

## Community Lead Awareness | Story Collection

Lead exposure may be happening in our daily life without our knowledge. Unfortunately, there are many ways we can be exposed to lead. The stories below were developed to be used with the [Lead Awareness Curriculum](#). While fictionalized, they are based on common, real-life occurrences of lead exposure and can raise awareness and prevent further exposure in communities.

### Atmospheric exposure from lead-formulated aviation gasoline

*Every day residents living near a local airport watched airplanes soar through the sky and clouds. These airplanes served as a source of wonder for them and many of the residents worked at the airport, used it to fly for work or to visit with loved ones. However, many residents were not aware that some of these planes used leaded aviation gasoline. As the planes flew over the neighborhoods, schools and childcare center, microscopic lead particles filled the air and resulting in elevated blood lead levels, especially in children.*

Most aircraft that operate on leaded aviation gasoline are piston-engine aircraft which are typically small aircraft that carry 2-10 passengers. Jet aircraft used for commercial transport do not use fuel containing lead. Piston-engine aircraft account for 70% of the lead emitted into the air each year, making it the largest single source of atmospheric lead contamination in the U.S. As a result, aircraft operating on leaded fuel cause elevated levels of lead in the air near airports.

But the Federal Aviation Administration is working to transition piston-engine aircraft to unleaded fuel with two initiatives: the Piston Aviation Fuels Initiative (PAFI) and the FAA-industry partnership to Eliminate Aviation Gasoline Lead Emissions (EAGLE). For more information about these initiatives, go to the [Federal Aviation Administration's webpage on Aviation Gasoline](#).

EPA's AirNow mobile app provides a simple interface for quickly checking current and forecast air quality information for planning daily activities and protecting your health. The app automatically displays the current Air Quality Index for your local area or any area you wish to check, and allows you to store multiple areas for quick reference.

For more information, review the following:

- [Download EPA's AirNow app](#)
- [EPA Proposes Endangerment Finding for Lead Emissions from Aircraft that Operate on Leaded Fuel \(pdf\)](#)
- [EPA: Petitions and EPA Response Memorandums related to Lead Emissions from Aircraft that Operate on Leaded Fuel](#)

Source:

[Oxford Academic: Leaded aviation gasoline exposure risk and child blood lead levels](#)

## Candy

*A pair of siblings were really excited to wear matching dinosaur costumes on Halloween. After a very successful night of trick-or-treating as dinosaurs, the siblings began munching on the candy they collected. Little did they know, some of the treats contained lead.*

While most parents know that too much candy for their kids can upset their stomachs and harm their teeth cavities, few are aware that some of the candy they enjoy can contain lead. This is especially a concern on Halloween when children collect a lot of candy at once.

Sources of lead in candy include ingredients such as tamarind, chili powder and salt, the manufacturing process, and the ink in candy wrappers. The U.S. Food and Drug Administration (FDA) regulates lead concentration in candy; however, studies have found that some imported candy contains lead concentrations exceeding the FDA's recommended maximum of 0.1 parts per million (ppm).

To prevent children from eating contaminated candy, adults can look on the wrapper for tamarind and chili powder in candy produced in Latin America and Asia. Immediately dispose of candy that is suspected to contain lead.

By being aware of potential lead hazards and taking these simple steps, children and adults can still enjoy Halloween and other festive occasions with their favorite treats.

For more information, refer to [EPA's Search Tool: Heavy Metals in Cultural Products](#).

