



## **2013 Childhood Lead Surveillance Annual Report**



## TABLE OF CONTENTS

Topic	Page
<b>Table of Contents</b>	<b>2</b>
<b>Executive Summary</b>	<b>3 – 4</b>
<b>Updates and Highlights</b>	<b>4 – 5</b>
<b>Pa. Lead Snapshot, 2013</b>	<b>6</b>
<b>Statewide Summaries</b>	<b>7 – 26</b>
<ul style="list-style-type: none"> <li>• Children Tested for Lead <span style="float: right;">8</span></li> <li>• Children Tested and Confirmed Elevated <span style="float: right;">8</span></li> <li>• Children Tested for Lead by Race <span style="float: right;">9</span></li> <li>• Children Tested and Confirmed Elevated by Race <span style="float: right;">10</span></li> <li>• Geometric Mean <span style="float: right;">11</span></li> <li>• Historical Data - Children Tested and Confirmed Elevated <span style="float: right;">12</span></li> <li>• Children Tested by Age 3 and 7 <span style="float: right;">13</span></li> <li>• Confirmed Elevated Results for Children Tested by Age 3 and 7 <span style="float: right;">14</span></li> <li>• Confirmed Elevated Percentage by Geographic Area <span style="float: right;">15</span></li> <li>• Testing in Rural and Urban Areas <span style="float: right;">16</span></li> <li>• CDC 'Reference Value' – BLLs of 5 µg/dL or greater <span style="float: right;">17-19</span></li> <li>• Population <span style="float: right;">20-21</span></li> <li>• Housing <span style="float: right;">22-26</span></li> </ul>	
<b>County Level</b>	<b>27 – 40</b>
<ul style="list-style-type: none"> <li>• Children Tested for Lead by County of Residence <span style="float: right;">28-30</span></li> <li>• Percentages (Children &lt; 7 Years Tested by County) <span style="float: right;">31</span></li> <li>• County Ranking (Top 15) by Percentage Tested <span style="float: right;">31</span></li> <li>• Children Tested and Confirmed Elevated by County of Residence <span style="float: right;">32-35</span></li> <li>• Percentages (Children &lt; 7 Years Tested and Confirmed Elevated by County of Residence) <span style="float: right;">36</span></li> <li>• U.S. Census Bureau's 2010 Census Population by County and Age <span style="float: right;">37-40</span></li> <li>• Map – Pennsylvania Population, Children (&lt; 7 Years) by County <span style="float: right;">40</span></li> </ul>	
<b>City Level (20 Selected Cities)</b>	<b>41 – 48</b>
<ul style="list-style-type: none"> <li>• Children Tested for Lead by City of Residence <span style="float: right;">42</span></li> <li>• Percentages (Children &lt; 7 Years Tested by City) <span style="float: right;">43</span></li> <li>• Percentage of Tested Children Living in 20 Selected Cities <span style="float: right;">44</span></li> <li>• Children Tested and Confirmed Elevated by City of Residence <span style="float: right;">45-46</span></li> <li>• U.S. Census Bureau's 2010 Census Population by Age and City of Residence <span style="float: right;">47-48</span></li> </ul>	
<b>Reports to PA-NEDSS in 2013 (Childhood/Adult Lead/Other)</b>	<b>49 – 50</b>
<b>Endnotes</b>	<b>51 – 53</b>
<b>Contact Information</b>	<b>54</b>

## EXECUTIVE SUMMARY

This is the seventh Lead Surveillance Annual Report. Prior reports are available on the Department of Health (DOH) website at [www.health.state.pa.us/lead](http://www.health.state.pa.us/lead). The data for the 2013 Annual Report were extracted from the Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS)<sup>1</sup> on May 5, 2014. However, data related to age of housing and population were extracted from the U.S. Census Bureau's 2010 Census summary file tables, located at <http://www.census.gov>.

This report is also the last in a series of four transitional annual reports. The 2010 Annual Report included a number of new reports and more in-depth analyses. The 2011 Annual Report incorporated the 2010 Census figures for the age of housing and population and related updated reports. The 2012 Annual Report included the last full year of Childhood Lead Poisoning Prevention Program (CLPPP) testing. In 2013, the annual report does not include CLPPP testing, but includes additional reports and areas of analysis.

In 2013, there were 144,512 Pennsylvania children under 7 years of age<sup>2</sup> reported to have been tested for lead. That number decreased from the previous year, and the decrease seemed to be across the state. Of the 67 counties in Pennsylvania, 51 experienced a decrease in testing from 2012 to 2013. Of the children tested, 1,564 (1.08 percent) were reported to have confirmed elevated blood lead levels\* (EBLLs).<sup>3</sup> Because the standard for care is to test children for lead at ages 1 and 2, the testing rate is highest for children under 3 years of age.<sup>4</sup> Over 26 percent of Pennsylvania's population under 3 years of age was tested for lead in 2013, compared to a testing rate of slightly more than 14 percent for children under 7 years of age.

While overall reporting to PA-NEDSS has improved, reporting on race continues to be problematic. Patient race was reported as "unknown" or left blank for nearly two-thirds of the children reported to have been tested for lead in 2013. Despite this, the lack of race information is not a uniform, statewide phenomenon. For children tested under 7, in roughly one-quarter of Pennsylvania's counties, nearly 60 percent or more of the race data is known. However, given that only slightly more than one-third of the patient race data is known, it is difficult to perform analysis that is either meaningful or statistically reliable. With that much information unknown, the data are susceptible to high variance and may not be representative of the overall population.

The portion of the race data that is known shows the following: In 2013, of the 144,512 children under 7 reported as tested for lead, 29,656 (20.52 percent) were reported as white or Caucasian, and 12,540 (8.68 percent) were reported as black or African-American. More than 1 percent of the total were reported as Asian, while the remainder (approximately 69.6 percent) were reported either as "unknown" (66.27 percent) or "other" (3.34 percent).<sup>5</sup> In addition, 1.08 percent of children under 7 tested for lead in Pennsylvania had a confirmed EBLL result; for black/African-American children, the rate was 2.26 percent; for Asian children, 1.22 percent; and for white/Caucasian children, 1.35 percent.

When reviewing the number of children with reported confirmed elevated results, more than half (54.92 percent) of the confirmed elevated results were reported as a race of "other" or "unknown." This means that there is more race data for confirmed elevated reports (approximately 45 percent reported) than for reports as a whole (approximately 30 percent). Despite there being more race data for confirmed elevated reports, the level of unknown race data still prevents any further meaningful analysis.

Pennsylvania's overall blood lead levels have clearly been dropping. In 2004, for children under 7 years of age, the geometric mean<sup>6</sup> blood lead level on reported maximum blood lead levels was approximately 3.5 µg/dL. In 2013, that number dropped to approximately 2.3 µg/dL, representing a 34.29 percent decrease over the last 10 years. Because Pennsylvania is not a universal testing state (where lead testing is mandatory), it is important to avoid comparing the geometric mean blood lead level with data representative of universal testing states.

It is generally recognized and accepted that the primary source for childhood lead poisoning in Pennsylvania continues to be exposure to aging, deteriorating lead-based paint (chips and dust). While lead was banned from paint in 1978, many older dwellings still contain layers of pre-1978 paint. According to the 2010 Census data, Pennsylvania ranks third in the nation for having the most housing units identified as having been built before 1950 (when lead was more prevalent) and fourth in the nation for having the most housing units identified as having been built before 1978.

## **UPDATES AND HIGHLIGHTS**

### **Lead Data Usage**

The need for lead data is constant and varied, and its users are ever more wide-ranging. With each passing year, there are additional groups that request lead data, and more ways in which the data is needed. Data is released according to both the Health Insurance Portability and Accountability Act (HIPAA) and the Pa. Disease Prevention and Control Law requirements. Some examples of groups that use lead data and the ways they use it are:

- Federal agencies: Centers for Disease Control and Prevention [CDC] (national lead data, programming), Housing and Urban Development [HUD] (programming, lead abatement), Environmental Protection Agency [EPA] (programming, quarterly reports, EBLL requests and property monitoring)
- State agencies: DOH (programming, grant writing, Environmental Public Health Tracking Network [EPHTN], environmental health studies); Department of Public Welfare [DPW] (Data matching, Health Effectiveness and Data Information Set [HEDIS] measures, monitoring)
- The media (reports on lead)
- Hospitals (studies, community programming, patient information/test results)
- Universities (research studies)
- Head Start (testing and follow-up)
- The general public/lead tested children (children's blood lead levels, follow-up)

### **Data Analysis**

As the need for lead data continues to evolve, so must its analysis. By continuing to look at data in different ways, more insight is gained, the data's utility is increased, and more new comparisons are revealed. As mentioned earlier, this year's report includes a number of new reports, such as the differentiation between urban and rural counties, or lead levels that require medical intervention.

With the movement of PA-NEDSS lead data to a new server in 2014, there will be different software that will replace the current COGNOS software used for extracting data. The EPHTN is piloting a project that integrates PA-NEDSS data with geospatial software to present interactive maps on their Webpage. It is expected that the same can be done with lead data. To prepare for this possibility, staff have undergone ArcGIS geospatial software training, including both the desktop and streamlined online versions. The establishment of an ArcGIS users group has also provided more resources for understanding and use of the software.

### **Data Quality**

In an effort to clean up the database in preparation for the 2013 Annual Report, staff employed various strategies to identify and fix patient, report and location records within PA-NEDSS. Records missing critical fields of information were identified, researched and corrected whenever possible.

Records indicating implausible data (such as extremely high quantitative test results, for example) were identified, researched and corrected. Error queues were monitored daily, and every effort to maintain clean, accurate and consistent information on incoming reports was taken. Records with missing dates of birth were identified and completed after contacting health care providers to obtain the correct information. For some records, this resulted in a transfer from the childhood lead program jurisdiction to the adult lead program jurisdiction. In addition, several programs within the Pa. Department of Health participate in a cross-program deduplication program. Programs are assigned one-week periods on a rotating basis, during which they deduplicate, or merge, duplicate records found in PA-NEDSS each day. This activity aids in the data cleaning process and allows PA-NEDSS to function more efficiently.

One area that will be improved is records with unknown counties. For a variety of reasons, addresses of some patients were not verified by system software, causing the data to reflect an “unknown” county for those records when the data was extracted. This may have had an effect on the testing numbers and percentages for counties and the state as a whole. The first part of the solution is an enhanced cleaning schedule to prevent the buildup of defective records in the system. In addition, PA-NEDSS will be moving from its current address verification software to a more robust system used by the Office of Administration. It is expected that more addresses will be verified with the new system, leading to fewer instances of unknown counties.

### **EPHTN**

The EPHTN is an effort to collect, analyze, document and provide information on suspected links between environmental hazards (including air pollution, contaminated water and toxic substances such as pesticides) and their impact on the health of citizens. The Pennsylvania Department of Health Bureau of Epidemiology, Division of Environmental Health Epidemiology, Health Tracking Section, received a grant from CDC to begin building Pennsylvania’s Statewide EPHTN in 2006. The Pennsylvania Childhood Lead Surveillance Program continues to participate in planning and development efforts and annually delivers a childhood lead dataset in accordance with the project’s requirements. More information on the EPHTN project can be found at: [www.health.state.pa.us/epht](http://www.health.state.pa.us/epht).

### **Point-of-service lead analyzing devices**

In accordance with the PA Code, laboratories are required to report all lead test results. A relatively new way to test children for lead is the use of portable, point-of-service lead analyzing devices (such as the Lead Care II). These devices produce immediate results at the service location and have the potential to go unreported. To account for the use of these devices and establish reporting of results to PA-NEDSS, language was included in the final draft of the PA Code Chapter 27 regulations. Those regulations revised laboratory reporting requirements, established the requirement of electronic reporting, and delineated the difference between adult lead and childhood lead reporting.

In the interim, staff have developed a process to enable the reporting of results obtained from these devices by working with the company that distributes them, the DOH’s Bureau of Laboratories (BOL) and Bureau of Information Technology (BIT). Purchasers of the devices are given an information package that informs them of the requirement to report results. Users undergo compliance testing through BOL and are then registered for PA-NEDSS use through BIT. Results can be entered manually, or through the electronic reporting process, if the volume warrants.

**\*Note:** For the purposes of this report, a confirmed elevated (or confirmed EBLL) result is defined as one venous specimen with a result of  $\geq 10$  micrograms per decileter of blood ( $\mu\text{g}/\text{dL}$ ) or two capillary specimens with a result of  $\geq 10$   $\mu\text{g}/\text{dL}$ , drawn within 12 weeks of each other. The CDC has changed their definition to such results of  $\geq 5$   $\mu\text{g}/\text{dL}$ . For more information, please see page 17 of this report.

## Pa. Lead Snapshot, 2013

**144,512**

This is the number of children under 7 tested for lead in Pennsylvania in 2013. This represents a 3.46 percent decrease from 2012. Overall, 150,546 tests were performed on children under 16. For more information, see pp. 8, 12 and 28-30.

**1,564**

This is the number of children under 7 with confirmed EBLL tests in 2013. This represents a decrease of 13.92 percent from 2012. For more information, see pp. 8, 12 and 32-35.

**1.08%**

This is the percentage of confirmed EBLL tests in 2013, based on the number of children under 7 tested. This represents a 10.84 percent decrease from 2012. For more information, see pp. 8, 12, 14-15 and 36.

**2.3  $\mu\text{g}/\text{dL}$**

This is the geometric mean (in micrograms per decileter) of blood lead levels of tests performed in Pennsylvania in 2013. For more information, see p. 11.

**70%**

**5<sup>th</sup>**

This is the estimated percentage of homes built in Pa. before 1978 and our national rank, based on the 2010 Census. For more information, see pp. 22-23.

**36%**

**5<sup>th</sup>**

This is the estimated percentage of homes built in Pa. before 1950 and our national rank, based on the 2010 Census. Although lead paint wasn't banned until 1978, it was used less frequently as other products became more widely available and affordable. Lead paint was still most prevalent before 1950. For more information, see pp. 22-23.

- Since 2007, the number children under 7 tested for lead has increased from **131,150** to **144,512**, an increase of **10.19 percent**. For children under age 16, the number of tests has increased from 139,183 to 150,546.
- Since 2007, the geometric mean BLL has decreased from **3.1 $\mu\text{g}/\text{dL}$**  to **2.3 $\mu\text{g}/\text{dL}$** , a **25.81 percent decrease**.
- Since 2007, the percentage of children under 7 tested with a confirmed EBLL has gone from **2.20 percent** to **1.08 percent**, a **decrease of 50.91 percent**. During that time, the number of confirmed EBLLs has gone from **2,887** to **1,564**, a **45.83 percent decrease**.
- Since 2007, the percentage of children under 7 tested has risen from **12.57 percent** to **14.05 percent**, an **increase of 11.77 percent**.

