



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Lead Poisoning Prevention Program

Childhood Blood Lead Surveillance in Maryland

2007 Annual Report

June, 2008



MARYLAND CHILDHOOD LEAD REGISTRY

2007 ANNUAL SURVEILLANCE REPORT

EXECUTIVE SUMMARY

The Maryland Department of the Environment's statewide Childhood Lead Registry (CLR) performs childhood blood lead surveillance for Maryland. The CLR receives the reports of all blood lead tests done on Maryland children 0-18 years of age, and the CLR provides blood lead test results to the Department of Health and Mental Hygiene including Medicaid and local health departments as needed for case management and planning.

Since 1995, the CLR has released a comprehensive annual report on statewide childhood blood lead testing. This current report presents the childhood blood lead test results for calendar year 2007 (CY 2007). All numbers are based on blood lead testing (venous or capillary) on children. The CLR does not receive any reports on lead screening based on the lead risk assessment questionnaire. With few exceptions all numbers referred to children 0-72 months of age.

CY 2007 Surveillance Highlights:

- A total of 117,931 blood lead tests from 112,346 children 0-18 years were received and processed by the CLR in 2007, of which 111,095 tests were from 105,708 children 0-72 months. The overall blood lead testing for children 0-72 months was 22.6% for 2007.
- The highest testing rates for children 0-72 months were found in Wicomico County (42.3%); followed by Caroline County (34.4%), Somerset County (33.5%), and Baltimore City (32.0%).
- The highest testing rates for children 0-35 months were found in Caroline County (59.8%), Wicomico county (59.2%), Somerset county (52.8%), and Talbot County (50.0%).
- More than 90% of addresses were geocodable at the longitude, latitude level. The county assignment, however is based on: 1) census tract as determined by geocoding, 2) child's zip code address, and 3) the original county name if it were included in the address information.
- In 2007, close to 91% of blood lead tests were reported electronically. The average reporting time, from the time sample is drawn to the time the result enters the CLR database is about 7 days. The average reporting time for elevated blood lead results (≥ 10 $\mu\text{g/dL}$) is approximately 30 hours.

- Out of 105,708 children 0-72 months tested for lead statewide in 2007, 892 (0.8%) were found to have blood lead level ≥ 10 $\mu\text{g/dL}$ (prevalent cases) of whom 654 had their very first EBL test (incident cases) in 2007.

Overview

Exposure to lead is still the most significant and widespread environmental hazard for children in Maryland. Children are at the greatest risk from birth to age six while their neurological systems are being developed. Exposure to lead can cause long-term neurological damage that may be associated with learning and behavioral problems and with decreased intelligence.

Terms and Definitions

There is no evidence of a blood lead level below which there are no health effects. The Centers for Disease Control and Prevention (CDC) concurs that the evidence shows that there is no threshold level for blood lead that can be considered “safe”. CDC’s current blood lead level of concern of 10 µg/dL is based on: 1) lack of successful clinical or public health interventions with BLLs below 10 µg/dL, 2) likelihood of misclassification errors due to uncertainty associated with laboratory testing at levels <10 µg/dL, and 3) the need to prioritize public health resources for children with BLL ≥10 µg/dL. Based on these facts, the CLR dropped the term “Lead Poisoning” as was initially defined: “a venous blood lead level ≥25 µg/dL” and later dropped the level to 20 µg/dL. Instead, to better reflect the extent of the work and to direct program activities to the “more at-risk” areas, from 2005 forward new terms ‘incidence’ and ‘prevalence’ with the following definitions were included in annual report.

EBL (Elevated Blood Lead level): A blood lead level ≥10 µg/dL, currently defined by CDC as “Level of Concern”. The highest venous, or, in the absence of venous test, the highest capillary test was the basis of determination.

Prevalence: Any child with an EBL for the calendar year is the basis of this selection. Prevalence reflects the existing load of children with EBL who may be new to the program or may have been carried-over from previous years (continuously or after some remission.)

