

DID YOU KNOW ?

Lead can be found in certain foods, cosmetics, and medicines.

Lead in food, candy, spices, medicines, or cosmetics cannot be detected by looking at or tasting products. People selling these items may not even know the products contain lead, and even small amounts of lead can cause harmful lead poisoning, causing illness and possibly death. Testing is the only way to tell if a product may contain lead. The best practice is to avoid the use of products that may contain lead. If you think your child has been exposed and showing symptoms of illness, get them tested as soon as possible by their health care provider.

FOODS

Lead can be found in many candies and spices. Certain candy ingredients like chili powder or tamarind may contain lead. Lead gets in candy during the process of drying, storing, or grinding of ingredients manufactured improperly. Ink from paper and plastic wrappers may bleed through into the imported candy which can cause lead in the blood when consumed.



COSMETICS

Lead in cosmetic products are typically used for religious ceremonies. Adults and children are exposed to high levels of lead by ingesting a product called Sindoor (a traditional vermilion red or orange-red cosmetic powder). Pregnant women are at the greatest risk of this type of lead exposure. Though not a food, Sindoor may be used as a food additive.



MEDICAL PRODUCTS

Lead has been found in powders and tablets given for arthritis, infertility, upset stomach, menstrual cramps, and colic. Powders and tablets were traditionally used by East Indian, Indian, Middle Eastern, West Asian, and Hispanic cultures. Traditional medicines contain herbs, minerals, metals, or animal products to treat ailments. Lead and other heavy metals may be added into products during grinding, coloring, and packaging.



IMPORTED ITEMS KNOWN TO CONTAIN LEAD

- Ba-baw-san is a Chinese herbal remedy that contains lead. It is used to treat colic pain to help alleviate symptoms for a young child.
- Daw Tway is a digestive aid used in Thailand and Myanmar (Burma). Test samples show that it contains as much as 970 parts per million (ppm) of lead.
- Greta and Azarcon also known as “Alarcon,” “Coral,” “Liga,” “Maria Luisa,” or “Rueda” are treatments used traditionally in Hispanic cultures to treat an upset stomach. It’s also used on teething babies. Greta and Azarcon are both fine orange powder and can contain lead content as high as 90%.
- Ghasard is an Indian folk medicine that has been found to contain lead. It is a brown powder used as a tonic and digestive aid.
- Kajal, also known as kohl or surma, is a type of eye cosmetic product used in parts of Africa and the Middle East and may contain high levels of lead.
- Sindoor, in testing of the Swad brand Sindoor product, found it contained very high levels of lead, some as high as 97%.



Source: <https://www.cdc.gov/lead-prevention/prevention/foods-cosmetics-medicines.html>



DID YOU KNOW ?

The most common sources for lead in drinking water comes from pipes, faucets, and/or plumbing fixtures.

Lead can come from homes with lead service lines which connect the home to the main water line. Homes without lead service lines may have the following:

- Brass or Chrome-Plated Brass Faucets
- Galvanized Iron Pipes
- Plumbing Soldered with Lead

Some drinking water fountains with lead-lined tanks and other plumbing fixtures not intended for drinking water may also have lead in the water and includes the following:

- Lab Faucets
- Hoses
- Spigots
- Hand Washing Sinks



Lead can enter drinking water when a chemical reaction occurs in plumbing materials that contain lead through a process called corrosion. Corrosion dissolves or wears away metal from pipes and other fixtures. Water with high acidity or low minerals can lead to excessive or severe corrosion. How much lead enters the water depends on the acidity or alkalinity of the water; types of minerals in the water; the amount of lead water contacts; water temperature; wear in the pipes; length of time water stays in the pipes; and presence of protective scales or coating in the pipes.

Prevention

Here is a list of ways you can help reduce or prevent the risk of exposure of lead in drinking water.

- Contact your local water authority and ask if there's a lead service line providing water to your home. If there's lead present, check if there're any programs to help remove the lines. Keep in mind lead exposure will increase while lines are being removed and up to six months after the work is completed. This includes the water main being replaced.
- Request to have the water tested. Results can vary based on variables such as season, day, method, water flow, etc.
- Drink water only through a point of use filter. Drink or cook with water that comes out of the tap cold or use bottled water for drinking. Boiling water will not reduce lead, it increases levels of lead.
- People who are exposed to lead sometimes show no signs or symptoms. If you think your child has been exposed the best route is to get your child's blood tested by a local provider as soon as possible. As levels of lead in the blood increase so, do effects on the body and symptoms.