Source:

- [National Library of Medicine – Lead: Sweet Candy, Bitter Poison](#)
- [FDA: Lead in Food, Foodwares, and Dietary Supplements](#)

## Cosmetics and/or cultural powders

*A couple celebrated their love with a big and colorful wedding. To follow Hindu tradition, the husband applied sindoor, a red-orange cosmetic powder, on the bride's hairline to signify her new status as a married woman. Other women in the ceremony watched the newlyweds with excitement - they too had sindoor applied to their foreheads as a visual mark of their marital status. What the couple and wedding guests didn't know is that the powder used to make sindoor was made with toxic materials - including lead.*

To give *sindoor* its distinctive red color, some manufacturers add lead tetroxide to it. *Sindoor* purchased in both India and the United States may contain lead. Other cultural cosmetics, such as *kajal* and *tiro*, have been banned by the U.S. Food and Drug Administration (FDA) because of their elevated lead content, and have been classified as illegal color additives. Regular application of cosmetic powders containing lead can cause elevated blood lead levels which can lead to reproductive health issues, high blood pressure, incidence of hypertension and decreased kidney function.

Even small amounts of lead exposure can lead to lifelong health effects, including neurological disorders and behavioral changes in children. Immediately discontinue use, especially body application or ingestion, of any cosmetics suspected of containing lead.

By seeking out lead-free alternatives, you can still carry on beloved cultural traditions while protecting the health of you, your family and your community.

For more information, refer to [CDC's Fact Sheet: Recalls of Children's Products, Foods, Cosmetics, and Medicines Due to Lead Hazards](#).

Source:

- [National Library of Medicine: Lead Content of Sindoor, a Hindu Religious Powder and Cosmetic: New Jersey and India, 2014-2015](#)

## Do-it-yourself (DIY) renovations in homes built before 1978

*A couple beamed with joy after finally saving enough money to purchase their first home. Excited to renovate the older home, the couple began stripping walls, sanding floors, and replacing old fixtures. What the couple did not know was that the layers of paint covering their walls, doors, and window frames contained lead - a common ingredient in the paint used in homes built before 1978. As the couple continued repairing the house, invisible lead particles became airborne and settled on surfaces like a silent poison.*

Renovations in older homes with lead-based paint can be especially harmful to children, who may inhale the lead dust created by the renovation or repair activities. Inhaling lead-contaminated dust over time raises the lead in their blood to dangerous levels.

If you are looking to renovate your home, EPA recommends hiring a lead-safe certified professional to determine if lead is present in your home, and then securing the services of a lead-safe certified contractor to perform the renovation, repair or painting work for you. If you choose to do the renovation work yourself, be sure to follow EPA's do-it-yourself (DIY) lead-safe work practices, which can be found on EPA's website.

By enlisting the appropriate professionals and taking precautions, you can safely renovate your home and make sure you and your children live in a lead-free environment. [If you have young children, read more about potential lead exposure from indoor lead-based paint.](#)

For more information, review the following:

- [Find a lead-safe certified professional near you](#)
- [Find a lead-safe certified contractor near you](#)
- [Follow DIY-lead safe work practices when renovating your home](#)
- [Fact sheet for your next DIY home renovation](#)

## Drinking water

*Parents were surprised and horrified when they learned that their school district's water was contaminated with lead. After a district-wide investigation found that multiple schools in the area had lead in their drinking water and that water in many schools had not been tested for lead in over 10 years. Most schools were found to have three or more sources of water with lead contamination above the EPA action level of 15 parts per billion (ppb). (The lead action level is a measure of the effectiveness of the corrosion control treatment in water systems). Drinking water sources were turned off and bottled water was provided for students to drink instead while the school district evaluated all buildings for possible lead-contaminated water.*

It is not uncommon to find lead in drinking water in homes, schools and daycare centers across the country due to corrosion of metal pipe materials that can result in the release (or leaching) of metals, such as lead and copper, into the water supply. In some cases, such as in 2014 in Flint, Michigan, improper water treatment caused lead from pipes to leach into drinking water. Lead in drinking water can also come from lead service lines, small pipes that connect a building to the main water system. Sometimes, the source of lead in drinking comes from the lead-based pipes, faucets or fixtures inside a building. Multiple factors play a role in how much lead is released to water, including the water temperature, amount of time water spends in the pipes, acidity of the water, mineral content and coatings on the pipe. Lead exposure from water at home can be reduced by running water prior to using it for cooking or drinking and using only cold water for these purposes. Tools on the EPA website provide guidance on how to identify lead pipes in your home and test drinking water for lead.