Incidence: Any child with the very first EBL is basis of this selection. Incidence reflects the load of the children with EBL who may have never been tested for lead before or the result of all their blood lead tests were all below 10 µg/dL. Incidence is a better indicator for primary prevention. It is expected that the expansion of primary prevention activities results in less exposure and fewer new cases. The old cases, because of the extent and severity of the past exposure may

Sources of Childhood Lead Exposure

Lead paint dust from deteriorated lead paint or from renovation is the major source of exposure for children in Maryland. Out of estimated of 2,200,749 residential houses in Maryland 424,787 (18.5%) are built before 1950 (95% likely to contain lead paint) and 959,785 (41.7%) built between 1950-1979 (75% likely to have lead paint. (Source: US Census Bureau, 2006 American Community Survey http://factfinder.census.gov/home/saff/main.html?_lang=en)

Water, air, and soil, may provide low-level, “background” exposure, but rarely may cause childhood lead poisoning.

Imported products, parental occupations, hobbies, and imported traditional medicines occasionally may cause lead exposure among children.

In-utero exposure to lead may affect fetal development. This can be of more significance among certain subgroup populations who may be more at risk of environmental lead exposure.

remain internally exposed and continue to have EBL for months or even years. The procedures to locate new cases were discussed in detail in previous reports (Annual reports 2005, 2006).

Statistical Report

In calendar year 2007, a total of 105,708 children 0-72 months were tested for lead exposure statewide. Table One provides a summary of statewide statistics of blood lead testing in 2007.

Table One
Calendar Year (CY) 2007 Statistical Report¹

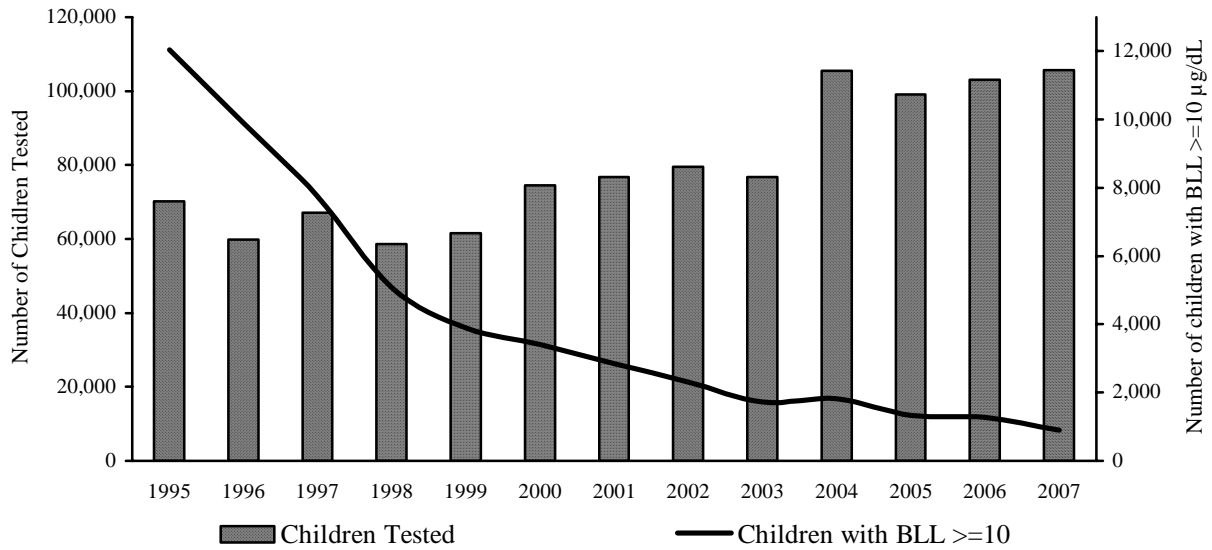
Item	Number	Percent (%)
Number of tests	117,931 ²	
Number of children	105,708	100.0
Age		
Under One	12,063	11.4
One Year	35,686	33.8
Two Years	26,217	24.8
Three Years	11,990	11.3
Four Years	11,524	10.9
Five Years	8,228	7.8
Sex		
Female	51,033	48.3
Male	53,627	50.7
Undetermined	1,048	1.0
Highest Blood Lead Level (µg/dL)		
≤4	97,848	92.5
5-9	6,968	6.6
10-14	591	0.6
15-19	166	0.2
≥20	135	0.1
Mean BLL (Geometric mean)	1.67	
Blood Specimen		
Capillary	15,567	14.7
Venous	81,328	77.0
Undetermined ³	8,813	8.3