Source: <https://www.cdc.gov/lead-prevention/prevention/drinking-water.html>



DID YOU KNOW ?

Some occupations involve a higher risk of lead exposure than others.

Although children are at a greater risk for lead exposure, adult exposure to lead can also cause harmful health effects. Adults can expose children to lead through their occupations. Occupations that have a greater risk of lead exposure include:

- Auto Repair
- Pipefitter
- Smelting
- Firing Range Instructors
- Manufacturing
- Mining
- Recycling
- Plumbers
- Police Officers
- Printing
- Construction
- Military
- Welders or Cutters



Adults can also expose children through hobbies and activities. Hobbies and activities that pose an increase to lead exposure include:

- Painting
- Soldering
- Glazed Pottery Making
- Stained Glass
- Car Repair
- Shooting Firearms
- Home Renovation
- Molding Bullets, Slugs, or Sinkers
- Distilled Liquids/Moonshine



Lead dust can be found on your hair, skin, shoes, clothes, and tools.

What can you do?

- Always practice safety in the workplace.
- Maintain a clean work area.
- Shower at the end of your shift, wash your hands regularly, and change out of your work clothes before going home.
- Use proper protective equipment, such as disposable gloves, lead wipes, or hand cleaner.
- Leave your work shoes outside the home.

Source: <https://www.cdc.gov/lead-prevention/prevention/jobs-hobbies-activities.html>



DID YOU KNOW ?

Lead can naturally occur in soil at low levels.

The chance of lead exposure increases based on environmental elements from human activity. Lead in soil, specifically in urban areas and around older homes, can be an issue. Lead doesn't break down over time so lead deposited in the past can still be present today. The old car parked in your yard could contain lead from gasoline or paint and make your soil susceptible to increased levels of lead.



What are some exposures to lead in soil?

You can be exposed to lead through:

- Playing in bare soil
- Gardening
- Eating food grown in contaminated soil
- Ingesting soil
- Touching hands to mouth after touching soil



What should you do if you're around soil that is contaminated?

There are numerous options to reduce exposure to lead in soil, including:

- Cover contaminated soil with a thick layer of clean soil, vegetation, mulch, or other material.
- Limit access to contaminated areas.
- Keep soil outside. Use floormats, take your shoes off before entering the home, and keep entry ways clean.
- Bath and clean your pets if they go outside.
- Wash food well.
- Wear gloves and wash hands if contacting soil.
- Prevent children from playing in bare soil and supervise to ensure they aren't eating it.
- Avoid growing food directly adjacent to buildings where levels are likely higher.
- Build raised garden beds.
- Hire lead abatement contractors to remove or permanently cover the soil.



Source: US Environmental Protection Agency, Region III. (2020). Lead in soil. <https://www.epa.gov/sites/default/files/2020-10/documents/lead-in-soil-aug2020.pdf>



DID YOU KNOW ?

Lead paint is the most common and greatest risk factor in lead exposure.

Lead based paint contains dust that can lead to lead exposure. If you live in a home made before 1978, you have an increased risk of lead exposure.

How can my child be exposed to lead?

Children that live in homes built before 1978 have an increased risk of lead exposure. As the paint ages, it cracks, chips, and creates dust. Children can be harmed if they eat, breathe, or touch lead chips and dust. Young children are at greatest risk because their bodies absorb lead more



easily than adults and young children often put things in their mouth that could have lead on them, such as their hands and toys.



Painting over a surface does not stop the spread of lead. The lead paint underneath can come through in the form of lead dust.

Lead dust is common in windows, doors, floors, porches, siding, stairways, and cabinets.

How can I find out if lead is in my home?

Getting a lead paint inspection or an environmental risk assessment can determine if your home contains lead.

- Lead paint inspections can tell the content of every lead painted structure. However, it will not tell you if it's a hazard or how to deal with it.
- Environmental Risk Assessments can tell you any serious hazards that exists such as peeling paint or lead dust, and what actions are needed to address the issues.



How do you screen for lead exposure?

