Lead and Pregnancy

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to lead may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care professional.

What is lead and where is it found?

Lead is a heavy metal. It can be found in many places such as in old paint. In 1978 the United States government banned the use of paint containing lead. Lead is still used in making pottery, and in various industries such as battery manufacturing, auto repair, and printing. Some traditional and folk medications can contain high amounts of lead, as well as some types of candy made in Mexico. In the past, lead was used in gasoline. Although the United States has limited the use of lead in gasoline, lead can still be found in the ground and in water.

Because lead is found in many places in our environment, most people have small amounts of lead in their blood.

How does lead get into my body?

Lead can be absorbed through the lungs and gut. When lead paint is sanded or disturbed it produces dust that contains lead. If you breathe in that dust, the lead can get into your lungs. It can also get into your body through the gut if you swallow lead paint chips, medications, soil or water that contains lead. Only small amounts of lead get into the body through the skin. It is important to use extra care in washing your body, especially your hands, if you have been exposed to lead from contaminated water or other sources. This is to prevent the lead from getting into your mouth from your hands.

When a person is exposed to lead over a long period of time or at a high level the lead can be stored in the bones. Lead can stay in the bones for many years.

Is there anything I can do to lower my exposure to lead?

Yes. If you are working with lead in your job or have a hobby such as making jewelry or stained glass, it is important to check your blood lead level. It is a good idea to lower your exposure to lead before and during pregnancy.

If you are fixing up an older home you may disturb paint that contains lead. You should avoid this activity because lead can easily get into your body by breathing in dust or getting it on food or beverages. If other people will be fixing up your home for you, be sure that they follow safe procedures to protect you and your family from lead exposure.

Water from public sources is regularly tested for lead. You can get information about your drinking water from your local board of health. Houses that use well water should have the water tested regularly for lead and other possible contaminants.

Some researchers have found that a diet poor in calcium, iron and zinc can be associated with increased lead absorption. Therefore, it is important for pregnant women to eat a well-balanced diet and take prenatal vitamins.

Is there a test to tell how much lead I have been exposed to?

Yes, a blood lead test can easily be done to see how much lead is present. Although most people will have some lead in their blood, levels greater than 10µg/dl indicate that there is some exposure at home or in the workplace that may need to be changed. While there is no clear safe level of lead in the body, the goal is to have the lowest level possible.

Because lead is stored in bone, women who have worked or been exposed to lead in the
past may have higher lead levels in pregnancy. This happens because lead in the mother’s bones can be released into the blood during pregnancy. Women who had exposure to lead in the past should have levels checked before and during pregnancy.

For children, The Centers for Disease Control and Prevention recommend that public health actions (such as a search for the source of lead) be initiated when blood lead levels are above 5 micrograms per deciliter (µg/dL).

**Can lead make me sick?**

Since lead is stored in bone, it can build up throughout a person’s life. In adults, very high levels of lead in the blood can cause serious health problems to the brain and the kidneys.

**Can lead in my body reach the baby?**

Yes, lead can cross into the baby starting at about the 12th week of pregnancy. The amount of lead in the blood of the mother and baby are almost the same.

**What effects could lead have on my baby?**

High levels of lead during pregnancy can cause miscarriage and stillbirth. Other pregnancy problems such as low birth weight and premature delivery can also occur.

The most serious effects of high maternal lead levels are learning and behavior problems in exposed babies. There may be mild effects on learning in babies exposed to small amounts of lead.

Exposure to lead during pregnancy does not increase the risk for physical birth defects.

**Is there concern about lead if I am breastfeeding?**

Lead levels in breast milk are the same as in the mother’s blood. Lead may also be found in infant formulas, particularly if the local water supply contains high levels of lead. A mother should not stop breastfeeding unless her blood lead level is very high. Be sure to talk to your health care provider about all your choices for breastfeeding.

**Is it a problem if the father of the baby is exposed to lead?**

Lead in the body can reach the sperm. High levels of lead may cause changes in the shape, size, number and movement of the sperm. This may make it harder for you to get pregnant.

Fathers who work with lead can bring it home on their clothes or other items. If a pregnant woman handles these items, such as in doing laundry, she could have a direct exposure to lead. If your partner is exposed to lead at work or through a hobby, you should be sure he is not bringing home lead on his clothes, shoes or other articles.

In general, exposures that a father has do not increase risk to a pregnancy. For more information, please see the OTIS fact sheet Paternal Exposures and Pregnancy at [http://www.mothertobaby.org/files/paternal.pdf](http://www.mothertobaby.org/files/paternal.pdf).

**How can I protect myself and my family from lead exposure after a hurricane or flood?**

After a hurricane or flood, lead can be found in the floodwaters. You can prevent a harmful amount of lead from getting to you or your baby by following these safety measures:

- Listen to and follow public announcements to tell you if tap water is safe to drink or to use for cooking or bathing. If the water is not safe to use, follow local instructions to use bottled water. Boiling does not remove lead.
- Flooded, private water wells will need to be tested after floodwaters recede. If you suspect that your well may be contaminated with lead, contact your local or state health department.
- Walking in floodwaters is not likely to cause a large exposure to lead because only small amounts get through your skin.

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*If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.*