

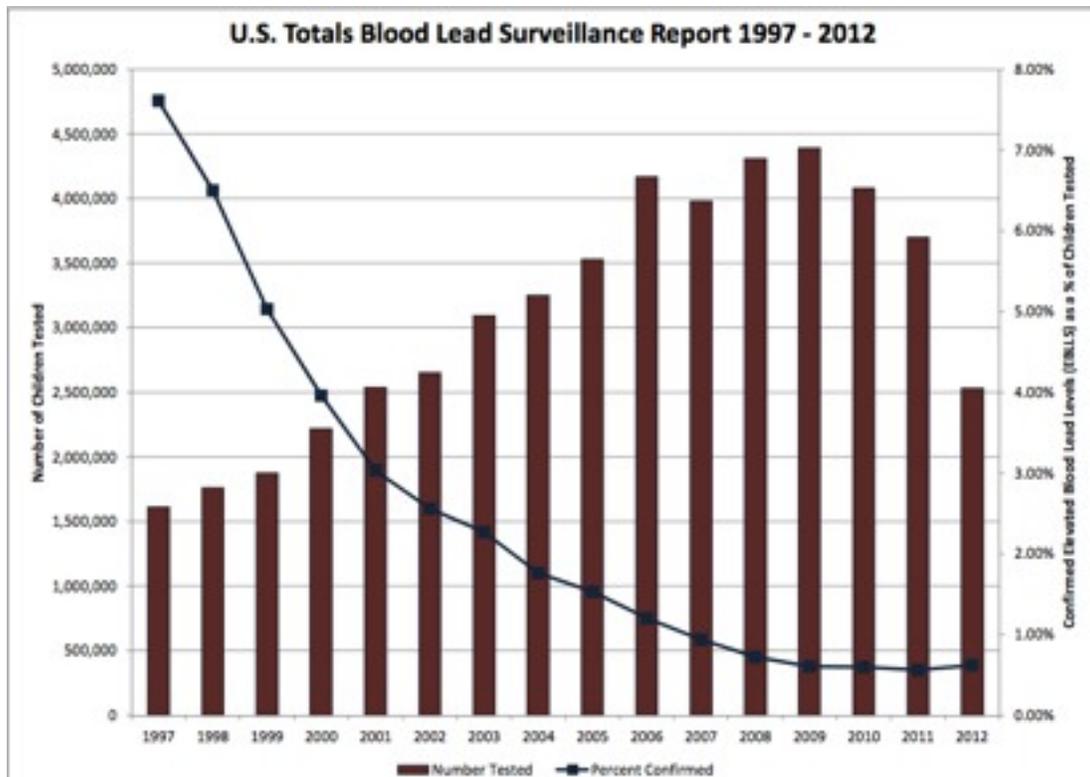
Lead Poisoning

Obj. 10.6: Explain common sources and prevention methods for childhood lead poisoning.



Trends in Elevated Blood Lead Levels Among Children

Examine the graph below and use it to answer the questions that follow.



Source: CDC <http://www.cdc.gov/nceh/lead/data/StateConfirmedByYear_1997_2012.pdf>

1. How has testing for elevated blood lead levels changed over the 15 years represented in this graph?
2. How have the percentage of confirmed elevated blood lead levels changed over the 15 years represented in this graph?
3. During what 5-year period did percentage of elevated blood lead levels drop the most?
4. Name some factors that might be responsible for these trends.



Preventing Lead Exposure

According to the CDC, “Today at least 4 million households have children living in them that are being exposed to high levels of lead. There are approximately half a million U.S. children ages 1-5 with blood lead levels above 5 micrograms per deciliter (µg/dL), the reference level at which CDC recommends public health actions be initiated. Lead exposure can affect nearly every system in the body. Because lead exposure often occurs with no obvious symptoms, it frequently goes unrecognized.”

Use the following CDC website to answer the questions below:

<http://www.cdc.gov/nceh/lead/tips.htm>

How are children exposed to lead?	
Who is at risk?	
What can be done to prevent exposure to lead? (List 4 examples)	
What are some thing that can be done to further reduce a child’s exposure from non-residential paint sources?	



What Do Parents Know?

- Do you think most parents are know the information you just read?
- Which parts of the information might be more or less understood by the general public?
- How do you think knowledge on this topic acquired by parents and guardians?
- Should further efforts to educate parents and guardians take place? If so, how?
- What other factors besides education may act as barriers for parents from making their home safe from lead hazards?



Case Study

Read the case study “**Death of a Child After Ingestion of a Metallic Charm --- Minnesota, 2006**” from the CDC MMWR report

(Source: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5512a4.htm>)



Case Study Debrief

Answer the following questions based on the case study.

1. What blood lead levels (BLL) are considered elevated for children?
2. What are some possible sources of exposure to lead besides paint that were mentioned?
3. How did the child in the case study die?
4. What was the child’s BLL at death?
5. What were the results of the inspection of the boy’s home?
6. What did CDC scientists find when they purchased and tested charms like the one the boy ingested?



Lead Poisoning

Fill in the table below with information about lead poisoning.

Sources	Effects	Prevention



Assess Your Home

Gather information about possible lead hazards in your own home by talking with your parents and doing any further research. Make a list of the possible hazards and prevention strategies already being used in your home.