1. For detailed analysis and breakdown of numbers refer to Supplementary Data Tables 1-5.
2. The 117,931 tests were from 112,346 children 0-18 years, of whom 105,708 were 0-72 months old. Data in this statistical table are based on children 0-72 months.
3. In supplemental data tables blood tests with sample type unknown were counted as capillary.

Findings

Childhood lead exposure further declined in 2007 (Figure One). There was 33.3% decline in both prevalence and incidence. The reduction has occurred both statewide and in areas of highest risk such as Baltimore City.

Figure One
Number of Children 0-72 Months Tested for Lead and Number Reported to Have Blood Lead Level ≥ 10 $\mu\text{g}/\text{dL}$: 1995-2007



The drop in both extent and severity of lead poisoning continued from 2006 to 2007 (Figure Two).

Figure Two
Blood Lead Distribution of Children 0-72 Months Tested for Lead in 2006 and 2007

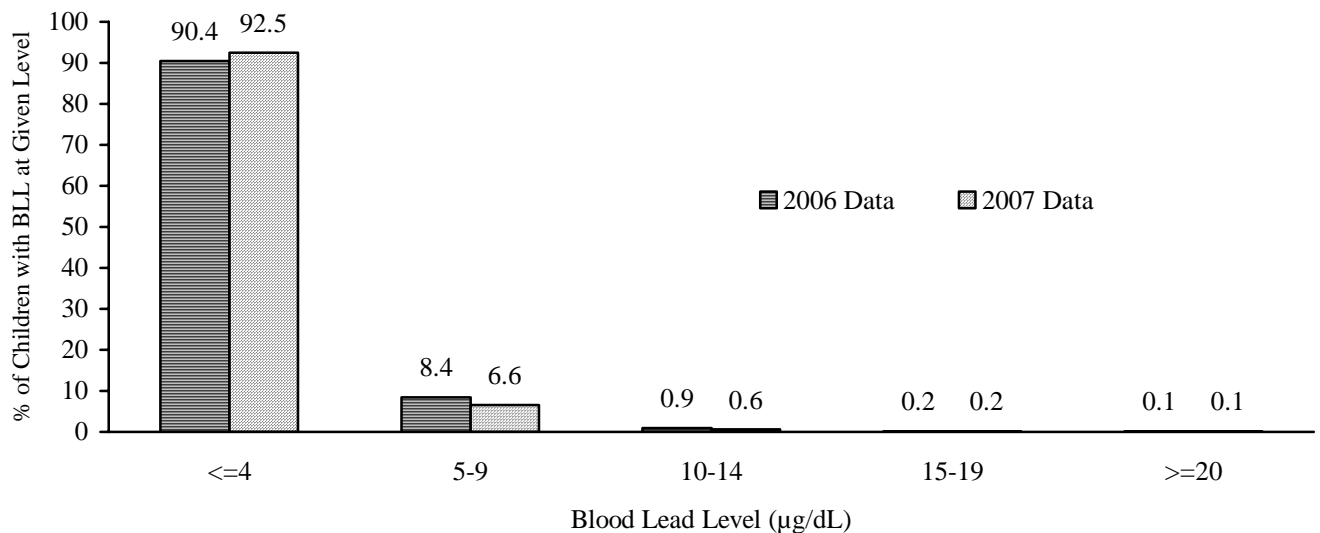


Table Two provides the breakdown of blood lead testing and the status of children with respect to lead exposure by jurisdiction in 2007.