Preventing exposure to lead is the best way to avoid lasting harm from lead poisoning. Lead screening is the only way to know if a child has lead poisoning. A simple blood test can show how much lead is in your child's blood. As blood lead levels increase, adverse effects increase. Contact your child's health care provider if screening is necessary. Your child's health care provider can monitor and recommend appropriate follow-up actions.



Prevention Tips

- If your home was built before 1978, ask your state or local health department about testing for lead paint or dust for possible lead exposure.
- Make sure your child doesn't eat, lick, or chew on surfaces that have lead paint.
- Regularly clean. Wet mop floor surfaces, clean baseboards, and windowsills to keep your house free from lead dust.
- Have peeling or cracked paint removed by professionals.
- Practice safety during renovation activities, i.e., cutting, sanding, or replacing windows. Hire certified contractors or laborers.
- Keep children and pregnant women away from the house during renovation activities. This includes the renovation of the space itself. Make sure work is complete and cleaned before entry.
- Regularly wash children's hands that may have encountered household dust or exterior soil near a renovation.

Source: <https://www.cdc.gov/lead-prevention/prevention/paint.html>



DID YOU KNOW ?

Artificial turf, rubber tiles, rubber mulch, and playground surfaces can contain lead, PFA (Per- and Polyfluoroalkyl Substances) and/or other risky chemicals.

Playgrounds may be covered with crumb rubber, virgin rubber or PIP (Poured in Place) rubber. What is the difference?

Crumb rubber is made from recycled tires. It contains lead. Virgin rubber does not use any rubbers from tires or any other source. PIP Rubber is a solid rubber surface that may be virgin rubber but underneath the surface is usually recycled tire mulch. Testing has shown there to be lead on the surface.



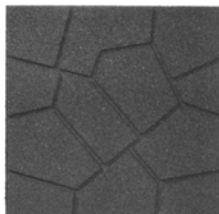
What is artificial turf?

Artificial turf often contains lead. Many turf fields are filled with recycled crumb rubber. This includes NFL fields, college fields, and your local school's field. When lead dust is on the playing surface of turf or playgrounds, washing it does not resolve the problem. Turf fill can be scattered and kicked into the air. This is problematic because children or athletes can breathe in lead, chemicals, and other matter when they play. Small children can also eat these fine pieces of rubber fill.



What about rubber tiles?

Rubber tiles are widely available in retail stores such as Home Depot or Lowe's. Some tiles may state they're made from recycled rubber. Make sure to check with the manufacturer to find out if it's made from recycled tires before purchasing.



How can you become exposed to lead through these surfaces?

- Heat and rubber deterioration over time cause chemical compound reactions on the surface which can increase airborne exposure. A curious child may be drawn to the eroded surface with their hands. Children put their hands in their mouth and now they're exposed.
- Rain disperses the particles everywhere. When flooding occurs, the particles may be dispersed all around with nowhere to go but outside its area. This can lead to the soil becoming contaminated or a child playing in the dispersed material.



What are some safe alternatives?

Safe alternatives could be engineered wood fiber, natural wood mulch, or natural grass.

- Engineered wood fiber is spongy for playgrounds and has no lead or dangerous chemicals.
- Natural wood mulch has no toxic lead or chemicals.
- Natural grass as an alternative to artificial turf.



Source: Zuckerman, Diane PHD (Dec 2023). Lead Exposure in Artificial Turf Fields, Playgrounds, and Rubber Tiles [PPT slides]. National Center for Health Research



DID YOU KNOW ?

Lead could be in your child's toys.

Lead is a heavy metal that, when ingested by children, affects the brain, nerves, and other parts of the body. It can cause learning, physical, and behavior problems. Lead poisoning may lead to slower growth. There is no safe lead level and the risk increases the higher the lead level. At very high levels, lead may cause coma, convulsions, or even death.

How can lead be found in toys?

In 1978, lead paint was banned by the United States in the manufacturing of all house paint, toys, dishes, and cookware. Toys made in other countries still have the possibility of lead. It is still widely used.



Why do these countries use lead when making toy products?

The use of lead in plastics has not been banned. Lead is used to soften plastic and make it more flexible so it can go back to its original state. When plastic containing lead is exposed to elements like sunlight, air, or detergents, the chemical bond between the lead and plastic breaks down, causing the lead to separate and form a fine dust. When a child touches the toy and puts their fingers or the toy itself in their mouth, they can ingest lead. While paint-based lead was banned in the United States it is not regulated in other countries. It's important to be aware that imported toys may contain lead.

