LPPP provides education and outreach about lead poisoning to the general public, as well as health care providers, agencies and community-based organizations.



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Lead Poisoning Prevention Project**