**STATEWIDE SUMMARIES**

## Statewide Summaries

### CHILDREN TESTED FOR LEAD

#### Pa. Children Tested for Lead by Age and Maximum Blood Lead Level<sup>7</sup>

BLL	1 and 2 Years (12-35 months)	<3 Years (12-35 months)	<6 Years (0-71 months)	< 7 Years (0-83 months)	<16 Years (<191 months)	
Lows (0-9 µg/dL)	73,210	110,724	138,444	141,203	147,107	Maximum blood lead level = The child's highest blood lead level (quantitative test result) for the year.
Highs (≥10 µg/dL)	1,662	1,997	2,699	2,756	2,849	
Nulls	256	449	541	553	590	
<b>Total</b>	<b>75,128</b>	<b>113,170</b>	<b>141,684</b>	<b>144,512</b>	<b>150,546</b>	µg/dL = micrograms per deciliter of blood
2010 Census Pop.	291,031	432,581	877,769	1,028,282	2,442,080	NOTE: "Less than" Sign: <
% of Pop. Tested <sup>8</sup>	25.38%	26.16%	16.14%	14.05%	6.16%	

#### Pa. Children Tested and Confirmed Elevated by Age/Categorized by First Confirmed Elevated Blood Lead Level<sup>9</sup>

BLL	1 and 2 Years (12-35 months)	<3 Years (12-35 months)	<6 Years (0-71 months)	< 7 Years (0-83 months)	<16 Years (<191 months)	
10 to <15 µg/dL	558	569	866	886	916	Maximum blood lead level = The child's highest blood lead level (quantitative test result) for the year.
15 to <20 µg/dL	179	200	311	318	335	
≥20 µg /dL	167	223	341	360	391	
<b>Total</b>	<b>904</b>	<b>992</b>	<b>1,518</b>	<b>1,564</b>	<b>1,642</b>	µg/dL = micrograms per deciliter of blood
Total Tested	75,128	113,170	141,684	144,512	150,546	NOTE: "Less than" Sign: <
% Confirmed <sup>10</sup> Elevated	1.20%	0.88%	1.07%	1.08%	1.09%	

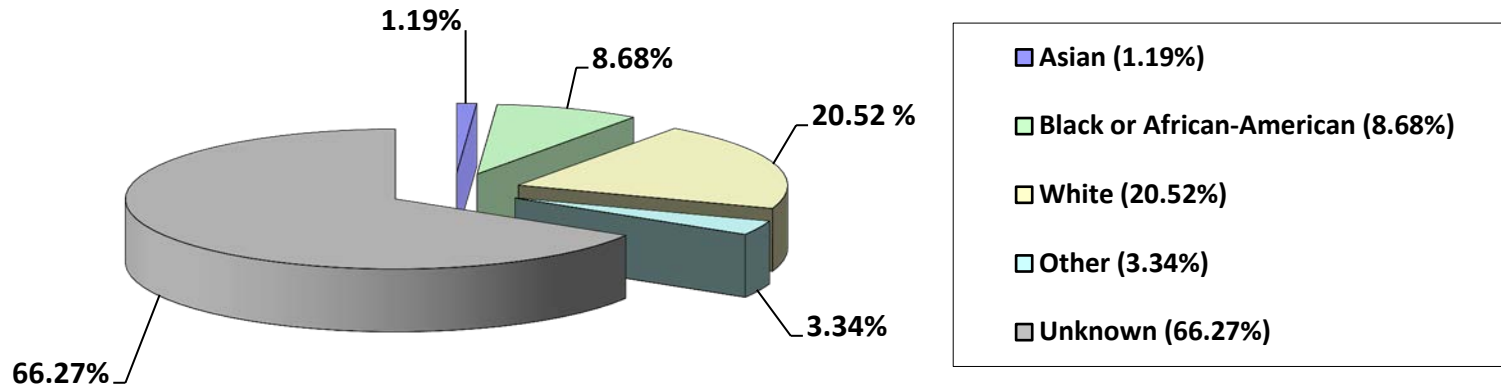


## Statewide Summaries - continued

### Pa. Children Tested for Lead by Age and Race<sup>11</sup>

Race	1 and 2 Years (12-35 months)	<3 Years (12-35 months)	<6 Years (0-71 months)	< 7 Years (0-83 months)	<16 Years (<191 months)	Race Abbreviations:
A	851	1,147	1,675	1,715	1,824	A = Asian
B	5,653	6,987	11,988	12,540	13,431	B = Black or African-American
W	14,828	22,553	29,069	29,656	31,116	W = White
O	2,434	3,166	4,669	4,828	5,065	O = Reported Other + American Indian + Alaskan Native + Native Hawaiian + Pacific Islander
U	51,362	79,317	94,283	95,773	99,110	U = Unknown
Total	75,128	113,170	141,684	144,512	150,546	Total = Total children
						NOTE: "Less than" sign: <
						**Full race data available upon request.**

**Pennsylvania Children < 7 Years, Reported to Have Been Tested for Lead in 2013, by Race**

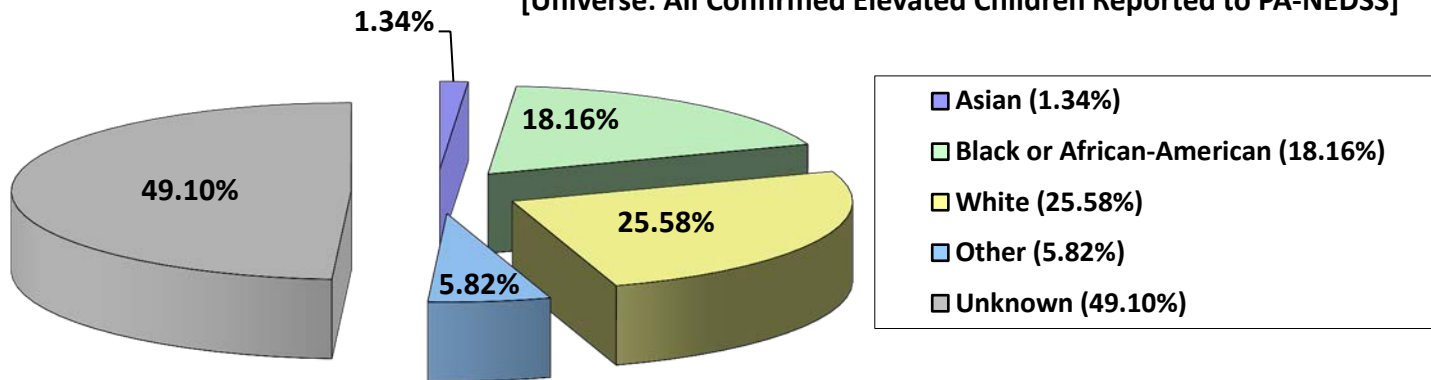


## Statewide Summaries - continued

### Pa. Children Tested and Confirmed Elevated by Age and Race<sup>12</sup>

Race	1 and 2 Years (12-35 months)	<3 Years (12-35 months)	<6 Years (0-71 months)	< 7 Years (0-83 months)	<16 Years (<191 months)	<b>Race Abbreviations:</b> A = Asian B = Black or African-American W = White O = Reported <i>Other</i> + American Indian + Alaskan Native + Native Hawaiian + Pacific Islander U = Unknown Total = Total children  <b>NOTE: "Less than" sign: &lt;</b>  **Full race data available upon request.**
A	12	12	21	21	24	
B	133	143	271	284	308	
W	227	257	388	400	420	
O	61	65	90	91	95	
U	471	515	748	768	795	
<b>Total</b>	<b>904</b>	<b>992</b>	<b>1,518</b>	<b>1,564</b>	<b>1,642</b>	

**PA Children < 7 Years Reported Confirmed Elevated in 2013 by Race  
[Universe: All Confirmed Elevated Children Reported to PA-NEDSS]**



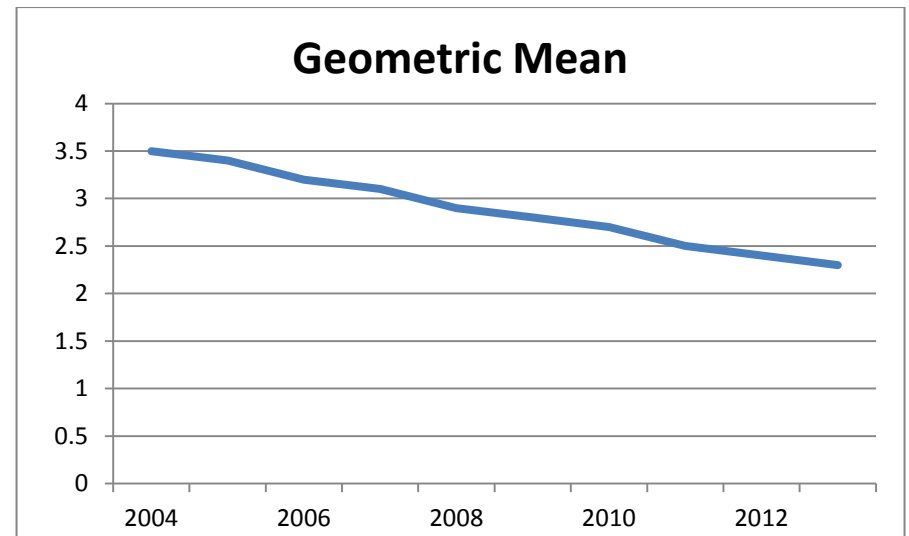
## Statewide Summaries - continued

### GEOMETRIC MEAN

Calendar Year	Geometric Mean of Maximum Blood Lead Level	
2004	3.5	Dataset: The maximum blood lead levels for children less than 7 years of age who were tested for lead. Note: Maximum blood lead levels of zero were converted to 0.1, and null quantitative test results (blank) were eliminated prior to calculation.  <b>Source: Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS), Lead Annual Report Cube</b>
2005	3.4	
2006	3.2	
2007	3.1	
2008	2.9	
2009	2.8	
2010	2.7	
2011	2.5	
2012	2.4	
2013	2.3	

For a description of the geometric mean, please see [endnote 6 on page 51](#) of the report.

Time Period	% Decrease in Geometric Mean	Overall % Decrease Since 2004
2004-2005	2.86	2.86
2005-2006	5.88	8.57
2006-2007	3.13	11.43
2007-2008	6.45	17.14
2008-2009	3.45	20.00
2009-2010	3.57	22.86
2010-2011	7.41	28.57
2011-2012	4.00	31.43
2012-2013	4.17	34.29



## Statewide Summaries - continued

### HISTORICAL DATA - CHILDREN TESTED AND CONFIRMED ELEVATED

	1 and 2 Years			<3 Years			<6 Years			<7 Years			<16 Years		
	Tested	CE	% CE	Tested	CE	% CE	Tested	CE	% CE	Tested	CE	% CE	Tested	CE	% CE
<b>2007</b>	59,991	1,411	<b>2.35%</b>	94,907	1,560	<b>1.64%</b>	127,440	2,770	<b>2.17%</b>	131,150	2,887	<b>2.20%</b>	139,183	3,024	<b>2.17%</b>
<b>2008</b>	65,334	1,632	<b>2.50%</b>	100,535	1,770	<b>1.76%</b>	134,118	2,898	<b>2.16%</b>	137,878	2,996	<b>2.17%</b>	146,320	3,131	<b>2.14%</b>
<b>2009</b>	70,865	1,563	<b>2.21%</b>	107,298	1,675	<b>1.56%</b>	142,387	2,657	<b>1.87%</b>	145,996	2,750	<b>1.88%</b>	154,096	2,856	<b>1.85%</b>
<b>2010</b>	72,106	1,463	<b>2.03%</b>	108,916	1,575	<b>1.45%</b>	144,896	2,498	<b>1.72%</b>	148,617	2,595	<b>1.75%</b>	156,394	2,725	<b>1.74%</b>
<b>2011</b>	73,827	1,075	<b>1.46%</b>	111,066	1,171	<b>1.05%</b>	147,356	1,877	<b>1.27%</b>	150,979	1,950	<b>1.29%</b>	158,596	2,050	<b>1.29%</b>
<b>2012</b>	74,491	1,030	<b>1.38%</b>	112,662	1,106	<b>0.98%</b>	146,474	1,749	<b>1.19%</b>	149,689	1,817	<b>1.21%</b>	156,527	1,902	<b>1.22%</b>
<b>2013</b>	75,128	904	<b>1.20%</b>	113,170	992	<b>0.88%</b>	141,684	1,518	<b>1.07%</b>	144,512	1,564	<b>1.08%</b>	150,546	1,642	<b>1.09%</b>

How to read this table: The data is organized by year and then by age group, reading across the table. Within each age group, there are three numbers:

- The number of children reported to have been tested for lead (“Tested”);
- The number of children with confirmed elevated results (“CE”); and
- The percentage of children tested with confirmed elevated results (“% CE”).

As seen in the table above, confirmed elevated percentages have decreased considerably across age groups. Since 2007, the confirmed elevated percentages have decreased by at least 45 percent for all age groups. This is due to a moderate increase in testing numbers over time (the number of tests increased by at least 8 percent since 2007 for each age group) and a more substantial decrease in the number of confirmed elevated results (the two youngest age groups each decreased by at least 35 percent since 2007 and the others by at least 45 percent each).

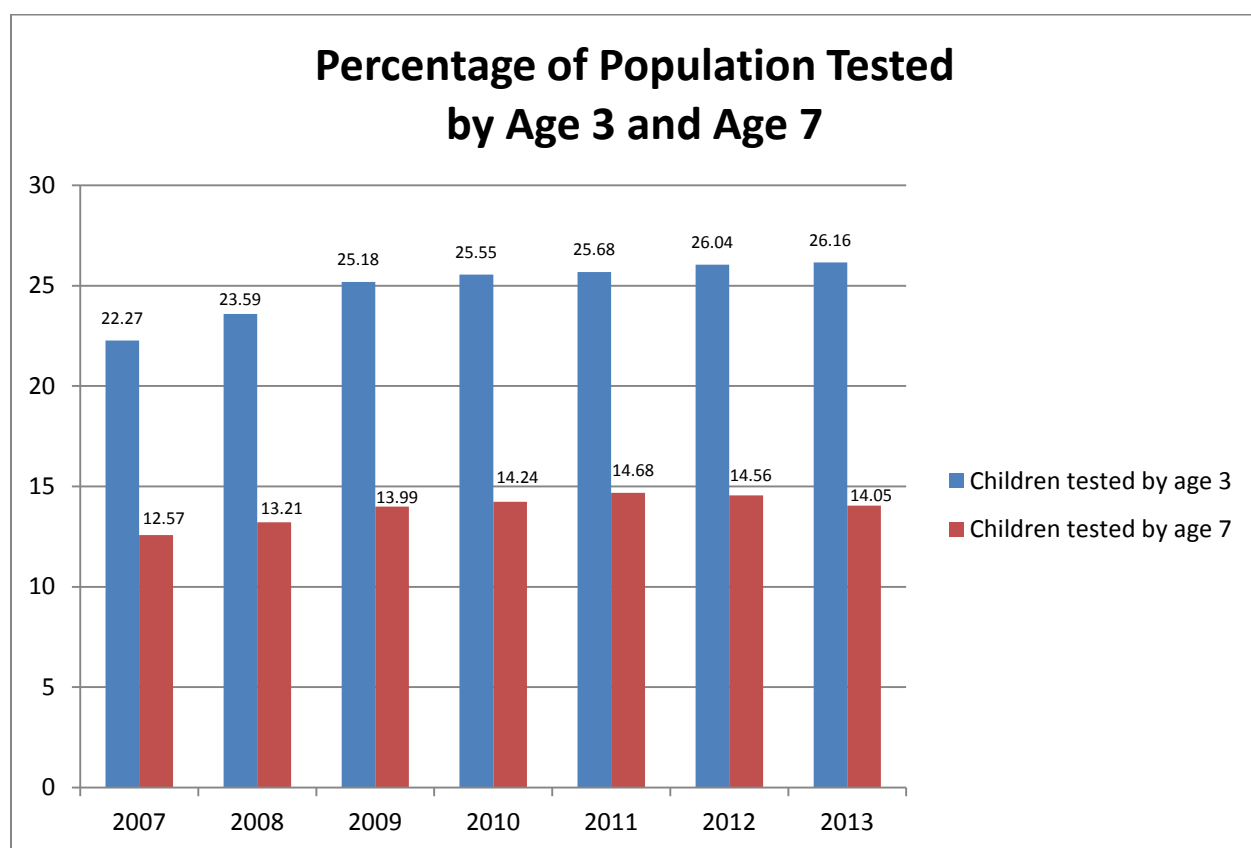
## Statewide Summaries – continued

### CHILDREN TESTED BY AGE 3 AND 7

Pennsylvania does not have a universal testing law, so there is no mandate for children to be tested by a certain age. However, the Early Periodic Screening, Diagnosis and Treatment (EPSDT) program (administered by the Pa. Department of Public Welfare [DPW]) requires providers to test children on Medical Assistance at age 1 and 2. Furthermore, most clinical practice guidelines recommend testing children under 7 and focusing on children at age 1 and 2. As seen below, both groups have

experienced an increase in testing since 2007, with an increase of over 19 percent for children under 3 and nearly 12 percent for children under age 7.

Although these increases in the percentage of children being tested are significant, it must be noted here that only slightly more than a quarter of the population of children under 3 and roughly one-seventh of the population of children under 7 are being tested.

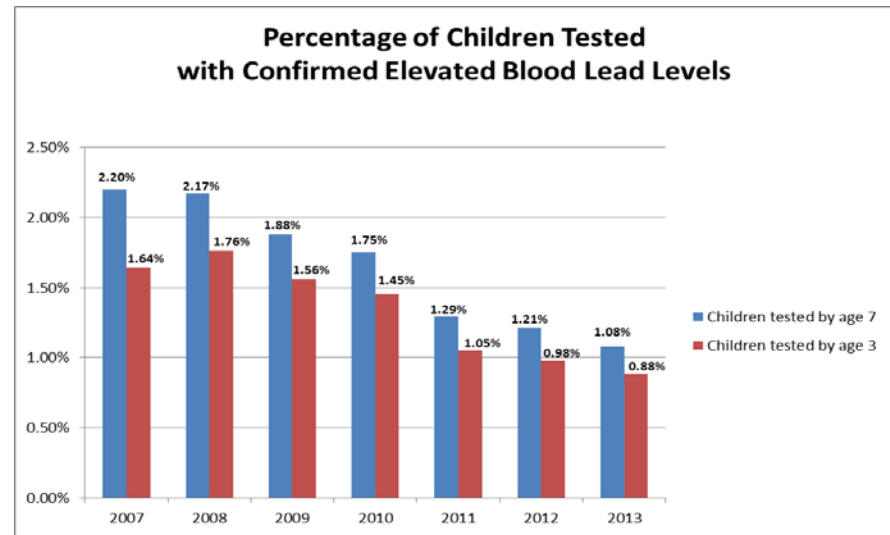


**Statewide Summaries – continued**

**CONFIRMED ELEVATED RESULTS FOR CHILDREN TESTED BY AGE 3 AND 7**

**CONFIRMED EBLL PERCENTAGES**

Based on CDC guidelines, blood lead levels greater than or equal to 10 µg/dL were previously considered the threshold for public health action.\* As seen in the graph at right, confirmed elevated percentages have decreased steadily since 2007, with a 51 percent decrease for children under 3 and a 46 percent decrease for children under 7. Of the children tested for lead in Pennsylvania in 2013, there were 992 children under 3 and 1,564 children under 7 with confirmed EBLLs. This is the first time with full reporting to PA-NEDSS that any age group has decreased below 1,000 confirmed elevated results for the calendar year.



