

# Savings to the Community from Lead Poisoning Prevention

Childhood lead poisoning can lead to life-long problems, including chronic health problems, learning disabilities, increased need for special education services and higher crime rates. We pay a huge price to treat these problems, not only in human terms, but in billions of dollars.

Findings	Source(s)
<p><b><u>IQ</u></b> Lead exposure in children age 6 and younger can lower IQ. It is estimated that for each microgram per deciliter of blood, a child can lose .52 IQ points.</p> <p>For each IQ point that is lost, a child makes between an estimated \$16,809 less over the course of his or her lifetime.</p>	<p><b>Nevin, et al (2008).</b> <i>“Monetary benefits of preventing childhood lead poisoning with lead safe window replacement”</i> in Environmental Research, July 2007 106: 410-419.</p>
<p><b><u>Special Education</u></b> There is a strong link between childhood lead poisoning and a need for special education due to lowered IQ and impaired neurobehavioral function. The estimated average cost of special education in the state of New York is \$12,833 per student per year. As a result, lead poisoning prevention can cost taxpayers up to \$7.8 million per year to pay for special education services.</p> <p>The number of children in Chicago who are identified as lead poisoned is 2,600. Many of these children are likely in need of special education.</p>	<p><b>Korfmacher, KS (2003).</b> <i>“Long-Term Costs of Lead Poisoning: How Much Can New York Save By Stopping Lead?”</i> in Working paper: Environmental Health Sciences Center, University of Rochester, 9 July 2003. Available: <a href="http://www.sehn.org/tccpdf/lead%20costs%20NY.pdf">http://www.sehn.org/tccpdf/lead%20costs%20NY.pdf</a>.</p>
<p><b><u>Health Care</u></b> As the amount of lead in a child’s blood increases, so do the medical costs for doctor visits, follow up testing, nurse only visits, chelation therapy or, in severe cases, for treating a child over several days in a hospital. Preventing childhood lead poisoning could save up to \$53 million (<i>Gould basing the estimates on Kemper et al</i>).</p> <p>The United States could save an estimated \$43.4 billion per year in healthcare costs by preventing childhood lead poisoning (<i>Landrigan 2002</i>).</p>	<p><b>Kemper et al (1998).</b> <i>“Cost-effectiveness analysis of lead poisoning screening strategies following the 1997 guidelines of the Centers for Disease Control and Prevention.”</i> In Archives of Pediatric Medicine 152:1202-1208.</p> <p><b>Landrigan, et al (2002).</b> <i>“Environmental pollutants and disease in American children: Estimates of morbidity, mortality, and costs for lead poisoning, asthma, cancer, and developmental disabilities.”</i> In Environmental Health Perspectives 110(7): 721-728.</p> <p><b>Gould, E (2009).</b> <i>“Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control.”</i> In Environmental Health Perspectives v 117 no. 7.</p>

<p><b><u>Crime</u></b></p> <p>There is a link between early childhood lead exposure and future criminal activity, especially violent crimes. This includes, murder, rape, aggravated assault, robbery and burglary (<i>Bellinger 1994, Nevin 2006, Wright 1998</i>). The estimated total direct costs of violent crimes linked to early childhood lead poisoning is nearly \$1.8 billion (<i>Gould 2009</i>).</p>	<p><b>Bellinger et al (1994).</b> <i>“Pre- and post-natal lead exposure and behavior problems in school age children.”</i> In Environmental Research 66:12-30.</p> <p><b>Wright et al (1998).</b> <i>“Association of prenatal and childhood blood lead concentrations with criminal arrests in early adulthood.”</i> In Public Library of Science Medicine 5:e101 available at: <a href="http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0050101">http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0050101</a></p> <p><b>Nevin, R (2006).</b> <i>“Understanding international crime trends: the legacy of preschool lead exposure.”</i> In Environmental Research 104:315-336.</p> <p><b>Gould, E (2009).</b> <i>“Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control.”</i> In Environmental Health Perspectives v 117 no. 7.</p>
<p><b><u>Tax Revenue</u></b></p> <p>Childhood lead poisoning has been shown to cause loss of IQ points, life-long illnesses and lower academic achievement. All of these factors can bring down the amount a child will earn over a life time. Lower incomes mean a loss to society as a whole because less comes back to us in tax revenue. It is estimated that the loss in potential tax revenue is between \$25 and \$35 billion.</p>	<p><b>Gould, E (2009).</b> <i>“Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control.”</i> In Environmental Health Perspectives v 117 no. 7.</p>
<p><b><u>Return on Investment</u></b></p> <p>It is estimated that preventing childhood lead poisoning would result in a combined net benefit of up to \$270 billion with an initial investment of \$11 billion. That is a \$24 return on every \$1 invested in lead poisoning prevention.</p>	<p><b>Gould, E (2009).</b> <i>“Childhood Lead Poisoning: Conservative Estimates of the Social and Economic Benefits of Lead Hazard Control.”</i> In Environmental Health Perspectives v 117 no. 7.</p>

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