Programs to test for lead in drinking water and to remove leaded pipes vary by state. Additionally, EPA's 2020 revised Lead and Copper Rule requires schools and daycare facilities to test their drinking water for lead. Parents can reach out to their school district and/or daycare to ask if they have completed recent water testing.

For more information, you can review the following:

[Learn more about lead in drinking water, how to determine if your drinking water has lead, and what you can do to protect yourself and your family.](#)

[Access EPA's guide to identify lead pipes and learn how to test your drinking water.](#)

[Learn more about the revised Lead and Copper Rule.](#)

Learn more about lead exposure and testing in schools [here](#) and [here](#).

Source:

- [Education Leaders Report: How States Are Handling Lead in School Drinking Water](#)
- [Harvard School of Public Health: State Approaches to Testing School Drinking Water for Lead in the United States](#)

### **Hobbies performed at home (making hunting ammunition, fishing tackle, etc.)**

*As summer approached, two parents were excited to introduce their five-year-old child to fishing. The parents found their old fishing gear in their garage and brought it into the house to teach their five-year-old how to prepare the equipment. Unfortunately, they did not know that much of their fishing tackle contained lead.*

Recreational fishers often store and prepare their equipment at home. However, some fishers might be unaware that some fishing tackle, like jigs and sinkers, can contain lead and can put people at risk of lead exposure inside their own homes. Other outdoor recreational equipment, like lead ammunition for hunting or lead solder for welding can jeopardize people's health inside their own homes too.

To avoid lead exposure from hobby equipment, people should store gear containing lead in sealed containers, use disposable gloves to handle these materials, clean work areas, wash hands often and avoid putting any equipment in their mouths.

By purchasing lead-free equipment and regularly following these steps to reduce lead exposure from lead-containing gear, people can continue to enjoy their favorite hobbies while keeping themselves and others safe.

For more information, refer to [LoonSafe.org's guidelines on How to tell if your fishing tackle contains lead \(Pb\)](#) or [Illinois Department of Health's Lead Safety for Fisherman](#).

Source:

- [National Library of Medicine – Lead poisoning from ingestion of fishing gear – a review](#)

## Imported aluminum cookpots

*A family of four went to the pediatrician together for the first time. The pediatrician tested the two young children for lead in their blood, something they had not done before in their home country. When both results came back showing higher than normal levels of lead, the parents were not sure what to do. The health department also found the case to be somewhat unclear, as the children's elevated blood lead levels could be from lead exposures before the family moved to the U.S. So, the doctor's office set up a follow-up blood test. Unfortunately, this second test showed that the children's blood lead levels had not returned to normal. The health department visited the family's home and found that the aluminum pressure cooker and pots they had brought with them to the U.S. had high levels of lead. The family switched to a stainless-steel pressure cooker and purchased new pots. The children continued to be monitored by their pediatrician as their blood lead levels decreased and returned to normal.*

Although your family may love to use heirloom or artisanal cookware, it is important to be cautious of potential lead exposure from these products.

Artisanal aluminum cookware, such as pots, pans, and pressure cookers, are commonly made by small producers from recycled scrap metal in some low and middle-income countries. These pots are inexpensive, lightweight and conduct heat well. However, they are not regulated and can contain high levels of lead. Using aluminum cookware in good condition from known manufacturers or switching to other materials, such as stainless steel cookware, can prevent such exposure to lead.

Although the causes of lead exposures can be less clear for a child who has recently moved, it is crucial to test all children for lead and make sure there are no exposures in their new home, like the lead contaminated cookware in this story.

