

Lead

This sheet is about exposure to lead during pregnancy or while breastfeeding. This information is based on research studies. It should not take the place of medical care and advice from your healthcare provider.

What is lead and where is it found?

Lead is a heavy metal. It can be found in many places, such as soil, water, cosmetics, children's & costume jewelry, old paint, ceramic glazes, plumbing, batteries, bullets, solders, and gasoline.

Lead can pass from pipes into drinking water (called leaching). When lead paint is sanded or stripped, it gives off dust that contains lead. Living near metal smelters, landfills, mining areas, or hazardous waste sites could increase the chance for exposure to lead.

Some traditional or folk medications (including Ayurvedic medicines) can contain high amounts of lead. Some types of candy can also contain lead.

Some hobbies and jobs can lead to higher levels of lead exposure. Examples include making ceramics, pottery, or jewelry, auto repair, printing, construction, stained-glass work, art restoration, welding, finishing furniture, indoor target practice, or making bullets or fishing lures.

In 1978, the U.S. government banned the use of paint containing lead, and the use of lead in gasoline around 1980. Even with attempts to limit sources of lead, lead can still be found in the ground and in water.

How does lead get into the body?

Lead gets into the body by breathing in lead dust, or by swallowing lead particles. Only small amounts of lead get into the body through the skin. If you have been around lead, it is important to carefully wash your body, especially your hands, to keep lead from getting into your mouth. Because lead is found in many places in our environment, most people have small amounts of lead in their blood.

Where is lead found in the body?

When a person is exposed to lead over a long period of time or at a high level, the body will store lead in the bones and teeth. Lead can stay in the bones and teeth for many years. During pregnancy and breastfeeding, lead can leave bone and move back into the blood.

How can I lower my exposure to lead?

- Avoid exposure to any known sources of lead before and during pregnancy. If you are working with lead in your job or hobbies, or eating / taking candies or medication imported from other countries talk with your healthcare provider about checking your blood lead level.
- If you are remodeling a home built before 1978, avoid removing lead paint yourself. Lead paint should be removed by certified professionals who are following safety procedures that protect you and your family from lead exposure.
- If you are living in a home built before 1978, wipe down windows and windowsills with a wet towel/rag and wet-mop the floors to help remove lead dust.
- Check your water. Houses that use well water should have the water tested regularly for lead and other possible contaminants. Water from public sources is regularly tested for lead. You can get information about your drinking water from your local board of health.
- Eat a well-balanced diet. A diet poor in calcium, iron, zinc, vitamin C, vitamin D, and vitamin E has been associated with increased lead absorption.

How can I find out if I have lead in my body?

A blood lead test can be done to see how much lead is in your blood. However, this is not a routine blood test for all

women who are pregnant. The Centers for Disease Control and Prevention (CDC) and American College of Obstetricians and Gynecologists (ACOG) recommends obstetric health care providers evaluate the risk of lead exposure for each individual patient and offer a blood test if a risk factor is present.

I am pregnant and had a lead test. Is there a level that I should be concerned about?

While most people will have some lead in their blood, levels greater than 5 micrograms per deciliter (mcg/dL) suggest that there is exposure at home or in the workplace that needs to be addressed and a search for the source of lead should be done.

I have been exposed to lead. Can it make it harder for me to get pregnant?

Studies have shown mixed results. Some studies suggest that lead levels that are too high or too low might make it harder to get pregnant. Other studies suggest lead might not affect the ability to get pregnant.

Can lead in my body reach the pregnancy?

Lead can cross the placenta and reach the developing fetus. The amount of lead in the blood of the woman who is pregnant and the fetus is almost the same. It is not known how early lead can reach the fetus in pregnancy, but reports have documented lead in a fetus as early as the end of the first trimester.

Does having lead exposure increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Several studies have reported links between high blood levels of lead during pregnancy and miscarriage.

Does having lead exposure increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like lead, might increase the chance of birth defects in a pregnancy. Lead exposure in pregnancy has not been clearly associated with an increased chance of physical birth defects.

Does having lead exposure increase the chance of other pregnancy-related problems?

Other problems have been reported with lead exposure in pregnancy, such as low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth), preterm delivery (birth before week 37), poor growth, preeclampsia (high blood pressure and problems with organs, such as the kidneys) that can lead to seizures (called eclampsia), and stillbirth.

Does having lead exposure in pregnancy affect future behavior or learning for the child?

Lead exposure during pregnancy can have effects on the fetal brain. This can cause learning and behavior problems for the child.

Breastfeeding and lead exposure:

Breastfeeding recommendations vary based on the amount of lead in the mother's blood. In general, women with blood lead levels under 40 mcg/dL could continue breastfeeding. However, the infant's blood lead levels might also need to be checked. Lead levels in breast milk are usually lower than the levels in the mother's blood. If lead is detected in a blood test, there could be an exposure at home or in the workplace that needs to be addressed.

Lead might also be found in infant formulas or in contaminated water that is used to mix formula. To reduce exposure to lead through water, use bottled/distilled water or, if using tap water, allow it to run for three minutes before using.

Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man has exposure to lead, can it make it harder to get a partner pregnant or increase the chance of birth defects?

Lead in the body can reach the sperm. High levels of lead might cause changes in the shape, size, number, and movement of the sperm. This might impact fertility (ability to get a woman pregnant). People who work with lead can bring lead dust home on their clothes, shoes, or other items. If a woman who is pregnant handles these items, such as

when doing laundry, there could be direct exposure to lead. For more information about paternal exposures, please see the MotherToBaby fact sheet at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

Please click here for references.

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at [MotherToBaby.org](https://mothertobaby.org).

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