**EBLLS WITH MEDICAL INTERVENTION**

The CDC guidelines recommend chelation for children with confirmed elevated blood lead levels of 45 µg/dL and above. As seen in the chart at right, the number of children requiring chelation is a relatively small portion of the number of children with confirmed elevated blood lead levels. And although the number of children tested has increased since 2007, the number and percentage of children with confirmed EBLLs of 45 µg/dL and above has decreased steadily since 2007. For more information on the number of children tested, please see the chart on p. 11.

	Confirmed EBLLs Requiring Medical Intervention					
	Children under 3 (0 – 35 months)			Children under 7 (0-83 months)		
	10 < 20	20 < 45	45 and above	10 < 20	20 < 45	45 and above
2007	1276	188	5	2262	521	39
2008	1241	204	3	2309	553	37
2009	1178	239	4	2097	558	38
2010	1151	212	6	1977	543	42
2011	839	164	6	1443	454	32
2012	813	172	7	1354	426	31
2013	813	163	6	1206	332	28

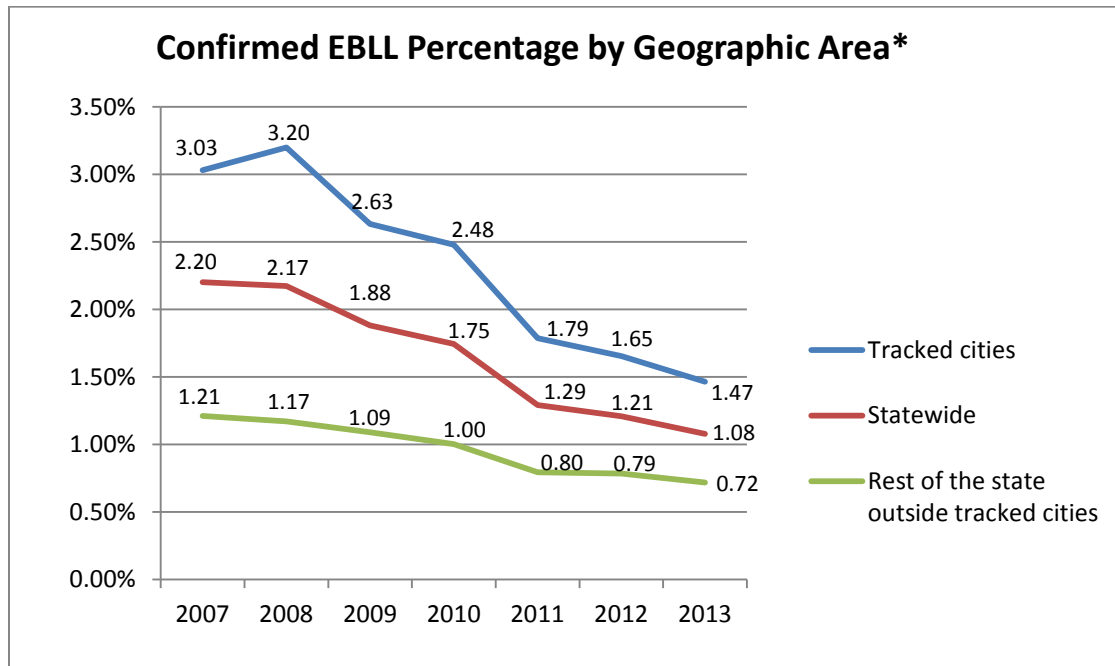
\*On 5/16/12, the CDC accepted the recommendation from the Advisory Committee on Lead Poisoning Prevention to eliminate the use of the term “Level of Concern” (associated with the level of 10 µg/dL) and to begin using a “reference value” of 5 µg/dL, based on population BLLs as an indicator of lead exposure that warrants further monitoring. For more information, please see p. 17 of this report and pp. 15-17 of the 2012 report.

**Statewide Summaries – continued**

**CONFIRMED ELEVATED BLOOD LEAD LEVEL (EBLL) PERCENTAGE  
BY GEOGRAPHIC AREA**

DOH tracks testing in a number of cities because of their high proportion of risk factors for lead poisoning: population of children under 7, low income families and older housing. A confirmed result is the most reliable sign of a child’s BLL, so confirmed elevated percentages are a common baseline measure. Even though the percentage of confirmed elevated blood lead levels has decreased significantly since 2007, these cities still experience confirmed EBLLs at a rate of more than twice that of the rest of the state and 36 percent more than the state as a whole. For reference, the cities are listed below:

Allentown	Johnstown	Reading
Altoona	Lancaster	Scranton
Bethlehem	Lebanon	State College
Chester	Levittown	Wilkes-Barre
Easton	Norristown	Williamsport
Erie	Philadelphia	York
Harrisburg	Pittsburgh	

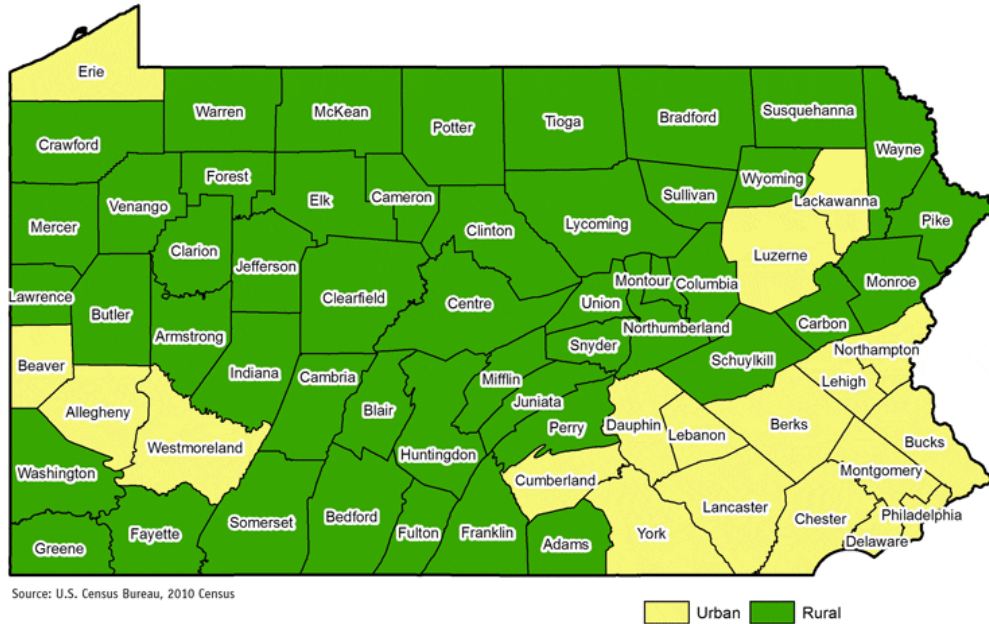


\*Based on the percentage of confirmed elevated blood lead results. The percentages were calculated as follows: **Number of confirmed EBLLs for children under 7 ÷ Total number of children under 7 reported to have been tested.** For the numbers of confirmed elevated cases and number of children tested for 2013, please refer to p. 8 of this report. For previous years, please see p. 12 of this report or previous reports at [www.health.state.pa.us/lead](http://www.health.state.pa.us/lead).

**Statewide Summaries – Continued**

**TESTING IN RURAL AND URBAN COUNTIES**

**Rural Pennsylvania Counties**



The Center for Rural Pa. defines rural and urban counties in terms of population density. Those counties with a population density above the state average are considered urban, and those below are considered rural. Although one in four children in Pa. lives in a rural county, one in five children tested lives in a rural county. One out of six children with a confirmed elevated result lives in a rural county. One reason for the difference in testing could be the lower proportion of doctors in rural counties. In 2012, there was one primary care physician for every 1,538 residents in rural counties, compared to one for every 1,071 residents in urban counties.<sup>13</sup>

	Percentage of Children Under 7 in Pa. <sup>14</sup>	Percentage of Children Under 7 tested*	Percentage of Tests in Pa. for Children Under 7*	Percentage of Confirmed Elevated Results for Children under 7	Confirmed Elevated Percentage
Urban	74.66%	14.73%	78.26%	83.18%	1.15%
Rural	25.34%	11.46%	20.67%	16.82%	0.88%

For more information and definitions concerning rural and urban counties, please see the Center for Rural PA’s website at: [http://www.rural.palegislature.us/demographics\\_rural\\_urban.html](http://www.rural.palegislature.us/demographics_rural_urban.html).

\*Source: PA-NEDSS. Numbers are for 2013 and do not include the approximately 1500 tests with unknown counties that could not be determined before the publishing of the annual report. There was no effect on confirmed elevated results.



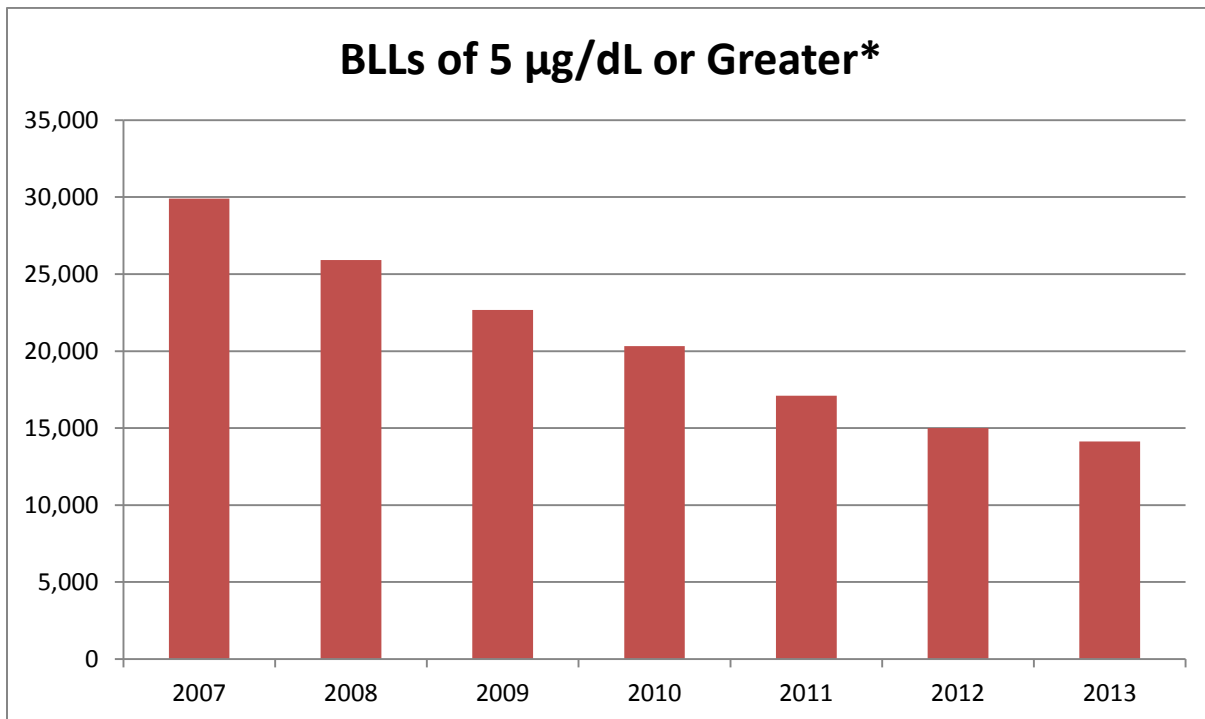
## Statewide Summaries – continued

### **BLLs OF 5 µg/dL OR GREATER – CDC’S “REFERENCE VALUE”**

In 2012, the CDC established a “reference value” of 5 µg/dL, and eliminated the use of the term “level of concern.” This decision was based on an extensive review of emerging science that there is no level below which deleterious effects are not noted. That level of 5 µg/dL has also been established as an elevated blood lead level (EBLL).<sup>15</sup>

It’s useful to look at BLLs of 5 µg/dL and above because they are an indicator of how many children (and what proportion of children) are potentially being exposed to a source of lead that most children their age are not. BLLs above the reference value warrant additional monitoring, education and investigation. The chart below includes results for children under 7.

While testing of children under 7 has increased by more than 10 percent since 2007, the number of children with BLLs of 5 µg/dL or greater has decreased by more than half. The percentage of children tested with these BLLs has followed suit, decreasing from almost 23 percent of children tested in 2007 to less than 10 percent in 2013. These numbers have followed the general downward trend in the number and percentage of children with confirmed elevated BLLs, as well as the mean BLL (see pp. 10, 11, and 13 for further details).



\*Please note that the results included in this chart are not confirmed BLLs, as confirmed BLLs are not tracked for levels of 5 to less than 10.

**BLLS OF 5 µg/DL OR GREATER: COUNTY LEVEL**

	BLLs ≥ 5 µg/dL	Percentage of Children Tested w/ BLLs ≥ 5 µg/dL		BLLs ≥ 5 µg/dL	Percentage of Children Tested w/ BLLs ≥ 5 µg/dL		BLLs ≥ 5 µg/dL	Percentage of Children Tested w/ BLLs ≥ 5 µg/dL
Pa. County			Pa. County			Pa. County		
1 Adams	79	9.83%	30 Greene	17	7.52%	59 Tioga	28	7.00%
2 Allegheny	1,121	8.08%	31 Huntingdon	36	9.42%	60 Union	32	9.97%
3 Armstrong	111	12.89%	32 Indiana	87	10.52%	61 Venango	83	15.51%
4 Beaver	187	12.06%	33 Jefferson	63	13.85%	62 Warren	63	15.52%
5 Bedford	49	10.45%	34 Juniata	20	9.22%	63 Washington	137	8.42%
6 Berks	772	15.98%	35 Lackawanna	185	12.87%	64 Wayne	37	10.00%
7 Blair	147	11.32%	36 Lancaster	315	8.68%	65 Westmoreland	165	6.23%
8 Bradford	65	10.87%	37 Lawrence	34	5.71%	66 Wyoming	9	9.09%
9 Bucks	95	2.46%	38 Lebanon	138	12.52%	67 York	458	11.65%
10 Butler	86	7.15%	39 Lehigh	836	22.96%	<b>All 67 counties</b>	<b>14,136*</b>	<b>9.78%</b>
11 Cambria	176	14.33%	40 Luzerne	235	8.81%	<p><b>Notes:</b></p> <p>This chart shows the number and percentage of children under 7 tested with results of 5 µg/dL or greater. In general, counties with higher numbers of tests had lower percentages of children with results ≥5 µg/dL. The exceptions were Berks and Lehigh, which had testing numbers and percentages among the 10 highest. In addition, five of the counties with the most testing were in the bottom third of the rankings for percentage.</p> <p>*1,550 of the children tested had a county of residence delineated as “unknown” in the PA-NEDSS database, and their records could not be corrected before the data was downloaded. Of these, 123 children had BLLs ≥5 µg/dL. These results were included in the total and did not materially affect the overall percentage.</p> <p><b>Source: PA-NEDSS</b></p>		
12 Cameron	5	7.25%	41 Lycoming	97	9.17%			
13 Carbon	109	21.04%	42 McKean	107	16.46%			
14 Centre	33	3.76%	43 Mercer	100	8.33%			
15 Chester	270	5.79%	44 Mifflin	24	5.63%			
16 Clarion	21	5.65%	45 Monroe	64	6.38%			
17 Clearfield	82	8.91%	46 Montgomery	357	4.65%			
18 Clinton	26	6.90%	47 Montour	3	2.11%			
19 Columbia	24	6.08%	48 Northampton	402	16.76%			
20 Crawford	87	11.63%	49 Northumberland	108	11.34%			
21 Cumberland	91	8.58%	50 Perry	35	9.51%			
22 Dauphin	369	11.63%	51 Philadelphia	4,038	10.38%			
23 Delaware	559	7.10%	52 Pike	27	5.60%			
24 Elk	17	5.50%	53 Potter	36	12.41%			
25 Erie	521	12.54%	54 Schuylkill	223	14.00%			
26 Fayette	59	4.16%	55 Snyder	38	10.67%			
27 Forest	6	15.79%	56 Somerset	34	6.56%			
28 Franklin	149	10.54%	57 Sullivan	3	10.34%			
29 Fulton	6	3.57%	58 Susquehanna	17	6.75%			

## BLLS OF 5 µG/DL OR GREATER: CITY LEVEL (BY TRACKED CITY)

The reference value of 5 µg/dL can also be considered for cities that are tracked because of their risk factors for lead poisoning: high proportions of children under 7, families with low income, and older housing. The chart below shows the levels of elevated BLLs in those cities for children under 7 tested in 2013. Most of the tracked cities (14 out of 20) had a higher percentage of children with BLLs ≥ 5 µg/dL than the rate for the state as a whole.