In the U.S., children enrolled in Medicaid are required to get tested for lead at ages 12 and 24 months, or age 24–72 months if they have no record of ever being tested. For children not enrolled in Medicaid, the Centers for Disease Control (CDC) recommends focusing testing efforts on high-risk neighborhoods and children.

For more information, refer to the [Hazardous Waste Management Program's study on lead in imported aluminum cookpots](#).

### Source:

- [A review of lead exposure from recycled aluminum cookpots](#)
- [A study of aluminum cookware and metal exposure from ten countries](#)
- [A study of lead in aluminum cookpots in Washington State](#)

## Lead-based paint in homes built before 1978

*Homes are special for families – they are places of gathering, warmth, and memory-making. But lead may be an invisible danger that owners and renters of homes built before 1978 should be aware of that can be lurking on the walls, windowsills, door frames and other areas that get frequent wear and tear. For parents with young children, it is especially important to be aware of the risk of lead exposure in older homes.*

Young children, especially those under the age of 6, may encounter lead when they play, touch or chew on surfaces in older homes. Dust from deteriorating surfaces with lead-based paint can also fall on floors, making the ground dangerous for children to crawl and play on.

If you are living in a home that was built before 1978, it is essential to inspect and keep all painted surfaces in excellent shape, and frequently clean up dust with a wet cloth or paper towel. Lead-based paint presents a hazard if there is chipping, cracking or peeling on painted surfaces in the home. You can also hire a certified lead professional to perform a lead inspection in your home. Once the areas in your home with lead have been identified, you can hire a lead abatement contractor to safely remove the areas of concern.

It is possible to safely live in a home with lead-based paint provided you take action to protect you and your children's health.

For more information, review [EPA's webpage on protecting your family from sources of lead](#). To hire a lead inspector to test your home for lead, visit [epa.gov/lead/findaprofessional](http://epa.gov/lead/findaprofessional).

Source:

- [American Public Health Association: Lead-contaminated house dust and urban children's blood lead levels](#)



## Jewelry

*A parent gifted their child a beautiful necklace for their birthday that had been passed down for generations in the family. But what the parent did not know is that the necklace was made with lead. The child proudly wore and sometimes used their hands and mouth to play with the necklace. The necklace elevated the child's blood lead level and put their health at risk.*

Although family heirlooms, like necklaces, bracelets, and rings are beloved sentimental items, they may unfortunately pose a risk to our health, and especially our children's safety. Lead is often used in jewelry to make the product heavier, brighten colors, and stabilize or soften plastic. It is not possible to know whether jewelry is made of lead just by looking at it.

Parents should avoid dressing their children with jewelry that may contain lead to avoid exposure from chewing, sucking on or swallowing it. Jewelry labeled as made in the United States is less likely to contain lead than jewelry made abroad and purchased through informal and unregulated sources. Be extra cautious with all jewelry made before 1978. You can check the [website of the U.S. Consumer Product Safety Commission](#) to see whether your child's jewelry has been recalled.

If you suspect your jewelry contains lead, immediately remove your and your child's access to it and keep it in a sealed container to prevent exposure. While family heirlooms serve as memories of your loved ones, it is more important to protect your and your child's health.

For more information, refer to [CDC's Fact Sheet: Recalls of Children's Products, Foods, Cosmetics, and Medicines Due to Lead Hazards](#).

### Source:

- [CDC: Lead in Consumer Products](#)
- [Massachusetts Executive Office of Health and Human Services, Department of Public Health: FAQ About Lead in Children's Jewelry](#)

## Take Home Exposures

*After a long day of construction labor, a worker was eager to go home and remove their dirty boots and clothing to begin relaxing with their family. What the worker did not know was that they unknowingly carried lead dust from work on themselves and their clothes into their home.*

Many industries, including construction, plumbing, painting, recycling and manufacturing, can expose workers to lead. Although exposure to lead is unavoidable in some occupations, many people are unaware that lead dust from work environments can settle onto workers' clothes, bodies and equipment. The lead can then contaminate workers' cars and homes, potentially poisoning unsuspecting workers, along with their family members, friends or roommates.