How can my child be exposed?

Children can be exposed by touching or playing with a toy that's contaminated. The child can ingest lead by either putting the toy directly in their mouth or putting their hands in their mouth after playing with the toy.



Where should I purchase toys?

Toys should be purchased from credible retailers. This does not mean major retailers can't have recalls. You should avoid antique or vintage toys or figures. Toys produced before 1978 may contain lead. Be cautious when purchasing toys from flea markets, thrift shops, dollar stores, and e-commerce stores.

What toys may increase my child's risk of lead exposure?

Antique toys, imported toys, costume jewelry, and plastic toys have a higher risk of lead exposure.



Can I test for lead in my child's toys?

You can test for lead by submitting a sample to a certified lab. Only they can accurately test products. Do it yourself home kits are available, but do not show how much lead is present. The reliability of detecting low lead levels isn't determined.

Tips

- ◆ **Be aware of toy recalls.** Recalls are posted regularly on the Consumer Product Safety Commission (CPSC) website at <https://www.cpsc.gov/Recalls>.
- ◆ **Clean toys and wash hands regularly.** Lead can be transferred from hand to mouth ingestion either by placing the toy directly in the child's mouth or the child putting their hands in their mouth. It is important to clean toys regularly and always wash your hands.
- ◆ **Avoid questionable and cheap toys.** If it's a deal too good to be true, chances are there's a possibility for lead. Avoid retailers who sell products online at cheap rates. Stay away from dollar stores that also sell cheap products.
- ◆ **Because it's sold at a major retailer doesn't mean it can't contain lead.** In 2017, a national retail store sold fidget spinners that complied with CPSC guidelines. The spinners were labeled for ages 14+ but often purchased for younger children. These spinners had 330 times the amount of lead allowable for children's products.

Source: <https://www.cdc.gov/lead-prevention/prevention/consumer-products.html> and <https://dhhs.ne.gov/LeadDocs/Lead-in-Toys.pdf>



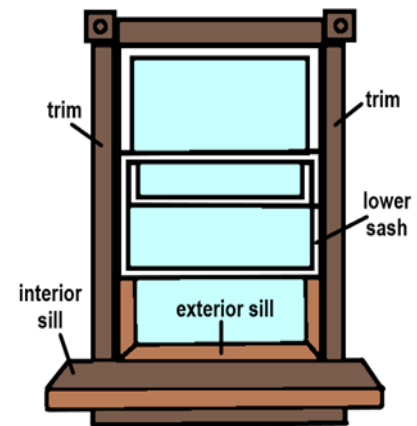
DID YOU KNOW ?

Cleaning your windows the right way can reduce lead hazards.

Windows have been found to be major sources of lead paint chips and lead dust in your children's environment. If they're exposed to these, your children could be lead poisoned. Cleaning your windows the right way can reduce these lead hazards and keep your children safe. **Do you know how to clean your windows the right way?**

How to Clean Your Windows the Right Way

1. **Raise the lower sash** of each window and secure if needed. You have just exposed the exterior sill, the lower flat portion of the window frame as pictured in the diagram.
2. **Remove and wash any toys** found in windows with soapy water.
3. **Use wet paper towels or rags to remove paint chips and dirt** from the exterior sill of each window. Dispose of the rags and/or paper towels in a heavy-duty trash bag.
4. **Clean out all remaining dirt, paint chips, and debris** from all exterior sills. Use a bucket full of water and wet paper towels or cleaning rags. (Soap and water work best, but you can use plain water too.) Repeat this process until the area is clean. Throw the dirty paper towels and rags in a trash bag.
5. **Wipe down the trim and interior sill** of each window, using clean rags or paper towels and water. (These are the decorative portions of the window that face the inside of your house, as shown in the diagram.) Do this from top to bottom. Dispose of these dirty rags in a trash bag.
6. **Flush the dirty water down the toilet** when you're finished cleaning.
7. **Repeat this procedure every two weeks.** It may be necessary to do this more often depending on the weather, or at windows where your children spend most of their time.
8. **When finished, wash your hands** thoroughly with soap and water.



NOTE:

- ⊘ Don't do this yourself if you're pregnant.
- ⊘ Don't have small children do this job.



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