City	BLLs ≥5 µg/dL	Number of Children Tested	Percentage of Children Tested w/ BLLs ≥5 µg/dL
Allentown	552	2,614	21.12%
Altoona	108	736	14.67%
Bethlehem	153	1,012	15.12%
Chester	187	1,242	15.06%
Easton	160	908	17.62%
Erie	424	3,205	13.23%
Harrisburg	314	2,439	12.87%
Johnstown	132	679	19.44%
Lancaster	192	1,753	10.95%
Lebanon	101	764	13.22%
Levittown	7	508	1.38%
Norristown	148	1,652	8.96%
Philadelphia	3,845	37,033	10.38%
Pittsburgh	702	7,906	8.88%
Reading	599	3,537	16.94%
Scranton	133	789	16.86%
State College	6	273	2.20%
Wilkes-Barre	45	514	8.75%
Williamsport	53	546	9.71%
York	313	2,186	14.32%
<b>Total</b>	<b>8,174</b>	<b>70,296</b>	<b>11.63%</b>
<b>Statewide</b>	<b>14,136</b>	<b>144,512</b>	<b>9.78%</b>

Source: PA-NEDSS

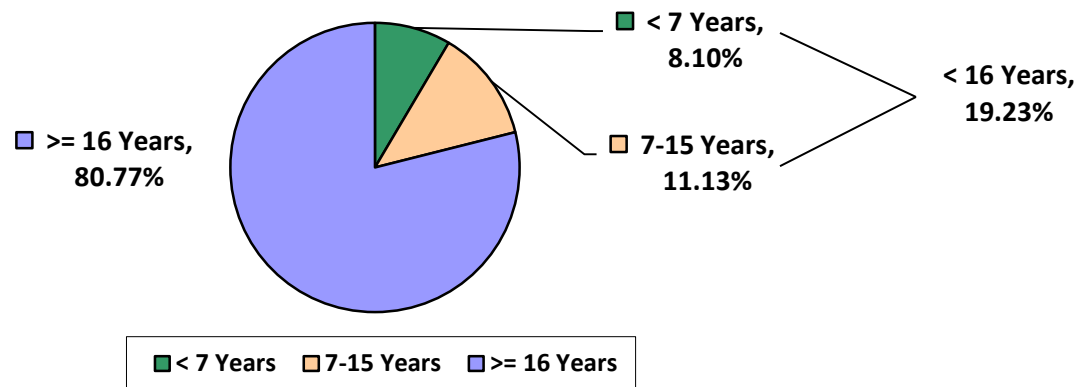
**Statewide Summaries - continued**

**POPULATION** <sup>16</sup>

Geo. Level	Population Data Source	Population as of	1 and 2 Years	< 3 Years	< 6 Years	< 7 Years	< 16 Years	Total Population
Pennsylvania	U.S. Census Bureau	2010 Census →	291,031	432,581	877,769	1,028,282	2,442,080	12,702,379
	Pa. Department of Health Bureau of Health Statistics	July 1, 2012 →	284,695	430,089	868,304	1,017,509	2,405,409	12,763,536
United States (including Pa. and excluding Puerto Rico)	U.S. Census Bureau	2010 Census →	8,074,999	12,019,152	24,258,220	28,324,601	65,470,033	308,745,538

Geo. Level	Population Data Source: U.S. Census Bureau, 2010 Census		
	Percent of Total Population Represented by Age Cohort Population		
	1 and 2 Years (12-35 months)	< 7 Years (0-83 months)	< 16 Years (0-191 months)
Pennsylvania	2.29%	8.10%	19.23%
United States	2.62%	9.17%	21.21%

**Pennsylvania 2010 Census Population**



## Statewide Summaries – continued

### POPULATION

Source: The U.S. Census Bureau's 2010 Census, Summary File 1 Table QT-P2			
Note: Excluding Puerto Rico but including the District of Columbia (DC)			
<b>States Ranking by Total Population</b>			
	Rank	State	Total Population (All Ages)
First (Most)	1	California	37,253,956
<b>Sixth</b>	<b>6</b>	<b>Pennsylvania</b>	<b>12,702,379</b>
Last (Fewest)	51	Wyoming	563,626
<b>States Ranking by Population &lt; 16 Years</b>			
	Rank	State	Population < 16 Years
First (Most)	1	California	8,174,098
<b>Sixth</b>	<b>6</b>	<b>Pennsylvania</b>	<b>2,442,080</b>
Last (Fewest)	51	District of Columbia	89,148
<b>States Ranking by Population &lt; 7 Years</b>			
	Rank	State	Population < 7 Years
First (Most)	1	California	3,536,926
<b>Sixth</b>	<b>6</b>	<b>Pennsylvania</b>	<b>1,028,282</b>
Last (Fewest)	51	District of Columbia	43,471
<b>States Ranking by Population &lt; 6 Years</b>			
	Rank	State	Population < 6 Years
First (Most)	1	California	3,036,508
<b>Sixth</b>	<b>6</b>	<b>Pennsylvania</b>	<b>877,769</b>
Last (Fewest)	51	District of Columbia	38,156
<b>States Ranking by Population &lt; 3 Years</b>			
	Rank	State	Population < 3 Years
First (Most)	1	California	1,507,814
<b>Sixth</b>	<b>6</b>	<b>Pennsylvania</b>	<b>432,581</b>
Last (Fewest)	51	Vermont	18,676
<b>States Ranking by Population 1 and 2 Years</b>			
	Rank	State	Population 1 and 2 Years
First (Most)	1	California	955,430
<b>Sixth</b>	<b>6</b>	<b>Pennsylvania</b>	<b>291,031</b>
Last (Fewest)	51	Vermont	12,708

## Statewide Summaries - continued

### HOME OWNERSHIP AND OCCUPANCY <sup>17</sup>

Source: The US Census Bureau's 2010 American Community Survey, Tables B25002 and S2502

Statistics below reflect US Census Bureau estimates on 50 U.S. states and the District of Columbia (DC). Puerto Rico is not included.

Geo Level	Occupied Housing Units			Vacant Housing Units	Total Housing Units <sup>18</sup>
	Owner Occupied	Renter Occupied	Total Occupied	Total Vacant	
United States	74,873,372	39,694,047	114,567,419	17,223,646	131,791,065
Pennsylvania	3,461,678	1,474,352	4,936,030	632,790	5,568,820

Ranking by Total Housing Units			
Rank		State	Housing Units
First (most)	1	California	13,682,976
Fifth	5	Pennsylvania	5,568,820
Last (fewest)	51	Wyoming	262,286

Ranking by Total Owner Occupied Housing Units			
Rank		State	Housing Units
First (most)	1	California	6,903,175
Fifth	5	Pennsylvania	3,461,678
Last (fewest)	51	District of Columbia (DC)	101,793

Ranking by Total Occupied Housing Units			
Rank		State	Housing Units
First (most)	1	California	12,406,475
Fifth	5	Pennsylvania	4,936,030
Last (fewest)	51	Wyoming	222,803

Ranking by Total Renter Occupied Housing Units			
Rank		State	Housing Units
First (most)	1	California	5,503,300
Sixth	6	Pennsylvania	1,474,352
Last (fewest)	51	Wyoming	67,525

Ranking by Total Vacant Housing Units			
Rank		State	Housing Units
First (most)	1	Florida	1,959,023
Seventh	7	Pennsylvania	632,790
Last (fewest)	51	North Dakota	37,687

## Statewide Summaries - continued

### AGE OF HOUSING<sup>19</sup>

Source: The US Census Bureau's 2010 American Community Survey, Table B25034

Statistics below reflect US Census Bureau estimates on 50 U.S. states and the District of Columbia (DC). Puerto Rico is not included.

Geo Level	Total Housing Units, as of the 2010 Census	Estimated Total Units Built Pre-1978 <sup>20</sup>	All percentages are rounded two decimal places.	Total Units Built Pre-1950	All percentages are rounded two decimal places.
			Estimated Percentage of Total Housing Units Built Pre-1978 <sup>21</sup>		Percentage of Total Housing Units Built Pre-1950 <sup>22</sup>
United States	131,791,065	71,302,191	54.10%	25,296,711	19.19%
Pennsylvania	5,568,820	3,899,824	70.03%	2,006,135	36.02%

Ranking by Estimated Total Housing Units Built Pre-1978			
Rank		State	Housing Units
First (most)	1	California	8,007,401
Fourth	4	Pennsylvania	3,899,824
Last (fewest)	51	Alaska	117,920

Ranking by Estimated Percent of Total Housing Units Built Pre-1978			
Rank		State	All Percentages are rounded two decimal places
			Estimated Percentage of Housing Units built pre-1978
First (highest %)	1	District of Columbia (DC)	83.55%
Fifth	5	Pennsylvania	70.03%
Last (lowest %)	51	Nevada	22.86%

Ranking by Total Housing Units Built Pre-1950			
Rank		State	Housing Units
First (most)	1	New York	3,403,457
Third	3	Pennsylvania	2,006,135
Last (fewest)	51	Alaska	10,893

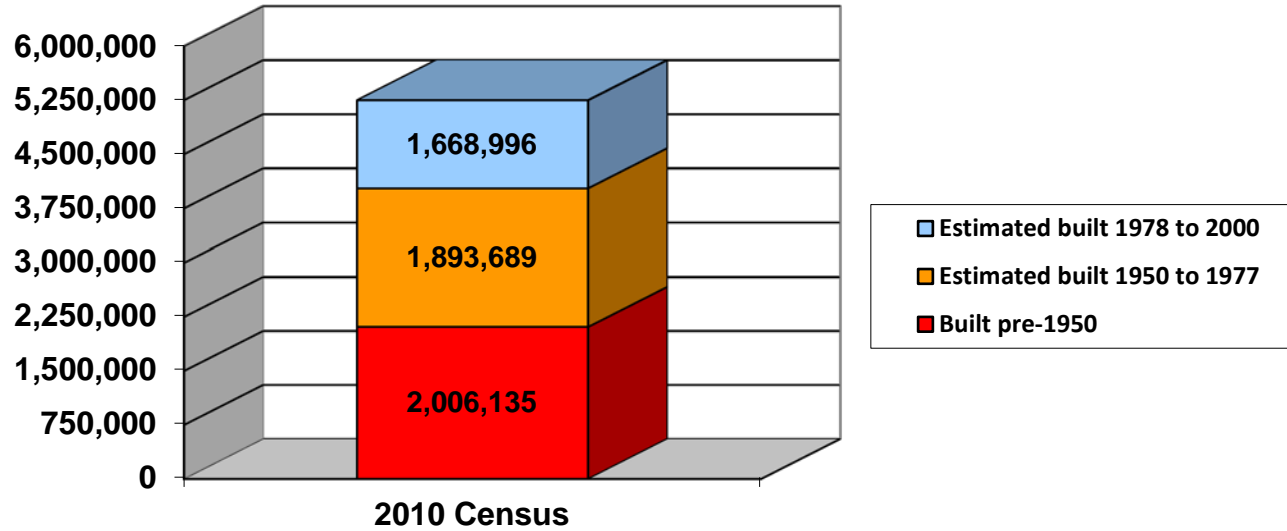
  

Ranking by Percent of Total Housing Units Built Pre-1950			
Rank		State	All Percentages are rounded two decimal places
			Percentage of Housing Units built pre-1950
First (highest %)	1	District of Columbia (DC)	50.97%
Fifth	5	Pennsylvania	36.02%
Last (lowest %)	51	Nevada	2.18%

Statewide Summaries - continued

AGE OF HOUSING

**Pennsylvania's Housing Stock  
In Units Built**



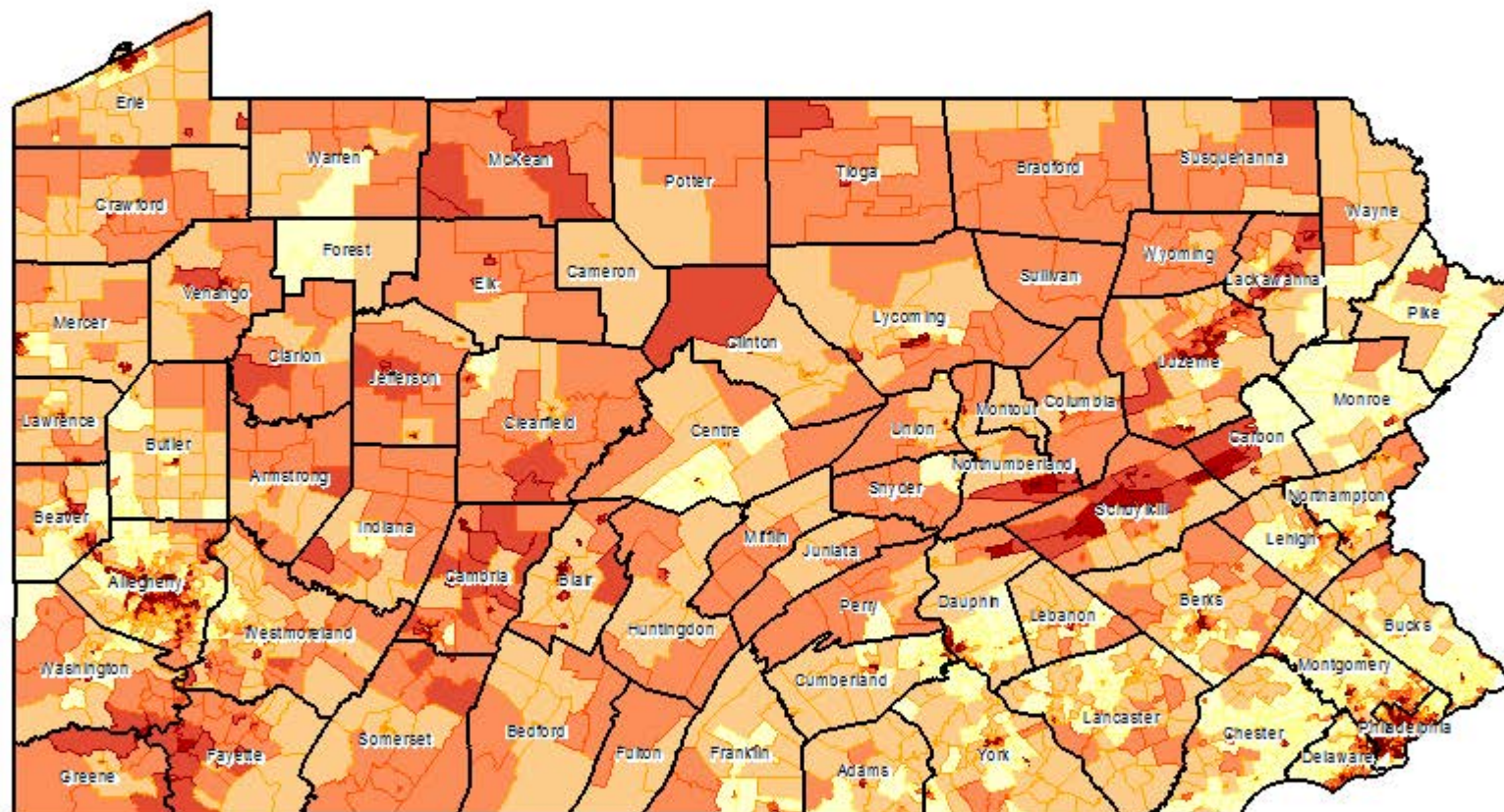
Source: U.S. Census Bureau, 2010 ACS, Table B25034	Housing Units:				
	Built Pre-1950	Estimated built 1950 through 1977	Total estimated built Pre-1978	Estimated built 1978 through 2010	Total Housing Units
<b>Pennsylvania</b>	<b>2,006,135</b>	<b>1,893,689</b>	<b>3,899,824</b>	<b>1,668,996</b>	<b>5,568,820</b>



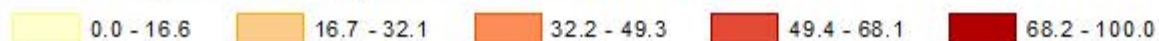
## Statewide Summaries - continued

### AGE OF HOUSING - MAP

Percentage of Pennsylvania's housing stock built before 1950, by 2010 Census Tract