To help prevent introducing lead into their homes, workers can shower immediately after work; remove and store work clothing, shoes, and equipment outside of their homes; and clean these items separately from other personal items.

While it might be difficult for workers in construction and other industries to avoid carrying lead dust on their clothes, bodies, and equipment, they can take these simple steps to keep their homes lead-free.

For more information, refer to the [Occupational Safety and Health Administration's overview on lead](#).

Source:

- [CDC: National Institute for Occupational Safety and Health - Take-Home Exposures](#)
- [CDC: National Institute for Occupational Safety and Health – Information for Workers](#)

## Toys

*When their previously chatty and healthy toddler started having difficulties speaking, a family became highly concerned. The doctor's office ordered multiple laboratory tests, one of which was a blood test for lead. The family was surprised when their toddler's blood test showed elevated lead levels, since they lived in a new home, they thought didn't have lead. After a month of conversations with public health officials and multiple house visits, the family was able to track down the source of the lead exposure to their toddler's favorite toy, which the child would often chew on. Once the parents disposed of the toy, the toddler's blood lead level returned to normal.*

While it is entirely normal for young children to enjoy playing with and putting toys in their mouths, it is important to be cautious because if their toy contains lead, this behavior can lead to lead exposure. Chewing on, sucking, or swallowing pieces of a toy can expose children to dangerous levels of lead.

Children's toys are regulated in the United States, but some toys, especially retro, vintage or collectible toys, toys made in other countries and toy jewelry, may be contaminated with lead since current federal regulations may not apply to them. Lead can be present in the paint, plastic or metal components of toys and toy jewelry. The U.S. Consumer Product Safety Commission (CPSC) monitors and issues recalls for current products that may expose children to lead. Parents and caregivers can check the CPSC website or call its hotline to determine if any recalls have been issued for household toys.

It is recommended that children not be allowed to play with retro or vintage toys, as toys made before 1978 are more likely to contain lead-based paint.

Additionally, washing toys regularly and keeping them in good condition (i.e., avoiding wear and tear) can help to avoid possible lead dust on their surfaces. If you suspect that your child has been exposed to toys or toy jewelry that contains lead, immediately remove the items, dispose of them, consult your child's doctor, and consider a blood lead test for your child to determine whether they have been exposed to lead.

Paying attention to the source and age of your children's toys and being aware of current recalls can help make sure kids are kept safe from lead while they play.

To learn more about lead in toys, possible health impacts, and actions families can take:

- [CDC lead hazards in toys](#)
- [Recent review](#) of lead in toys

To learn about current toys recalled for lead contamination:

- [Consumer Product Safety Commission](#)
- 1-800-638-2772

Fact Sheets:

- [National Center for Healthy Housing](#)
- [Colorado Department of Health: Keeping Kids Safe from Toys Contaminated with Lead](#)

Source:

- [WebMD: Lead in Toys: Could It Be Lurking in Your Home?](#)

## Traditional glazed ceramicware

*After purchasing a beautiful, bright orange ceramic mug at a thrift store, the piece became a family's household favorite for hot and cold drinks. Unfortunately, the family was unaware that the imported ceramic contained lead that was seeping into their drinks.*

Traditional glazed ceramic ware decorated with beautiful bright colors can quickly become people's favorite containers for drinks and food. However, frequently eating or drinking from, or storing food in, improperly manufactured ceramics can result in lead poisoning.

Manufacturers sometimes use lead-containing glazes to add color and create a bright and smooth finish for ceramics. When pottery is not fired in a kiln at the proper temperatures during production, the lead does not correctly seal into the glaze. The unsealed lead can contaminate foods and liquids, harming human health.

