

This fact sheet explains the U.S. Preventive Services Task Force's (Task Force) draft recommendation statement on screening for elevated lead levels in childhood and pregnancy. It also tells you how you can send comments about the draft recommendation to the Task Force. Comments may be submitted from October 30, 2018 to December 3, 2018. The Task Force welcomes your comments.

Screening for Elevated Lead Levels in Childhood and Pregnancy

The Task Force issued a **draft recommendation statement** on *Screening for Elevated Lead Levels in Childhood and Pregnancy*. The Task Force found that there is not enough evidence to determine the balance of benefits and harms of clinicians screening for elevated blood lead levels in

children and in pregnant women with no signs or symptoms. The Task Force is calling for more research so clinicians can have better screening tools and effective treatments to help prevent the health problems that can result from lead exposure.

What are Elevated Blood Lead Levels?

Lead is a toxic metal that can cause health problems when people are exposed to it. Everyone has some lead in their blood because lead is in all parts of the environment. People who have elevated levels of lead may be exposed to additional sources of lead and are more likely to experience health problems as a result.

Facts about Lead Exposure

There is no safe level of lead exposure. Lead is a toxic metal that can cause health problems when people are exposed to it. Lead can be found in all parts of our environment: air, soil, water, and even inside homes. Lead exposure is caused by swallowing or breathing in a substance containing lead. Common sources of lead exposure include leaded gasoline, lead paint, lead-based plumbing material, and contaminated drinking water. Finding and removing any source of lead is essential to protecting health.

There have been important advances in reducing the risks of lead exposure in recent decades. Policy changes to remove lead from gasoline and paint have been very successful at reducing exposure to lead. But, sources of exposure such as contaminated drinking water, older plumbing, and older homes with lead paint still exist.

Children are especially vulnerable to lead exposure because their bodies absorb lead at a higher rate than adults, as their systems are not yet fully developed. Children who are exposed to lead can suffer from serious, lifelong negative effects on their health, such as:

- Behavioral and learning problems
- Lower IQ
- Hyperactivity
- Problems growing
- Hearing problems
- Anemia (not having enough red blood cells)
- Death

Lead exposure during pregnancy can harm the baby and the mother. High levels of lead in a woman's blood during pregnancy can cause loss of the baby during pregnancy, early delivery, low birthweight, and high blood pressure in the mother.

Facts about Lead Exposure

An effective way for a clinician to screen for lead exposure is through a blood test. In this test, a clinician uses blood from a finger prick to test lead amounts. If the patient's blood tests positive, another test is done with more blood taken from a vein in the arm. Other screening methods have not been found to be effective.

If someone's blood test is positive for lead exposure, there are treatments a clinician may use or recommend to reduce the amount of lead in the blood. One treatment called chelation therapy removes some lead from the blood using medicine. Chelation therapy can be used for patients with symptoms of lead poisoning. However, while chelation reduces the amount of lead in the blood, it does not treat the negative health effects of lead exposure that occurred because of the lead. It also does not prevent lead levels from increasing if someone is exposed again.

In an effort to reduce lead exposure, clinicians may provide families education about lead exposure and ways to keep lead out of the home. They may also refer families to services that help remove or control lead in the home through special cleaning and repairs, removing soil, and painting over lead paint.

Potential Benefits and Harms of Screening for Elevated Lead Levels in Childhood and Pregnancy

While blood tests can find elevated levels of lead in the blood, treatments cannot reverse many of the effects of exposure. More research is needed to determine what primary care clinicians can do to help prevent and treat the health problems that can result from lead exposure in childhood and pregnancy.

Only identifying and removing the source of lead can help prevent exposure to lead. Individuals with any concerns about lead should talk to their clinician and others in their community who can help.

The Draft Recommendations on Screening for Elevated Lead Levels in Childhood and Pregnancy: What Do They Mean?

Here are the Task Force's draft recommendations on screening for elevated lead levels in children 5 years of age and younger and in pregnant women. They are based on the quality and strength of the evidence about the potential benefits and harms of screening for this purpose. They are also based on the size of the potential benefits and harms. Task Force recommendation grades are explained in the box at the end of this fact sheet.

When the Task Force issues an **I statement**, it means there is not enough evidence to judge benefits and harms for or against screening.

Before you send comments to the Task Force, you may want to read the [draft recommendation statement](#). The recommendation statement explains the evidence the Task Force reviewed and how it decided on the grade. [Evidence documents](#) provide more detail about the scientific studies the Task Force reviewed.

1 The USPSTF concludes that the current evidence is *insufficient to assess the balance of benefits and harms* of screening for *elevated blood lead levels in asymptomatic children*. **(I Statement)**

2 The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for elevated blood lead levels in asymptomatic pregnant women. **(I Statement)**

Notes

1 *insufficient to assess the balance of benefits and harms*
There is not enough evidence to recommend for or against screening.

elevated blood lead levels
Everyone has some lead in their blood because lead is in all parts of the environment. People who have elevated levels of lead may be exposed to additional sources of lead and are more likely to experience health problems as a result.

asymptomatic
Showing no signs or symptoms of lead exposure.



children
This recommendation is focused on children 5 years of age and younger.

What is the U.S. Preventive Services Task Force?

The Task Force is an independent, volunteer group of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services, such as screenings, counseling services, and preventive medicines. The recommendations apply to people with no signs or symptoms of the disease being discussed.

To develop a recommendation statement, Task Force members consider the best available science and research on a topic. For each topic, the Task Force posts draft documents for public comment, including a **draft recommendation statement**. All comments are reviewed and considered in developing the final recommendation statement. To learn more, visit the **Task Force Web site**.

Click Here to Learn More about Lead Exposure

-  **Lead Prevention Tips**
(Centers for Disease Control and Prevention)
-  **Prevent Childhood Lead Poisoning**
(Centers for Disease Control and Prevention)

| USPSTF Recommendation Grades | |
|------------------------------|--|
| Grade | Definition |
| A | Recommended. |
| B | Recommended. |
| C | Recommendation depends on the patient's situation. |
| D | Not recommended. |
| I statement | There is not enough evidence to make a recommendation. |

 **Click Here** to Comment on the Draft Recommendation



The Task Force welcomes comments on this draft recommendation.



Comments must be received between October 30, 2018 and December 3, 2018.



All comments will be considered for use in writing final recommendations.