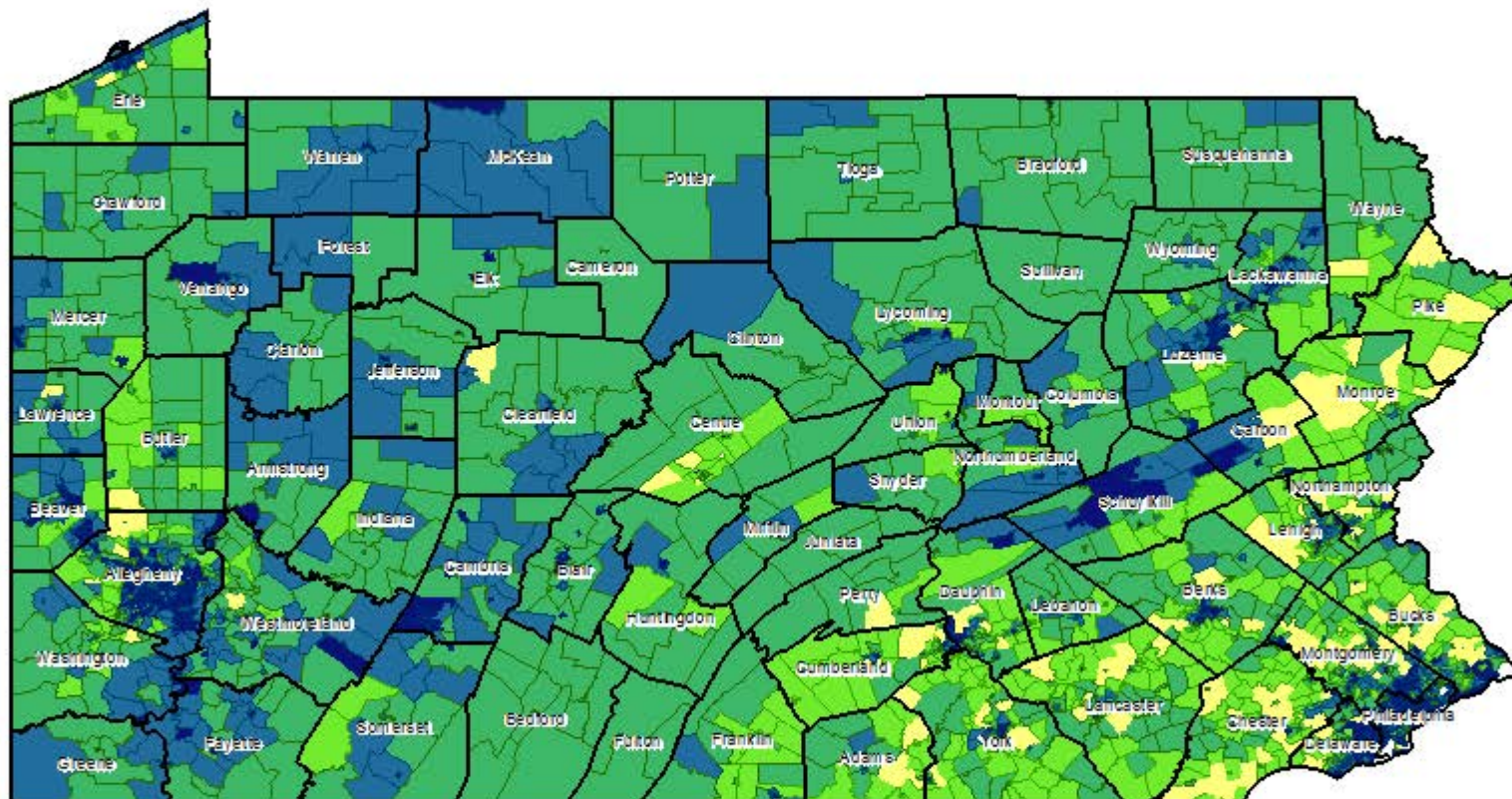


Percentage of housing units built before 1950

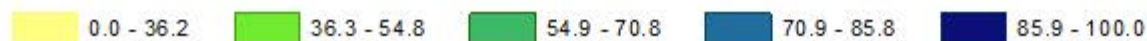


AGE OF HOUSING - MAP

Percentage of Pennsylvania's housing stock built before 1978, by 2010 Census Tract



Percentage of housing units built before 1978



**COUNTY LEVEL**

**Children Tested for lead in 2013 by:**

- i) Age**
- ii) Maximum blood lead level (BLL)**
- iii) County of residence**

**COUNTY LEVEL: CHILDREN TESTED FOR LEAD IN 2013 – BY AGE, MAXIMUM BLOOD LEAD LEVEL AND COUNTY OF RESIDENCE**

County	The Number of Pennsylvania Children Tested for Lead in 2013 by Age, Maximum Blood Lead Level and County of Residence																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	Lows <sup>23</sup>	Highs <sup>24</sup>	Nulls <sup>25</sup>	Total Children <sup>26</sup>	Lows	Highs	Nulls	Total Children	Lows	Highs	Nulls	Total Children	Lows	Highs	Nulls	Total Children	Lows	Highs	Nulls	Total Children
	0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL		
Adams	522	15	3	540	699	19	3	721	780	20	3	803	781	20	3	804	841	20	3	864
Allegheny	7,004	123	28	7,155	10,737	158	54	10,949	13,449	223	73	13,745	13,581	225	74	13,880	13,869	234	76	14,179
Armstrong	662	22	5	689	743	23	7	773	822	26	7	855	828	26	7	861	836	27	9	872
Beaver	593	19	2	614	1,253	30	8	1,291	1,478	35	11	1,524	1,505	35	11	1,551	1,535	37	11	1,583
Bedford	231	6	9	246	413	9	17	439	439	9	17	465	443	9	17	469	452	9	18	479
Berks	2,661	111	0	2,772	3,164	125	0	3,289	4,464	170	0	4,634	4,658	174	0	4,832	5,272	177	0	5,449
Blair	491	22	23	536	1,025	25	54	1,104	1,207	28	57	1,292	1,211	28	60	1,299	1,230	28	60	1,318
Bradford	341	9	0	350	473	9	1	483	580	12	1	593	585	12	1	598	600	12	1	613
Bucks	1,965	8	5	1,978	3,130	9	5	3,144	3,796	14	6	3,816	3,849	14	6	3,869	4,005	14	10	4,029
Butler	581	12	8	601	1,052	15	13	1,080	1,157	18	14	1,189	1,171	18	14	1,203	1,283	19	14	1,316
Cambria	527	21	3	551	1,003	28	4	1,035	1,169	42	6	1,217	1,180	42	6	1,228	1,197	42	6	1,245
Cameron	45	1	0	46	60	1	0	61	68	1	0	69	68	1	0	69	69	1	0	70
Carbon	182	3	0	185	427	8	2	437	496	8	2	506	508	8	2	518	536	8	2	546
Centre	274	3	1	278	814	6	2	822	860	9	3	872	866	9	3	878	891	9	4	904
Chester	2,407	34	14	2,455	3,442	43	14	3,499	4,550	51	22	4,623	4,593	51	22	4,666	4,710	53	23	4,786
Clarion	161	2	16	179	263	5	41	309	315	5	45	365	321	5	46	372	324	5	47	376
Clearfield	399	7	1	407	799	11	2	812	896	14	3	913	902	15	3	920	917	17	4	938
Clinton	123	1	0	124	284	5	0	289	367	7	0	374	370	7	0	377	381	7	1	389
Columbia	182	2	0	184	338	3	0	341	387	3	1	391	391	3	1	395	399	3	1	403
Crawford	305	8	2	315	603	16	7	626	716	16	8	740	724	16	8	748	754	17	8	779
Cumberland	602	18	12	632	824	22	13	859	1,010	23	14	1,047	1,024	23	14	1,061	1,066	24	14	1,104
Dauphin	1,432	43	9	1,484	2,169	53	9	2,231	3,012	78	14	3,104	3,078	80	15	3,173	3,216	84	16	3,316
Delaware	4,244	60	0	4,304	5,935	66	3	6,004	7,574	97	9	7,680	7,771	97	9	7,877	7,998	101	9	8,108
Elk	109	4	0	113	269	4	1	274	299	5	1	305	302	5	2	309	308	5	3	316
Erie	2,044	63	5	2,112	3,151	70	12	3,233	3,947	111	13	4,071	4,029	114	13	4,156	4,317	115	13	4,445
Fayette	643	9	2	654	1,119	11	5	1,135	1,361	13	6	1,380	1,398	13	6	1,417	1,450	13	6	1,469
Forest	14	0	1	15	28	0	3	31	34	1	3	38	34	1	3	38	36	1	3	40
Franklin	614	19	3	636	1,173	28	3	1,204	1,349	32	3	1,384	1,379	32	3	1,414	1,465	34	3	1,502
Fulton	75	0	4	79	114	1	5	120	159	2	5	166	161	2	5	168	171	2	6	179
Greene	116	2	0	118	174	2	0	176	220	2	0	222	224	2	0	226	231	2	0	233

**COUNTY LEVEL: CHILDREN TESTED FOR LEAD IN 2013 – BY AGE, MAXIMUM BLOOD LEAD LEVEL AND COUNTY OF RESIDENCE**

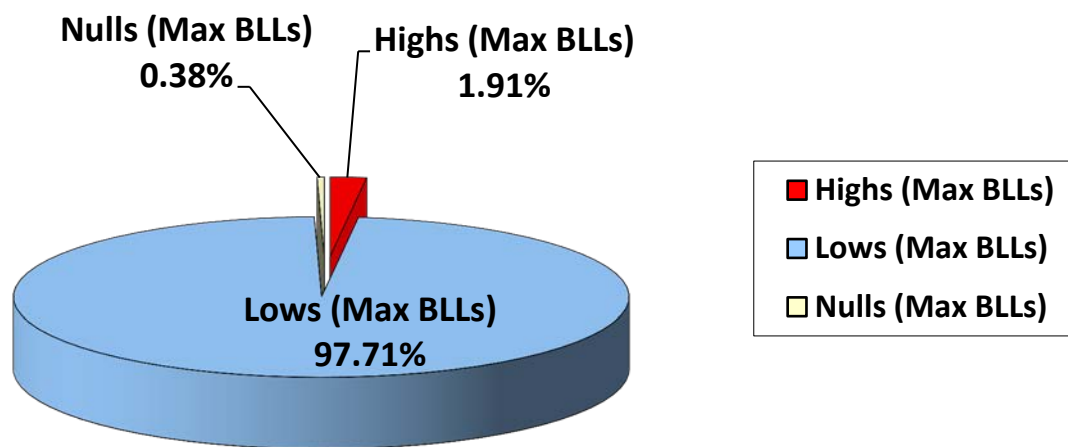
County	The Number of Pennsylvania Children Tested for Lead in 2013 by Age, Maximum Blood Lead Level and County of Residence																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	Low	High	Nulls	Total Children	Low	High	Nulls	Total Children	Low	High	Nulls	Total Children	Low	High	Nulls	Total	Low	High	Nulls	Total Children
	0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL		
Huntingdon	146	2	2	150	289	4	5	298	368	9	3	463	372	5	5	382	381	5	5	391
Indiana	335	9	4	348	705	14	16	735	788	17	3	892	795	14	18	827	807	15	18	840
Jefferson	162	4	1	167	335	6	7	348	430	6	1	491	436	9	10	455	448	9	10	467
Juniata	93	3	0	96	179	3	0	182	210	6	0	254	211	6	0	217	219	6	0	225
Lackawanna	763	23	3	789	1,090	28	7	1,125	1,360	46	1	1,974	1,394	36	7	1,437	1,516	36	7	1,559
Lancaster	1,879	68	4	1,951	2,712	73	5	2,790	3,456	97	7	3,972	3,528	98	5	3,631	3,721	103	5	3,829
Lawrence	303	9	5	317	456	9	6	471	566	9	1	619	578	10	7	595	607	10	7	624
Lebanon	586	25	10	621	826	31	12	869	1,035	31	2	1,212	1,051	39	12	1,102	1,097	40	12	1,149
Lehigh	1,828	44	0	1,872	2,897	49	0	2,946	3,526	67	2	3,811	3,570	71	0	3,641	3,639	71	0	3,710
Luzerne	1,271	30	3	1,304	2,215	39	3	2,257	2,566	66	4	3,358	2,601	59	6	2,666	2,711	59	6	2,776
Lycoming	396	9	1	406	835	13	1	849	1,028	22	1	1,045	1,040	17	1	1,058	1,056	18	1	1,075
McKean	375	17	3	395	565	22	4	591	620	17	1	644	622	24	4	650	640	25	4	669
Mercer	646	15	1	662	1,039	21	3	1,063	1,163	15	3	1,138	1,176	22	3	1,201	1,245	22	3	1,270
Mifflin	134	4	1	139	353	4	2	359	410	4	0	517	418	6	2	426	428	6	2	436
Monroe	644	10	1	655	766	10	1	777	974	12	2	1,425	990	12	1	1,003	1,057	12	2	1,071
Montgomery	4,111	55	10	4,176	6,233	63	10	6,306	7,472	71	0	7,777	7,589	82	11	7,682	7,834	86	12	7,932
Montour	69	0	0	69	116	0	0	116	141	0	0	144	142	0	0	142	145	0	0	145
Northampton	1,697	28	3	1,728	2,021	31	3	2,055	2,320	37	3	2,592	2,354	41	4	2,399	2,448	41	5	2,494
Northumberland	380	11	0	391	740	12	1	753	917	22	11	931	933	18	1	952	949	18	1	968
Perry	158	0	5	163	320	1	6	327	352	7	4	429	357	2	9	368	368	2	9	379
Philadelphia	20,472	472	3	20,947	27,873	525	4	28,402	37,006	750	5	37,761	38,112	777	5	38,894	39,963	813	7	40,783
Pike	257	3	2	262	387	4	5	396	464	1	1	602	472	4	6	482	487	4	6	497
Potter	249	2	3	254	266	2	3	271	283	2	2	292	284	3	3	290	287	3	3	293
Schuylkill	614	39	3	656	1,278	46	6	1,330	1,519	65	12	1,971	1,530	57	6	1,593	1,579	57	6	1,642
Snyder	137	2	1	140	284	3	1	288	341	9	4	350	347	8	1	356	353	8	1	362
Somerset	217	4	1	222	439	4	4	447	502	9	2	616	509	5	4	518	520	7	5	532
Sullivan	13	1	0	14	23	1	0	24	28	0	0	31	28	1	0	29	28	1	0	29
Susquehanna	183	2	0	185	214	2	0	216	246	8	0	309	250	2	0	252	257	2	0	259

**COUNTY LEVEL: CHILDREN TESTED FOR LEAD IN 2013 – BY AGE, MAXIMUM BLOOD LEAD LEVEL AND COUNTY OF RESIDENCE**

County	The Number of Pennsylvania Children Tested for Lead in 2013 by Age, Maximum Blood Lead Level and County of Residence																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	Low	High	Nulls	Total Children	Low	High	Nulls	Total Children	Low	High	Nulls	Total Children	Low	High	Nulls	Total Children	Low	High	Nulls	Total Children
	0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL			0-9 µg/dL	≥ 10 µg/dL		
Tioga	192	1	10	203	307	1	11	319	369	1	23	393	375	1	24	400	392	1	29	422
Union	123	4	1	128	261	5	2	268	308	8	2	318	311	8	2	321	313	8	2	323
Venango	249	10	0	259	450	13	0	463	505	21	0	526	514	21	0	535	526	21	1	548
Warren	147	8	1	156	320	10	4	334	379	14	7	400	385	14	7	406	433	15	13	461
Washington	722	7	7	736	1,330	18	11	1,359	1,576	22	13	1,611	1,593	22	13	1,628	1,634	22	14	1,670
Wayne	174	3	2	179	313	4	3	320	358	6	3	367	361	6	3	370	377	6	3	386
Westmoreland	1,173	18	6	1,197	2,321	23	11	2,355	2,585	31	12	2,628	2,605	31	12	2,648	2,682	34	12	2,728
Wyoming	46	0	0	46	77	0	0	77	98	0	0	98	99	0	0	99	102	0	0	102
York	1,869	65	2	1,936	2,916	86	3	3,005	3,703	122	3	3,828	3,802	125	4	3,931	3,891	130	4	4,025
All 67 counties	73,210 *	1,662*	256*	75,128*	110,724*	1,997*	449*	113,170*	138,444*	2,699*	541*	141,684*	141,203 *	2,756*	553*	144,512*	147,107*	2,849*	590*	150,546*

\*The totals include a number of children tested with county of residence “unknown” whose records could not be corrected before the data was downloaded. The number varies by age group, but was 1,550 for children under 7.