To prevent lead contamination from traditional ceramic ware, people should especially avoid purchasing bright red, yellow, and orange ceramics from regions known as sources of lead poisoning from traditional pottery or ceramic ware, such as Mexico, China, Ecuador, Turkey, Morocco, Uzbekistan and some European countries.

Ensuring that the traditional glazed ceramics in homes are free of lead will enable families to enjoy beautiful art pieces and stay healthy.

For more information, refer to [NYC Department of Health's Overview on Lead Exposure Through Traditional Mexican Ceramicware](#) or [EPA's overview on Lead Test Kits](#).

### Source:

- [National Library of Medicine: Lead Toxicity from glazed ceramic cookware](#)
- [FDA: Questions and Answers on Lead-Glazed Traditional Pottery](#)

## Traditional home remedies

*A toddler was found to have highly elevated levels of lead in his blood at his yearly medical check-up. His parents were concerned and invited the local health department to do a site visit to find out why. The health department checked the family's apartment and did not find lead in the paint or in the water. They checked the family's spices and pottery and still did not find any major sources of lead exposure. When the health department asked if their toddler had been experiencing any other health concerns, they learned that the family had been giving him a traditional home remedy made from greta powder mixed with honey for stomach aches. As greta powder is almost entirely lead, the family's efforts to help their child feel better had accidentally resulted in him being exposed to highly dangerous levels of lead. The family stopped using greta and the child's blood lead levels returned to normal within the next two months.*

Both *greta* and *azarcon* are traditional home remedies from Latin America that are predominantly made of lead and used to treat upset stomachs or indigestion. Other home remedies that can contain high levels of lead include: Payloo-ah, used for rash or fever by the Hmong community; Ghasard, Bali Goli, and Kandu used for indigestion and stomach aches by the Indian community; Daw Tway used as a digestive aid by the Southeast Asian community; Babaw-san used to treat colic by the Chinese community; and Kohl which is used as eyeliner and to treat skin infections, predominately by African and Middle Eastern communities. Many of these products can be almost entirely lead or contain very high levels of lead, making them highly dangerous for children. Some traditional Ayurvedic medicines have also been found to contain lead and have been linked to elevated blood lead levels.

While your family may opt to use traditional home remedies, it is best to make sure that they do not put your family at risk for lead exposure. While your family may find traditional home remedies to be beneficial or comforting, it is important to make sure that those you use are safe and nontoxic, since some remedies contain very high levels of lead and can put your family at risk for effects from lead exposure.

Informational flyers regarding lead in home remedies:

- [California DPH Fact sheet- English and Hmong](#)
- [California DPH Fact Sheet - Spanish](#)
- [Washington State DPH Fact Sheet](#)
- [CDC: Lead in Food, Cosmetics, and Medicines](#)

Source:

- [Alameda County, CA Government: Possible Sources of Lead – Home Remedies](#)
- [Centers for Disease Control and Prevention: Lead in Spices, Herbal Remedies, and Ceremonial Powders Sampled from Home Investigations for Children with Elevated Blood Lead Levels – North Carolina, 2011-2018](#)
- [National Library of Medicine: A cluster of lead poisoning among consumers of Ayurvedic medicine](#)
- [National Library of Medicine: Lead Poisoning and Anemia Associated with Use of Ayurvedic Medications Purchased on the Internet – Wisconsin, 2015](#)

## Soil

*A family's backyard garden was their biggest source of pride – a beautiful green space overflowing with colorful vegetables and flowers. Their children especially loved to help their parents plant new seedlings in the soil and dance around in the garden plots after school. But what this family did not know was that decades of nearby factory pollution had contaminated the garden soil with lead. As they carried on with gardening, ate the vegetables that they grew, and especially as their children played in the soil, they were exposing themselves to lead and putting their health at risk.*

While high levels of lead in soil do not decline over time, residents can still take action to reduce their exposure. They can choose to get their soil tested to determine whether lead is present. Soil can be tested for lead by sending samples to a laboratory that can identify the concentration of lead in the soil. Most laboratories associated with state university agricultural departments and agricultural extension offices offer soil testing for lead at cost. In some areas, there are also opportunities to have soil screened for lead at Soil Screening, Health, Outreach, and Partnership (soilSHOP) events.