**Pennsylvania Children Under 7 Years of Age Tested for Lead in 2013**



**COUNTY LEVEL: PERCENTAGES - CHILDREN (< 7 YEARS OF AGE) TESTED FOR LEAD - BY COUNTY OF RESIDENCE**

The Percentage of Pennsylvania Children, Under 7 Years of age, Tested for Lead in 2013 by County of Residence															
Pa. County	Total Children Tested <sup>27</sup>	2010 Census Population Under 7	Percent Tested <sup>28</sup>	Pa. County	Total Children Tested	2010 Census Population	Percent Tested	Pa. County	Total Children Tested	2010 Census Population	Percent Tested	Pa. County	Total Children Tested	2010 Census Population	Percent Tested
1 Adams	804	8,001	10.05%	30 Greene	226	2,794	8.09%	59 Tioga	400	3,100	12.90%				
2 Allegheny	13,880	89,121	15.57%	31 Huntingdon	382	3,403	11.23%	60 Union	321	3,058	10.50%				
3 Armstrong	861	5,038	17.09%	32 Indiana	827	6,354	13.02%	61 Venango	535	4,265	12.54%				
4 Beaver	1,551	12,625	12.29%	33 Jefferson	455	3,626	12.55%	62 Warren	406	2,942	13.80%				
5 Bedford	469	3,721	12.60%	34 Juniata	217	2,213	9.81%	63 Washington	1,628	15,174	10.73%				
6 Berks	4,832	36,035	13.41%	35 Lackawanna	1,437	16,230	8.85%	64 Wayne	370	3,139	11.79%				
7 Blair	1,299	10,244	12.68%	36 Lancaster	3,631	49,568	7.33%	65 Westmoreland	2,648	25,172	10.52%				
8 Bradford	598	5,258	11.37%	37 Lawrence	595	6,878	8.65%	66 Wyoming	99	2,145	4.62%				
9 Bucks	3,869	49,300	7.85%	38 Lebanon	1,102	11,782	9.35%	67 York	3,931	37,816	10.40%				
10 Butler	1,203	14,395	8.36%	39 Lehigh	3,641	30,329	12.01%	All 67 counties			144,512*	1,028,282	14.05%		
11 Cambria	1,228	10,308	11.91%	40 Luzerne	2,666	23,386	11.40%	<b>RANKING: Top 15 testing percentages by county, for children under 7 years of age</b>  <b>1. Philadelphia (28.15%)</b> <b>2. Cameron (22.62%)</b> <b>3. Potter (21.18%)</b> <b>4. McKean (19.59%)</b> <b>5. Erie (17.73%)</b> <b>6. Armstrong (17.09%)</b> <b>7. Delaware (16.45%)</b> <b>8. Clearfield (15.94%)</b> <b>9. Allegheny (15.57%)</b> <b>10. Forest (14.90%)</b> <b>11. Fayette (14.59%)</b> <b>12. Schuylkill (14.58%)</b> <b>13. Elk (14.07%)</b> <b>14. Mercer (13.91%)</b> <b>15. Warren (13.80%)</b>  *See note on p. 30 for more details regarding total.							
12 Cameron	69	305	22.62%	41 Lycoming	1,058	9,165	11.54%								
13 Carbon	518	4,905	10.56%	42 McKean	650	3,318	19.59%								
14 Centre	878	9,435	9.31%	43 Mercer	1,201	8,632	13.91%								
15 Chester	4,666	44,938	10.38%	44 Mifflin	426	4,084	10.43%								
16 Clarion	372	2,852	13.04%	45 Monroe	1,003	12,675	7.91%								
17 Clearfield	920	5,772	15.94%	46 Montgomery	7,682	67,338	11.41%								
18 Clinton	377	3,100	12.16%	47 Montour	142	1,491	9.52%								
19 Columbia	395	4,545	8.69%	48 Northampton	2,399	23,225	10.33%								
20 Crawford	748	7,108	10.52%	49 Northumberland	952	7,370	12.92%								
21 Cumberland	1,061	18,099	5.86%	50 Perry	368	3,880	9.48%								
22 Dauphin	3,173	23,315	13.61%	51 Philadelphia	38,894	138,163	28.15%								
23 Delaware	7,877	47,874	16.45%	52 Pike	482	4,113	11.72%								
24 Elk	309	2,196	14.07%	53 Potter	290	1,369	21.18%								
25 Erie	4,156	23,447	17.73%	54 Schuylkill	1,593	10,924	14.58%								
26 Fayette	1,417	9,715	14.59%	55 Snyder	356	3,413	10.43%								
27 Forest	38	255	14.90%	56 Somerset	518	5,282	9.81%								
28 Franklin	1,414	13,820	10.23%	57 Sullivan	29	342	8.48%								
29 Fulton	168	1,253	13.41%	58 Susquehanna	252	3,144	8.02%								

## **COUNTY LEVEL**

**Children Tested and Confirmed Elevated in 2013 by:**

- i) Age**
- ii) First confirmed elevated  
blood lead level (EBLL)**
- iii) County of residence**



**COUNTY LEVEL: CHILDREN TESTED AND CONFIRMED ELEVATED<sup>29</sup> – BY AGE, FIRST CONFIRMED EBL<sup>30</sup> AND COUNTY OF RESIDENCE**

County	The Number of Pennsylvania Children Tested and Confirmed Elevated in 2013 by Age, First Confirmed EBL and County of Residence																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total
Adams	3	0	2	5	2	1	2	5	3	0	3	6	3	0	3	6	3	0	3	6
Allegheny	37	14	5	56	41	14	10	65	67	21	18	106	69	22	18	109	73	22	21	116
Armstrong	2	2	0	4	2	2	0	4	2	2	2	6	2	2	2	6	3	2	2	7
Beaver	1	2	3	6	2	2	3	7	4	2	3	9	4	2	3	9	4	4	3	11
Bedford	3	0	0	3	3	1	0	4	3	1	0	4	3	1	0	4	3	1	0	4
Berks	65	20	23	108	64	23	31	118	95	34	33	162	97	35	36	168	99	36	36	171
Blair	2	2	0	4	1	2	1	4	4	3	1	8	4	3	1	8	4	3	1	8
Bradford	5	0	1	6	5	0	1	6	7	1	1	9	7	1	1	9	7	1	1	9
Bucks	2	1	2	5	2	1	3	6	2	2	6	10	2	2	6	10	2	2	6	10
Butler	3	1	0	4	3	1	0	4	3	1	1	5	3	1	2	6	4	1	2	7
Cambria	4	0	5	9	5	0	5	10	10	2	12	24	10	2	13	25	10	2	13	25
Cameron	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbon	0	2	0	2	1	2	0	3	1	2	0	3	1	2	0	3	1	2	0	3
Centre	2	0	1	3	1	1	1	3	2	0	2	4	2	0	2	4	2	0	2	4
Chester	8	1	2	11	10	1	2	13	13	1	3	17	13	1	3	17	13	1	5	19
Clarion	1	0	0	1	3	0	0	3	3	0	0	3	3	0	0	3	3	0	0	3
Clearfield	4	0	0	4	4	0	0	4	4	1	1	6	4	1	2	7	4	1	4	9
Clinton	0	0	1	1	2	0	1	3	2	2	1	5	2	2	1	5	2	2	1	5
Columbia	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
Crawford	2	0	1	3	2	1	2	5	3	1	2	6	3	1	2	6	3	2	2	7
Cumberland	3	2	2	7	3	2	2	7	4	2	2	8	4	2	2	8	4	2	3	9
Dauphin	12	4	2	18	11	5	3	19	17	9	6	32	18	9	6	33	19	10	6	35
Delaware	22	9	4	35	21	9	6	36	34	12	8	54	34	12	8	54	36	12	9	57
Elk	2	1	0	3	2	1	0	3	3	1	0	4	3	1	0	4	3	1	0	4
Erie	15	4	11	30	11	7	12	30	29	9	17	55	31	9	18	58	31	9	19	59
Fayette	3	2	1	6	3	3	1	7	6	3	1	10	6	3	1	10	6	3	1	10
Forest	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1	0	0	1
Franklin	4	0	2	6	5	0	2	7	6	0	5	11	6	0	5	11	6	0	6	12
Fulton	0	0	0	0	1	0	0	1	1	1	0	2	1	1	0	2	1	1	0	2

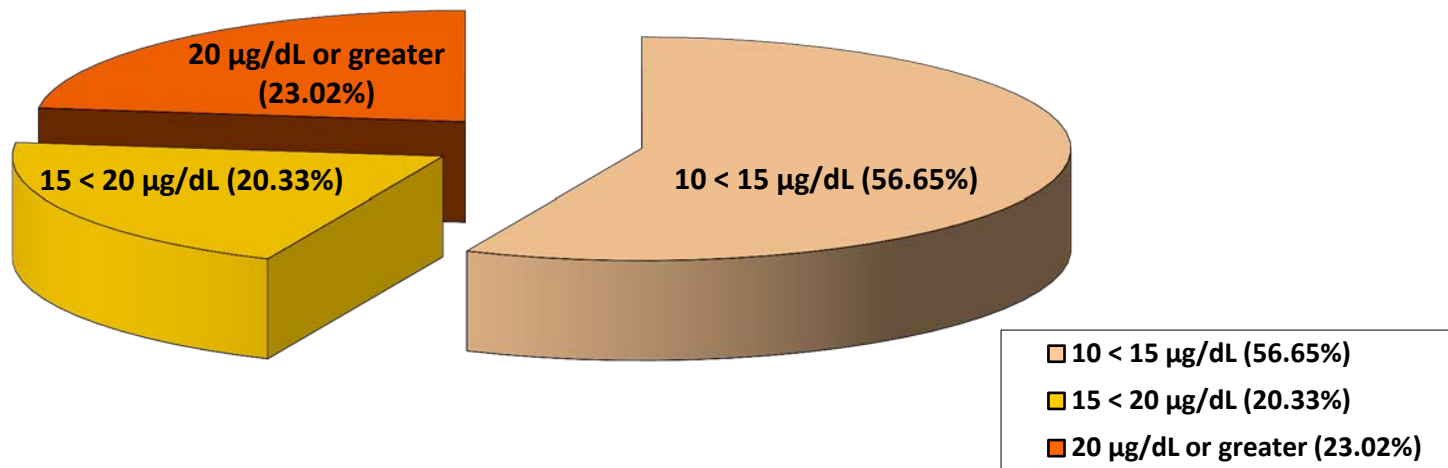
**COUNTY LEVEL: CHILDREN TESTED AND CONFIRMED ELEVATED – BY AGE, FIRST CONFIRMED EBLI AND COUNTY OF RESIDENCE**

County	The Number of Pennsylvania Children Tested and Confirmed Elevated in 2013 by Age, First Confirmed EBLI and County of Residence																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total
Greene	1	1	0	2	1	0	1	2	1	1	0	2	1	1	0	2	1	1	0	2
Huntingdon	0	0	1	1	0	0	1	1	0	0	2	2	0	0	2	2	0	0	2	2
Indiana	3	0	0	3	1	2	0	3	3	0	0	3	3	0	0	3	3	0	1	4
Jefferson	0	0	1	1	0	0	1	1	1	0	1	2	1	0	1	2	1	0	1	2
Juniata	2	0	0	2	2	0	0	2	2	1	0	3	2	1	0	3	2	1	0	3
Lackawanna	0	5	2	7	2	4	3	9	2	5	3	10	2	6	3	11	2	6	3	11
Lancaster	32	16	7	55	32	15	13	60	42	25	20	87	43	25	22	90	46	25	24	95
Lawrence	4	1	0	5	4	1	0	5	4	2	1	7	4	2	1	7	4	2	1	7
Lebanon	6	4	1	11	8	3	3	14	10	6	4	20	10	6	4	20	10	6	5	21
Lehigh	11	5	7	23	12	3	10	25	17	8	11	36	17	8	11	36	17	8	12	37
Luzerne	9	2	6	17	9	2	7	18	16	3	11	30	17	3	12	32	17	3	12	32
Lycoming	2	1	1	4	4	1	1	6	5	2	3	10	5	2	3	10	5	2	4	11
McKean	5	0	0	5	6	1	0	7	6	2	1	9	6	2	1	9	7	2	1	10
Mercer	12	1	0	13	14	1	0	15	15	1	0	16	15	1	0	16	15	1	0	16
Mifflin	1	2	1	4	1	1	2	4	2	3	1	6	2	3	1	6	2	3	1	6
Monroe	4	0	1	5	4	0	1	5	4	0	2	6	4	0	2	6	4	0	2	6
Montgomery	25	9	10	44	24	11	12	47	38	11	13	62	40	11	13	64	40	12	15	67
Montour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northampton	6	0	4	10	5	1	4	10	8	1	7	16	8	1	7	16	8	1	8	17
Northumberland	5	1	1	7	6	1	1	8	8	3	2	13	8	3	2	13	8	3	2	13
Perry	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1
Philadelphia	183	54	43	280	180	61	56	297	286	100	95	481	294	103	102	499	308	11	109	528
Pike	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potter	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1
Schuylkill	8	3	2	13	8	2	5	15	12	5	5	22	12	5	6	23	12	6	6	24
Snyder	0	0	1	1	1	0	1	2	3	1	2	6	3	1	2	6	3	1	2	6
Somerset	1	0	2	3	0	1	2	3	1	0	3	4	1	0	3	4	1	0	5	6
Sullivan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Susquehanna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**COUNTY LEVEL: CHILDREN TESTED AND CONFIRMED ELEVATED – BY AGE, FIRST CONFIRMED EBLL AND COUNTY OF RESIDENCE**

County	The Number of Pennsylvania Children Tested and Confirmed Elevated in 2013 by Age, First Confirmed EBLL and County of Residence																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total
Tioga	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Union	1	0	0	1	1	0	0	1	1	1	0	2	1	1	0	2	1	1	0	2
Venango	7	1	1	9	8	1	1	10	12	3	3	18	12	3	3	18	12	3	3	18
Warren	0	0	0	0	0	0	0	0	0	1	3	4	0	1	3	4	0	2	3	5
Washington	0	0	0	0	1	0	1	2	1	0	1	2	1	0	1	2	1	0	1	2
Wayne	2	0	0	2	2	0	0	2	2	0	0	2	2	0	0	2	2	0	0	2
Westmoreland	5	0	1	6	4	1	1	6	5	1	2	8	5	1	3	9	5	2	4	11
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
York	16	6	6	28	17	8	8	33	28	12	16	56	29	13	16	58	30	13	17	60
All 67 counties	558	179	167	904	569	200	223	992	866	311	341	1,518	886	318	360	1,564	916	335	391	1,642

**Pennsylvania Children < 7 years of age, Confirmed Elevated in 2013, by First Confirmed Elevated Blood Lead Level**



**COUNTY LEVEL: PERCENTAGES – CHILDREN (< 7 YEARS) TESTED AND CONFIRMED ELEVATED - BY COUNTY OF RESIDENCE**

The Percentage of Pennsylvania’s Tested Children, Under 7 Years of Age, Confirmed Elevated in 2013 by County of Residence														
Pa. County		Total Children Tested	Total Confirmed Elevated	Percent Confirmed Elevated <sup>31</sup>	Pa. County		Total Children Tested	Total Confirmed Elevated	Percent Confirmed Elevated	Pa. County		Total Children Tested	Total Confirmed Elevated	Percent Confirmed Elevated
1	Adams	804	6	0.75%	30	Greene	226	2	0.88%	59	Tioga	400	0	0.00%
2	Allegheny	13,880	109	0.79%	31	Huntingdon	382	2	0.52%	60	Union	321	2	0.62%
3	Armstrong	861	6	0.70%	32	Indiana	827	3	0.36%	61	Venango	535	18	3.36%
4	Beaver	1,551	9	0.58%	33	Jefferson	455	2	0.44%	62	Warren	406	4	0.99%
5	Bedford	469	4	0.85%	34	Juniata	217	3	1.38%	63	Washington	1,628	2	0.12%
6	Berks	4,832	168	3.48%	35	Lackawanna	1,437	11	0.77%	64	Wayne	370	2	0.54%
7	Blair	1,299	8	0.62%	36	Lancaster	3,631	90	2.48%	65	Westmoreland	2,648	9	0.34%
8	Bradford	598	9	1.51%	37	Lawrence	595	7	1.18%	66	Wyoming	99	0	0.00%
9	Bucks	3,869	10	0.26%	38	Lebanon	1,102	20	1.81%	67	York	3,931	58	1.48%
10	Butler	1,203	6	0.50%	39	Lehigh	3,641	36	0.99%	All 67 counties		144,512*	1,564	1.08%
11	Cambria	1,228	25	2.04%	40	Luzerne	2,666	32	1.20%	<p><b>Note: Percentages based on low numbers of children confirmed elevated have the potential for a high standard of error (SE) and are less reliable in representing the general population.</b></p> <p><b>*The total number of children tested includes 1,550 children with ‘unknown’ counties for residences. This had a negligible effect on confirmed elevated percentages and did not affect the number of children with confirmed elevated results.</b></p>				
12	Cameron	69	0	0.00%	41	Lycoming	1,058	10	0.95%					
13	Carbon	518	3	0.58%	42	McKean	650	9	1.38%					
14	Centre	878	4	0.46%	43	Mercer	1,201	16	1.33%					
15	Chester	4,666	17	0.36%	44	Mifflin	426	6	1.41%					
16	Clarion	372	3	0.81%	45	Monroe	1,003	6	0.60%					
17	Clearfield	920	7	0.76%	46	Montgomery	7,682	64	0.83%					
18	Clinton	377	5	1.33%	47	Montour	142	0	0.00%					
19	Columbia	395	1	0.25%	48	Northampton	2,399	16	0.67%					
20	Crawford	748	6	0.80%	49	Northumberland	952	13	1.37%					
21	Cumberland	1,061	8	0.75%	50	Perry	368	1	0.27%					
22	Dauphin	3,173	33	1.04%	51	Philadelphia	38,894	499	1.28%					
23	Delaware	7,877	54	0.69%	52	Pike	482	0	0.00%					
24	Elk	309	4	1.29%	53	Potter	290	1	0.34%					
25	Erie	4,156	58	1.40%	54	Schuylkill	1,593	23	1.44%					
26	Fayette	1,417	10	0.71%	55	Snyder	356	6	1.69%					
27	Forest	38	1	2.63%	56	Somerset	518	4	0.77%					
28	Franklin	1,414	11	0.78%	57	Sullivan	29	0	0.00%					
29	Fulton	168	2	1.19%	58	Susquehanna	252	0	0.00%					

**COUNTY LEVEL**

**U.S. Census Bureau, 2010 Census Population by County:**

- i) Pennsylvania county**
- ii) Age [total population and children less than 7 years**

**COUNTY LEVEL: POPULATION**

	Pennsylvania County	2010 Census Total Population	Statewide Ranking Based on Highest Total Population	2010 Census Population Children < 7	Statewide Ranking Based on Highest Population < 7	Children < 7 as a Percentage of Total Population:	Statewide Ranking Based on Highest Percentage < 7
1	Adams	101,407	31	8,001	31	7.89%	24-tie
2	Allegheny	1,223,348	2	89,121	2	7.29%	47-tie
3	Armstrong	68,941	38	5,038	39	7.31%	45
4	Beaver	170,539	20	12,625	22	7.40%	41-tie
5	Bedford	49,762	45	3,721	46	7.48%	38
6	Berks	411,442	9	36,035	9	8.76%	7
7	Blair	127,089	28	10,244	26	8.06%	20
8	Bradford	62,622	41	5,258	38	8.40%	17
9	Bucks	625,249	4	49,300	5	7.88%	26
10	Butler	183,862	19	14,395	19	7.83%	28
11	Cambria	143,679	25	10,308	25	7.17%	51-tie
12	Cameron	5,085	67	305	66	6.00%	64
13	Carbon	65,249	40	4,905	40	7.52%	37
14	Centre	153,990	22	9,435	28	6.13%	63
15	Chester	498,886	7	44,938	7	9.01%	4
16	Clarion	39,988	55	2,852	57	7.13%	54
17	Clearfield	81,642	36	5,772	36	7.07%	56
18	Clinton	39,238	57	3,100	53	7.90%	23
19	Columbia	67,295	39	4,545	41	6.75%	62
20	Crawford	88,765	35	7,108	33	8.01%	22
21	Cumberland	235,406	16	18,099	16	7.69%	32
22	Dauphin	268,100	15	23,315	14	8.70%	9
23	Delaware	558,979	5	47,874	6	8.56%	13
24	Elk	31,946	59	2,196	60	6.87%	59
25	Erie	280,566	14	23,447	12	8.36%	18
26	Fayette	136,606	26	9,715	27	7.11%	55
27	Forest	7,716	65	255	67	3.30%	67
28	Franklin	149,618	23	13,820	20	9.24%	2
29	Fulton	14,845	64	1,253	64	8.44%	14-tie
30	Greene	38,686	58	2,794	58	7.22%	50

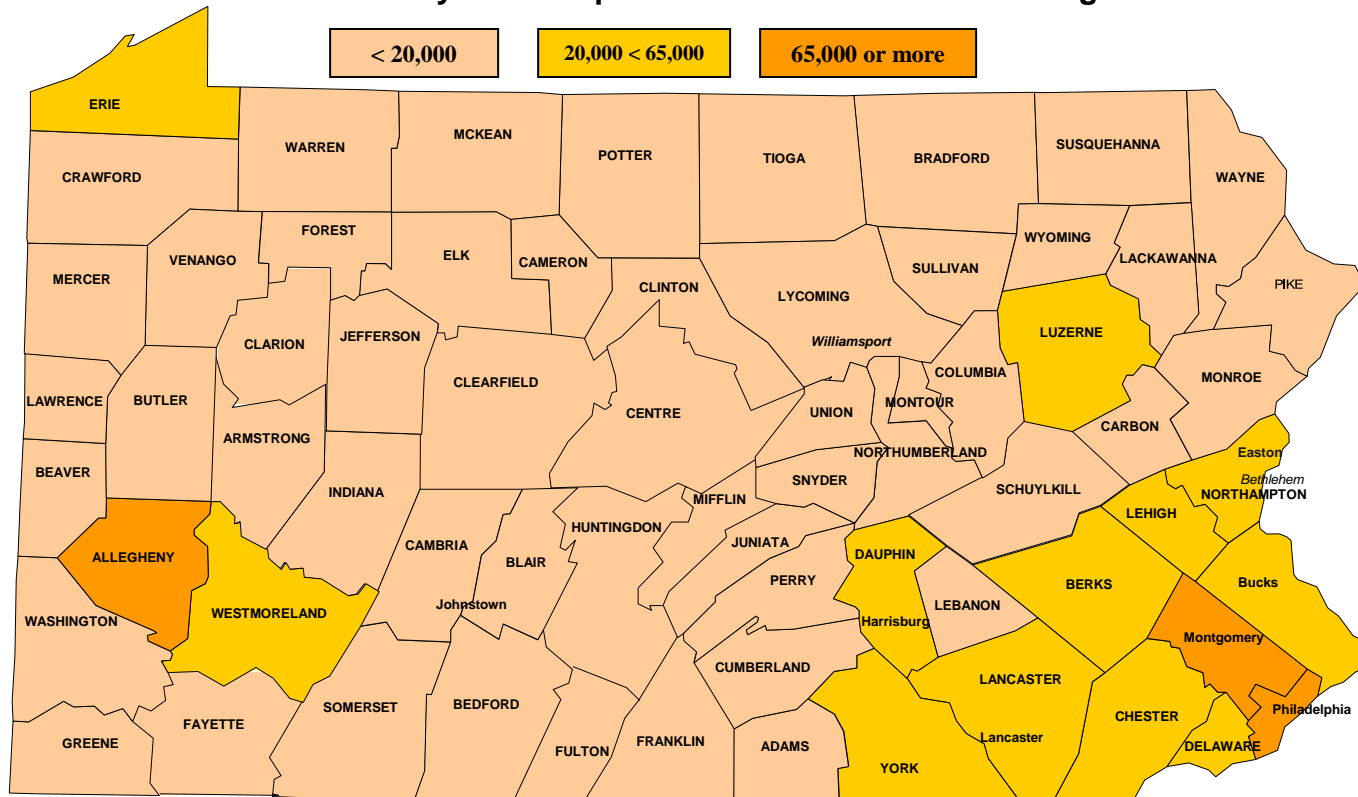
**COUNTY LEVEL: POPULATION**

	<b>Pennsylvania County</b>	<b>2010 Census Total Population</b>	<b>Statewide Ranking Based on Highest Total Population</b>	<b>2010 Census Population Children &lt; 7</b>	<b>Statewide Ranking Based on Highest Population &lt; 7</b>	<b>Children &lt; 7 as a Percentage of Total Population:</b>	<b>Statewide Ranking Based on Highest Percentage &lt; 7</b>
31	Huntingdon	45,913	48	3,403	49	7.41%	40
32	Indiana	88,880	34	6,354	35	7.15%	53
33	Jefferson	45,200	49	3,626	47	8.02%	21
34	Juniata	24,636	61	2,213	59	8.98%	5
35	Lackawanna	214,437	17	16,230	17	7.57%	35
36	Lancaster	519,445	6	49,568	4	9.54%	1
37	Lawrence	91,108	33	6,878	34	7.55%	36
38	Lebanon	133,568	27	11,782	23	8.82%	6
39	Lehigh	349,497	11	30,329	10	8.68%	11
40	Luzerne	320,918	12	23,386	13	7.29%	47-tie
41	Lycoming	116,111	30	9,165	29	7.89%	24-tie
42	McKean	43,450	51	3,318	50	7.64%	33
43	Mercer	116,638	29	8,632	30	7.40%	41-tie
44	Mifflin	46,682	46	4,084	44	8.75%	8
45	Monroe	169,842	21	12,675	21	7.46%	39
46	Montgomery	799,874	3	67,338	3	8.42%	16
47	Montour	18,267	62	1,491	62	8.16%	19
48	Northampton	297,735	13	23,225	15	7.80%	29-tie
49	Northumberland	94,528	32	7,370	32	7.80%	29-tie
50	Perry	45,969	47	3,880	45	8.44%	14-tie
51	Philadelphia	1,526,006	1	138,163	1	9.05%	3
52	Pike	57,369	42	4,113	43	7.17%	51-tie
53	Potter	17,457	63	1,369	63	7.84%	27
54	Schuylkill	148,289	24	10,924	24	7.37%	44
55	Snyder	39,702	56	3,413	48	8.60%	12
56	Somerset	77,742	37	5,282	37	6.79%	61
57	Sullivan	6,428	66	342	65	5.32%	66
58	Susquehanna	43,356	52	3,144	51	7.25%	49
59	Tioga	41,981	53	3,100	53	7.38%	43
60	Union	44,947	50	3,058	55	6.80%	60
61	Venango	54,984	43	4,265	42	7.76%	31

## COUNTY LEVEL: POPULATION

Pennsylvania County	2010 Census Total Population	Statewide Ranking Based on Highest Total Population	2010 Census Population Children < 7	Statewide Ranking Based on Highest Population < 7	Children < 7 as a Percentage of Total Population:	Statewide Ranking Based on Highest Percentage < 7
62 Warren	41,815	54	2,942	56	7.04%	57
63 Washington	207,820	18	15,174	18	7.30%	46
64 Wayne	52,822	44	3,139	52	5.94%	65
65 Westmoreland	365,169	10	25,172	11	6.89%	58
66 Wyoming	28,276	60	2,145	61	7.59%	34
67 York	434,972	8	37,816	8	8.69%	10
All 67 counties	12,702,379		1,028,282		8.10%	

### Pennsylvania Population Children < 7 Years of Age



**Note:** Ten of Pennsylvania's 67 counties account for more than half (57.42 percent) of the state's total population of children under 7 years of age. Nine of those counties (Berks, Bucks, Chester, Delaware, Lancaster, Lehigh, Montgomery, Philadelphia and York) are clustered in the southeastern part of the state and represent almost 49 percent of the state's children under 7. The other county (Allegheny) is located in the southwest.

**Note 2:** There are fifteen counties with more than 20,000 children under 7. These fifteen counties (all highlighted on the map at left) represent nearly 69 percent of the state's total population of children under 7.



**CITY LEVEL**

**Children Tested for Lead in 2013 by:**

- i) Age**
- ii) Maximum blood lead level**
- iii) City of residence – 20 selected cities**

**CITY LEVEL: CHILDREN TESTED FOR LEAD IN 2013 BY AGE, MAXIMUM BLOOD LEAD LEVEL AND CITY OF RESIDENCE**

Selected Cities	The Number of Pennsylvania Children Tested for Lead in 2013 by Age, Maximum Blood Lead Level and City of Residence:																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	Lows	Highs	Nulls	Total Children	Lows	Highs	Nulls	Total Children	Lows	Highs	Nulls	Total Children	Lows	Highs	Nulls	Total Children	Lows	Highs	Nulls	Total Children
	0-9	≥ 10			0-9	≥ 10			0-9	≥ 10			0-9	≥ 10			0-9	≥ 10		
Allentown	1,256	36	0	1,292	2,045	39	0	2,084	2,530	55	0	2,585	2,557	57	0	2,614	2,592	57	0	2,649
Altoona	288	19	6	313	590	21	14	625	695	23	15	733	697	23	16	736	712	23	16	751
Bethlehem	726	11	0	737	854	12	0	866	984	14	1	999	997	14	1	1,012	1,026	14	2	1,042
Chester	528	11	0	539	625	11	0	636	1,144	21	4	1,169	1,217	21	4	1,242	1,254	22	4	1,280
Easton	642	16	3	661	746	17	3	766	867	23	3	893	881	24	3	908	920	24	3	947
Erie	1,583	47	3	1,633	2,407	51	7	2,465	3,041	90	7	3,138	3,105	93	7	3,205	3,327	94	7	3,428
Harrisburg	1,085	38	7	1,130	1,616	46	7	1,669	2,306	69	12	2,387	2,355	71	13	2,439	2,455	74	14	2,543
Johnstown	314	16	0	330	561	22	0	583	644	32	0	676	647	32	0	679	660	32	0	692
Lancaster	881	45	3	929	1,271	48	4	1,323	1,654	60	4	1,718	1,686	63	4	1,753	1,792	68	4	1,864
Lebanon	415	19	10	444	559	23	12	594	715	28	12	755	724	28	12	764	746	29	12	787
Levittown	214	0	0	214	398	0	0	398	501	0	0	501	508	0	0	508	522	0	0	522
Norristown	821	27	0	848	1,101	28	0	1,129	1,553	40	1	1,594	1,610	41	1	1,652	1,659	41	1	1,701
Philadelphia	19,494	454	3	19,951	26,533	506	3	27,042	35,236	719	3	35,958	36,285	745	3	37,033	38,012	781	4	38,797
Pittsburgh	4,047	82	15	4,144	6,006	103	27	6,136	7,658	141	38	7,837	7,725	143	38	7,906	7,873	146	39	8,058
Reading	1,914	97	0	2,011	2,226	107	0	2,333	3,226	146	0	3,372	3,388	149	0	3,537	3,892	152	0	4,044
Scranton	412	19	2	433	574	23	6	603	737	29	6	772	753	30	6	789	812	30	6	848
State Coll.	79	1	0	80	255	1	1	257	271	1	1	273	271	1	1	273	275	1	1	277
Wilkes-Barre	222	4	1	227	425	8	1	434	496	11	4	511	499	11	4	514	526	11	4	541
Williamsport	225	4	0	229	409	4	0	413	532	7	0	539	539	7	0	546	551	7	0	558
York	916	52	0	968	1,405	58	1	1,464	2,018	86	1	2,105	2,096	88	2	2,186	2,142	93	2	2,237
<b>Total all 20 cities</b>	<b>36,062</b>	<b>998</b>	<b>53</b>	<b>37,113</b>	<b>50,606</b>	<b>1,128</b>	<b>86</b>	<b>51,820</b>	<b>66,808</b>	<b>1,595</b>	<b>112</b>	<b>68,515</b>	<b>68,540</b>	<b>1,641</b>	<b>115</b>	<b>70,296</b>	<b>71,748</b>	<b>1,699</b>	<b>119</b>	<b>73,566</b>

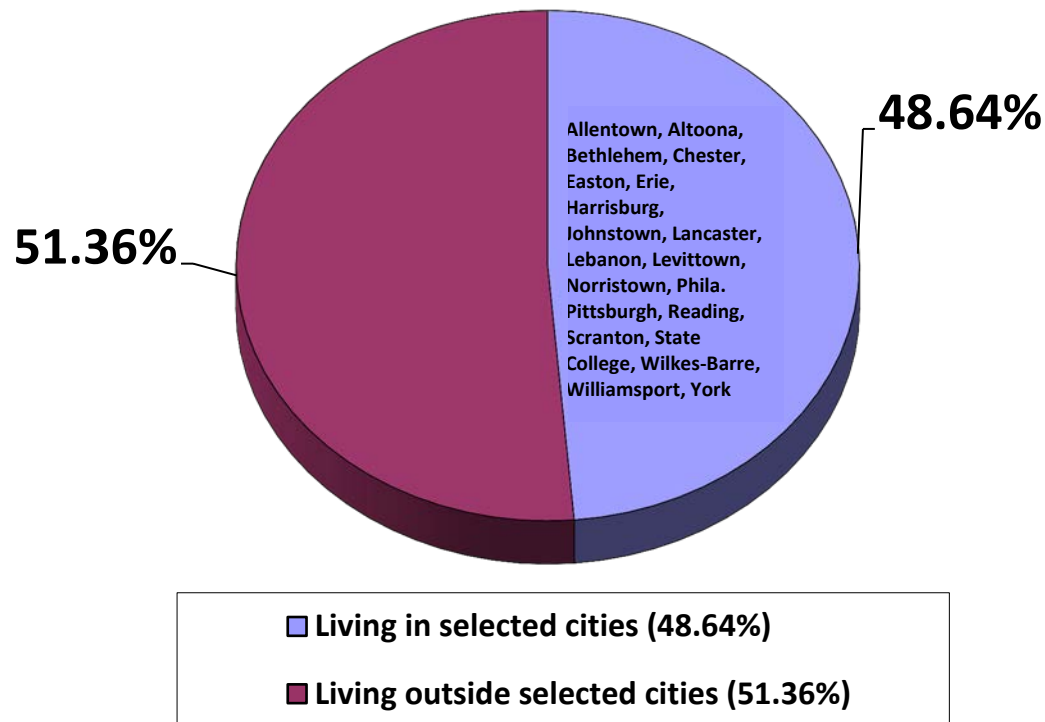
**CITY LEVEL: PERCENTAGES - CHILDREN (< 7 YEARS) TESTED FOR LEAD - BY CITY OF RESIDENCE (FOR 20 SELECTED CITIES ONLY)**

<b>The Percentage of Pennsylvania Children, Under 7 Years of Age, Tested for Lead in 2013 by City of Residence (for 20 selected cities)</b>			
<b>Selected Cities</b>	<b>Total Children Tested</b>	<b>2010 Census Population for Children Under 7</b>	<b>Percent Tested</b>
Allentown	2,614	12,747	20.51%
Altoona	736	4,190	17.57%
Bethlehem	1,012	5,757	17.58%
Chester	1,242	3,852	32.24%
Easton	908	2,463	36.87%
Erie	3,205	10,269	31.21%
Harrisburg	2,439	5,829	41.84%
Johnstown	679	1,975	34.38%
Lancaster	1,753	6,356	27.58%
Lebanon	764	2,767	27.61%
Levittown	508	Levittown CDP 4,408	11.52%
Norristown	1,652	Norristown Borough 4,113	40.17%
Philadelphia	37,033	138,163	26.80%
Pittsburgh	7,906	20,390	38.77%
Reading	3,537	11,537	30.66%
Scranton	789	6,225	12.67%
State College	273	State College Borough 999	27.33%
Wilkes-Barre	514	3,304	15.56%
Williamsport	546	2,676	20.40%
York	2,186	5,460	40.04%
<b>Total all 20 cities</b>	<b>70,296</b>	<b>253,480</b>	<b>27.73%</b>

**CITY LEVEL: PERCENTAGE OF CHILDREN TESTED LIVING IN 20 SELECTED CITIES**

	Children Living:			Percentage of total children tested living in 20 selected cities
	In Pennsylvania, but outside 20 selected cities	In 20 selected Pa. cities (Allentown, Altoona, Bethlehem, Chester, Easton, Erie, Harrisburg, Johnstown, Lancaster, Lebanon, Levittown, Norristown, Philadelphia, Pittsburgh, Reading, Scranton, State College, Wilkes-Barre, Williamsport, York)	In Pennsylvania statewide	
Number of children under 7 tested for lead in 2013 →	74,216	70,296	144,512	48.64%