EPA also recommends building raised garden beds and filling them with clean planting soil to reduce the chance of coming into contact with contaminants such as lead. Furthermore, be sure that children do not eat soil or put their hands in their mouths after playing in soil or on playgrounds, encourage them to wash their hands several times a day. Care should be taken not to eat crops that have been grown in soil that may contain lead as the lead can be absorbed by the plant. Other actions residents can take include keeping soil outdoors by using doormats and taking off their shoes before entering homes to avoid tracking in lead-contaminated soil.

While residents may not be able to address the large-scale causes of lead-contaminated soil, there are still small, actions they can take on a daily basis to reduce their chances of lead exposure and stay safe while enjoying gardening or other outdoor activities.

For more information about protecting yourself from contaminated soil, review the following:

- [EPA: Protect Your Family from Sources of Lead - Soil](#)
- [What Gardeners Can do: 10 Best Practices for Healthy Gardening](#)
- [EPA: Reusing Potentially Contaminated Landscapes - Growing Gardens in Urban Soils](#)
- [Johns Hopkins: Soil Safety Resource Guide for Urban Food Growers](#)
- [Healthy Soils, Healthy Communities: Metals in Urban Garden Soils](#)

### Source:

- [Journal of Environmental Quality - Lead in Urban Soils: A Real or Perceived Concern for Urban Agriculture?](#)
- [Industrial Lead Poisoning in Los Angeles: Anatomy of a Public Health Failure.](#)
- [University of Maryland Extension: Lead in Garden Soils](#)
- [EPA: Technical Review Workgroup Recommendations Regarding Gardening and Reducing Exposure to Lead-Contaminated Soils](#)

## Spices

*A couple were thrilled to welcome their new child to the world. At a regular visit to the child's doctor, they were surprised and concerned to hear that their child had an elevated blood lead level. The family had the lead-based paint removed from their home prior to having their first child. They did a follow-up blood lead test, to make sure the result was not an error of some kind. When the second test confirmed the results, the local health department came to the family's home and confirmed that the house did not have lead-based paint, lead pipes, or lead in the play area outside. What they did find, after a few weeks of testing, was that many of the spices the family frequently cooked with, especially those that friends and family had sent them from abroad, were contaminated with lead.*

Spices can add wonderful flavors to home-cooked meals and can connect families with communities across the world. However, they can also be contaminated with lead.

Lead can be added intentionally to spices to enhance their color or increase their weight or can be accidentally introduced if the spice plants or the spice processing equipment are contaminated with lead.

EPA recommends that families avoid using spices purchased abroad or those that have been imported, as research has shown some to have high levels of lead. If you are concerned about potential lead exposure, ask your doctor for a blood lead test.

For more information, review the following:

- [Public Health Warning regarding spices from Georgia](#)
- [NYC Health Website on Lead in Foods and Spices](#)
- [Minnesota Department of Health fact sheet on Lead in imported products, including spices.](#)

Source:

- [2018 MMWR Lead in Spices, Herbal Remedies, and Ceremonial Powders Sampled from Home Investigations for Children with Elevated Blood Lead Levels — North Carolina, 2011–2018](#)
- [Journal of Public Health Management & Practice: A Spoonful of Lead: A 10-Year Look at Spices as a Potential Source of Lead Exposure](#)
- [National Library of Medicine: Pediatric lead exposure from imported Italian spices and cultural powders](#)
- [National Library of Medicine: Childhood lead poisoning in 2 families associated with spices used in food preparation](#)
- [National Library of Medicine: Childhood lead poisoning in 2 families associated with spices used in food preparation](#)