**Pennsylvania's 2013 Lead Tested Children (< 7 years of age)**



**CITY LEVEL**

**Children Tested and Confirmed Elevated in 2013 by:**

- i) Age**
- ii) First confirmed EBL**
- iii) City of residence – 20 selected cities**

**CITY LEVEL: CHILDREN TESTED AND CONFIRMED ELEVATED – BY AGE, FIRST CONFIRMED EBLL AND CITY OF RESIDENCE (FOR 20 SELECTED CITIES)**

City	The Number of Pennsylvania Children Tested and Confirmed Elevated in 2013 by age, First Confirmed EBLL and City of Residence (20 selected cities)																			
	1 and 2 Years (12-35 months)				< 3 Years (0-35 months)				< 6 Years (0-71 months)				< 7 Years (0-83 months)				< 16 Years (0-191 months)			
	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total	10 < 15 µg/dL	15 < 20 µg/dL	≥ 20 µg/dL	Total
Allentown	8	5	5	18	9	5	5	19	8	6	13	27	8	6	13	27	8	6	14	28
Altoona	1	2	0	3	1	2	0	3	3	2	1	6	3	2	1	6	3	2	1	6
Bethlehem	0	0	1	1	0	0	1	1	0	0	2	2	0	0	2	2	0	0	2	2
Chester	3	2	2	7	3	2	2	7	3	2	3	8	3	2	3	8	3	2	4	9
Easton	3	0	3	6	3	0	3	6	4	0	7	11	4	0	7	11	4	0	7	11
Erie	11	3	8	22	11	3	8	22	17	10	20	47	19	10	21	50	19	10	22	51
Harrisburg	10	4	2	16	11	4	2	17	10	9	11	30	10	9	12	31	10	10	12	32
Johnstown	3	0	2	5	4	0	2	6	5	4	9	18	5	4	10	19	5	4	10	19
Lancaster	22	8	6	36	23	8	8	39	26	11	19	56	27	11	20	58	29	11	23	63
Lebanon	6	1	1	8	9	1	1	11	8	1	7	16	8	1	7	16	8	1	8	17
Levittown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norristown	12	5	5	22	13	5	5	23	18	7	11	36	19	7	11	37	19	7	11	37
Philadelphia	180	50	41	271	194	53	41	288	248	94	123	465	255	95	132	482	266	104	141	511
Pittsburgh	26	9	5	40	30	10	6	46	40	16	16	72	40	18	17	75	43	18	17	78
Reading	58	18	20	96	63	19	21	103	70	28	44	142	70	28	49	147	71	29	50	150
Scranton	0	4	0	4	1	4	0	5	1	3	2	6	1	4	2	7	1	4	2	7
State College	1	0	0	1	1	0	0	1	0	1	0	1	0	1	0	1	0	1	0	1
Wilkes-Barre	2	0	0	2	2	0	0	2	2	1	1	4	2	1	1	4	2	1	1	4
Williamsport	2	1	1	4	2	1	1	4	2	2	3	7	2	2	3	7	2	2	3	7
York	15	5	4	24	16	5	4	25	19	9	14	42	20	9	14	43	21	9	15	45
<b>Total all 20 cities</b>	<b>363</b>	<b>117</b>	<b>106</b>	<b>586</b>	<b>396</b>	<b>122</b>	<b>110</b>	<b>628</b>	<b>484</b>	<b>206</b>	<b>306</b>	<b>996</b>	<b>496</b>	<b>210</b>	<b>325</b>	<b>1,031</b>	<b>514</b>	<b>221</b>	<b>343</b>	<b>1,078</b>

## CITY LEVEL

### **U.S. Census Bureau, 2010 Census Population:**

- i) Age - total population and children less than 7 years**
- ii) City of residence - 20 selected cities**

	20 Selected Cities	2010 Census Total Population	20 City Ranking Total Population	2010 Census Population Children Less Than 7 Years	20 City Ranking Children Less Than 7 Years	Children Less Than 7 Years as a Percentage of Total Population	20 City Ranking Percentage of Population Less Than 7 Years
1	Allentown	118,032	3	12,747	3	10.80%	7
2	Altoona	46,320	11	4,190	12	9.05%	Tie - 13
3	Bethlehem	74,982	7	5,757	9	7.68%	18
4	Chester	33,972	16	3,852	14	11.34%	5
5	Easton	26,800	18	2,463	18	9.19%	11
6	Erie	101,786	4	10,269	5	10.09%	9
7	Harrisburg	49,528	10	5,829	8	11.77%	4
8	Johnstown	20,978	20	1,975	19	9.41%	10
9	Lancaster	59,322	8	6,356	6	10.71%	8
10	Lebanon	25,477	19	2,767	16	10.86%	6
11	Levittown (CDP)	52,983	9	4,408	11	8.32%	15
12	Norristown Borough	34,324	15	4,113	13	11.98%	3
13	Philadelphia	1,526,006	1	138,163	1	9.05%	Tie - 13
14	Pittsburgh	305,704	2	20,390	2	6.67%	19
15	Reading	88,082	5	11,537	4	13.10%	1
16	Scranton	76,089	6	6,225	7	8.18%	16
17	State College Borough	42,034	13	999	20	2.38%	20
18	Wilkes-Barre	41,498	14	3,304	15	7.96%	17
19	Williamsport	29,381	17	2,676	17	9.11%	12
20	York	43,718	12	5,460	10	12.49%	2
<b>Total all 20 cities</b>		<b>2,682,419</b>		<b>253,480</b>		<b>9.45%</b>	

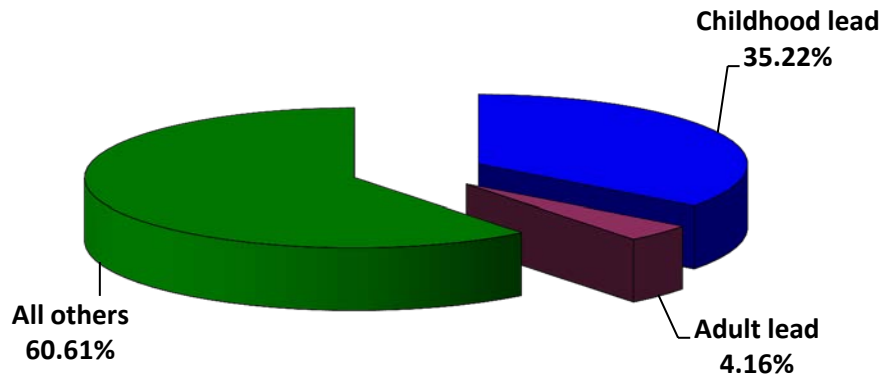


**Disease Reports to PA-NEDSS in 2013**

### Disease Reports to PA-NEDSS During 2013

Number of reports submitted to PA-NEDSS during calendar year 2013 <small>(Reported Date = 1/1/2013 through 12/31/2013, inclusive) →</small>			Condition:		Total Reports for 2013
	Childhood Lead	Adult Lead	Total Lead Reports	All Others <small>(89 different initial conditions*)</small>	
	169,155	19,995	189,150	291,096	480,246
Percentage of Total →	35.22%	4.16%	39.38%	60.61%	100%

**Reports to PA-NEDSS in 2013**



■ Childhood lead 35.22%   
 ■ Adult lead 4.16%   
 ■ All others 60.61%

In 2013, lead reports comprised nearly 40 percent of all reports in PA-NEDSS. The vast majority of lead reports (more than 89 percent) were childhood lead reports.

**\*All Others (89 different initial conditions) – Examples:**  
 Hepatitis C;  
 Chlamydia Trachomatis infection;  
 Lyme disease;  
 Hepatitis B;  
 Influenza A;  
 Low CD4 count (<200 or <14%);  
 Syphilis;  
 Gonorrhea; etc.

**NOTE:** For confidentiality reasons, this figure excludes HIV/AIDS reports.

## Endnotes

- <sup>1</sup> **The Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS)** – The Pennsylvania Department of Health’s online disease surveillance system. It serves as the department’s reporting system for all reportable conditions. It has been utilized by the Childhood Lead Poisoning Prevention Program since the spring of 2003.
- <sup>2</sup> **Children less than 7 years of age (< 7 years)** – Children between 0 and 83 months of age at time of specimen collection.
- <sup>3</sup> **Confirmed elevated blood lead levels** - Those children identified to be confirmed elevated as defined by the Council for State and Territorial Epidemiologists (CSTE). CSTE defines Confirmed Elevated as follows: A child with one venous blood specimen  $\geq 10 \mu\text{g/dL}$ , or any combination of two capillary and/or unknown blood specimens  $\geq 10 \mu\text{g/dL}$  drawn within 12 weeks of each other.
- <sup>4</sup> **Children less than 3 years of age (< 3 years)** – Children between 0 and 35 months of age, inclusive, at time of specimen collection.
- <sup>5</sup> **Note on race calculations** – In July 2012, race categories were updated in PA-NEDSS in order to mirror U.S. Census race categories, as well as to streamline race data categories within PA-NEDSS. This change resulted in the numbers for some races moving from “Unknown” race to “Other.”
- <sup>6</sup> **Geometric mean** - The geometric mean, in mathematics, is a type of mean or average which indicates the central tendency or typical value of a set of numbers. It is similar to the arithmetic mean (which most think of as “the average”), except that, instead of adding the set of numbers and then dividing the sum by the count of numbers in the set (n), the numbers are multiplied and then the nth root of the resulting product is taken. This measure is preferred when identifying a representative value for blood lead levels. The childhood lead datasets do contain outlying results that would skew the arithmetic mean or “average” and, possibly, lead to inaccurate conclusions. The geometric mean, therefore, serves as a better representative value of the dataset. For example, assume you have a dataset with two values in it, 2 and 8. The “average” (arithmetic mean) of those would be  $(2+8)/2 = 5$ . The geometric mean, however, is the square root of  $[(2) \times (8)]$ , which is 4. As you see, the “average” is 5, but the geometric mean is 4. Both are a type of “mean.” Both are a measure of central tendency. Calculating and utilizing the geometric mean is typically how blood lead levels are handled. Most articles indicating that childhood blood lead levels have dropped over time are referencing the geometric mean of those blood lead levels. And, as is typically done, we provided the geometric mean of maximum blood lead levels (highest values) within this report.
- <sup>7</sup> **Pennsylvania children tested for lead in 2013 by age and maximum blood lead level** – Those children reported to be residing in Pennsylvania and having had a lead test done with a specimen collection date between 01/01/2013 and 12/31/2013, inclusive, by age and maximum blood lead level (bll). As children are often tested more than once during a given time period, this table reflects those children tested by their single maximum (highest) blood lead level result during the calendar year. Source: The Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS), as of May 5, 2014.
- <sup>8</sup> **Percentage of Pennsylvania’s 2010 census population tested for lead in 2013, by age cohort** =  $[(\text{Total Children Tested for Lead}) \div (\text{Total 2010 Census Age Cohort Population}) \times 100]$ , rounded two decimal places.
- <sup>9</sup> **Pennsylvania children tested and confirmed elevated in 2013 by age and categorized by first confirmed elevated blood lead level** – Those children reported to be residing in Pennsylvania and having been tested and confirmed elevated during 2013, by age and first reported confirmed blood lead level. Here, “confirmed elevated” reflects those children identified to have a reported confirmed elevated blood lead level during 2013. The Council for State and Territorial Epidemiologists (CSTE) defines confirmed elevated as follows: A child with one venous blood specimen  $\geq 10 \mu\text{g/dl}$  or any combination of two capillary and/or unknown blood specimens  $\geq 10 \mu\text{g/dL}$  drawn within 12 weeks of each other. Source: The Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS), as of May 5, 2014.
- <sup>10</sup> **Percentage of Pennsylvania’s 2013 tested children confirmed elevated, by age cohort** =  $[(\text{Total children confirmed elevated in 2013}) \div (\text{Total children tested in 2013}) \times 100]$ , rounded two decimal places.
- <sup>11</sup> **Pennsylvania children tested in 2013 by age and race** – Those children reported to be residing in Pennsylvania and having been tested and confirmed elevated during 2013, by age and race. Source: The Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS), as of May 5, 2014.
- <sup>12</sup> **Pennsylvania children tested and confirmed elevated in 2013 by age and race** – Those children reported to be residing in Pennsylvania and having been tested and confirmed elevated during 2013, by age and race. Here, “confirmed elevated” reflects those children identified to have a reported confirmed elevated blood lead level during 2013. The Council for State and Territorial Epidemiologists (CSTE) defines Confirmed Elevated as follows: A child with one venous blood specimen  $\geq 10 \mu\text{g/dL}$ , or any combination of two capillary and/or

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unknown blood specimens  $\geq 10 \mu\text{g}/\text{dL}$  drawn within 12 weeks of each other. Source: The Pennsylvania National Electronic Disease Surveillance System (PA-NEDSS), as of May 5, 2014.

<sup>13</sup> **Rural and Urban Primary Care Providers** – Center for Rural PA and Department of Health, Bureau of Health Planning. Data for 2012 was the most recent available.

<sup>14</sup> **Percentage of Children in Rural and Urban Counties** – Population numbers based on 2010 Census, Summary File 1, Table QT-P2, U.S. Census Bureau.

<sup>15</sup> **CDC Reference Value** – For more information on the CDC Reference Value, please see “Recommendations of the Advisory Committee for Childhood Lead Poisoning Prevention – Low Level Lead Exposure Harms Children: A Renewed Call of Primary Prevention” at: [http://www.cdc.gov/nceh/lead/ACCLPP/blood\\_lead\\_levels.htm](http://www.cdc.gov/nceh/lead/ACCLPP/blood_lead_levels.htm).

<sup>16</sup> **Population** – Numbers based on 2010 Census, Summary File 1, Table QT-P2, U.S. Census Bureau.

<sup>17</sup> **Home ownership and occupancy** – Numbers based on 2010 American Community Survey, Tables B25002 and S2502, U.S. Census Bureau.

<sup>18</sup> **Total housing units** = Total occupied units + Total vacant units.

<sup>19</sup> **Age of housing** – Numbers based on 2010 ACS Survey, Table B25034, U.S. Census Bureau. The ACS Survey was used because the 2010 Census did not break down housing by year structure built.

<sup>20</sup> **Estimated total units built before 1978** - The estimated number of housing units built 1970 – 1977 was calculated as follows: (80%) x (total housing units built 1970 through 1979). This number was then added to the number built before 1970 to arrive at the total.

<sup>21</sup> **Estimated percentage of total housing units built pre-1978** = [(Estimated total units built pre-1978) ÷ (Total housing units)] X 100, rounded two decimal places.

<sup>22</sup> **Percentage of total housing units built pre-1950** = [(Total units built before 1950) ÷ (Total housing units)] X 100, rounded two decimal places.

<sup>23</sup> **Lows** – Those children reported to have been tested for lead during 2013 (specimen collection dates between 01/01/2013 and 12/31/2013, inclusive) with maximum blood lead levels (highest) below 10 micrograms per deciliter of blood.

<sup>24</sup> **Highs** – Those children reported to have been tested for lead during 2013 (specimen collection dates between 01/01/2013 and 12/31/2013, inclusive) with maximum blood lead levels (highest) at or above 10 micrograms per deciliter of blood.

<sup>25</sup> **Nulls** – Those children reported to have been tested for lead during 2013 (specimen collection dates between 01/01/2013 and 12/31/2013, inclusive) with maximum blood lead levels (highest) reported null, or blank. Blank quantitative test results are reported for various reasons. In some situations, the null represents an analyzed blood sample (by the laboratory) that contained a very, very low amount of lead and for which a value, or number, could not be assigned, given the low amount. These get reported with blank quantitative fields and “none detected” in the corresponding qualitative field. In other situations, these nulls represent those children whose blood samples were never analyzed at the laboratory for various reasons. For example, the tube holding the blood sample may have broken before an analysis could be performed. Also, perhaps the quantity of blood within the tube was “insufficient” for analysis. These children do need to be re-tested, since nothing is known about their true blood lead levels.

<sup>26</sup> **Total children tested** = (Total children with max BLLs that were low) + (Total children with max BLLs that were high) + (Total children with max BLLs that were null).

<sup>27</sup> **Total children tested** – Total children tested for lead in 2013 and residing in the reported County (at time of specimen collection).

<sup>28</sup> **Percent tested** = [(Total children tested) ÷ (2010 census population)] X 100, rounded to two decimal places.

<sup>29</sup> **Confirmed elevated** - Those children identified to be confirmed elevated as defined by the Council for State and Territorial Epidemiologists (CSTE). CSTE defines Confirmed Elevated as follows: A child with one venous blood specimen  $\geq 10 \mu\text{g}/\text{dL}$ , or any combination of two capillary and/or unknown blood specimens  $\geq 10 \mu\text{g}/\text{dL}$  drawn within 12 weeks of each other.

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<sup>30</sup> **First confirmed elevated blood lead level** – Children in this table were categorized by their first reported confirmed elevated blood lead level in 2013.

<sup>31</sup> **Percent confirmed elevated** = [(Total children confirmed elevated) ÷ (Total children tested)] X 100, rounded two decimal places.

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This report can be found at: [www.health.state.pa.us/lead](http://www.health.state.pa.us/lead).