Table Two
Blood Lead Testing of Children 0-72 Months by Jurisdiction in 2007

County	Population of Children ¹	Children Tested		Prevalent Cases ²		Incident Cases ³	
		Number	Percent	Number	Percent	Number	Percent
Allegany	4,957	1,231	24.8	12	1.0	11	0.9
Anne Arundel	43,779	6,615	15.1	19	0.3	16	0.2
Baltimore	59,794	16,255	27.2	62	0.4	52	0.3
Baltimore City	55,142	17,670	32.0	624	3.5	435	2.5
Calvert	6,810	785	11.5	1	0.1	1	0.1
Caroline	2,490	856	34.4	8	0.9	5	0.6
Carroll	13,546	1,404	10.4	3	0.2	2	0.1
Cecil	7,894	1,186	15.0	6	0.5	4	0.3
Charles	11,529	1,999	17.3	1	0.1	1	0.1
Dorchester	2,201	676	30.7	9	1.3	7	1.0
Frederick	18,686	3,465	18.5	10	0.3	10	0.3
Garrett	2,432	541	22.2	2	0.4	2	0.4
Harford	20,947	3,346	16.0	6	0.2	5	0.1
Howard	24,355	2,334	9.6	3	0.1	2	0.1
Kent	1,197	334	27.9	2	0.6	1	0.3
Montgomery	79,264	18,274	23.1	35	0.2	31	0.2
Prince George's	76,826	18,071	23.5	38	0.2	35	0.2
Queen Anne's	3,462	703	20.3	4	0.6	2	0.3
Saint Mary's	8,375	1,468	17.5	2	0.1	1	0.1
Somerset	1,577	529	33.5	2	0.4	2	0.4
Talbot	2,351	702	29.9	4	0.6	3	0.4
Washington	10,709	3,064	28.6	8	0.3	6	0.2
Wicomico	7,031	2,975	42.3	23	0.8	14	0.5
Worcester	3,035	947	31.2	7	0.7	5	0.5
County Unknown		278		1		1	
Statewide	468,390	105,708	22.6	892	0.8	654	0.6

Notes:

1. Adapted from the Census Bureau: "State Interim Population Projections by Age and Sex: 2000-2030" <http://www.census.gov/population/www/projections/projectionsagesex.html>.
2. All children with at least one blood lead test ≥ 10 $\mu\text{g}/\text{dL}$ in 2007. The selection is based on the highest venous or the highest capillary in the absence of any venous test. The same applies to footnote 3.
3. Children with the very first blood lead test ≥ 10 $\mu\text{g}/\text{dL}$ in 2007. These children were either not tested in the past or their blood lead levels were below 10 $\mu\text{g}/\text{dL}$.

Appendix A provides numbers of children by age groups of 0-35 months and 36-72 months, and Appendix B provides summary results for the past eight years at the State, Baltimore City, and County levels. For detailed breakdown of blood lead data the reader is referred to supplementary data tables: Supplements 1-5.

Statewide activities to reduce (eliminate) childhood lead poisoning

The State Elimination Plan calls for zero new cases of EBL by 2010. The plan focuses on primary prevention (removal and elimination of lead hazards) while maintaining well-established secondary prevention (identifying children who may be at risk of lead exposure) and tertiary prevention (case management of children exposed to lead) efforts in the state.

Primary Prevention: Much of the decline in blood lead levels is the result of implementation and enforcement of Maryland’s “Reduction of Lead Risk in Housing” law. The law requires each pre-1950 rental dwelling to be issued a Full Risk Reduction certificate at tenant turnover. In 2001, at least 50% of the owner's affected properties were required to be in compliance with the Full Risk Reduction Standard; 100% compliance was required in 2006. Effective October 1, 2004, the law requires rent court judges and local housing registry officials to not accept cases and applications from pre-1950 rental property owners who cannot present lead certificates that indicate that their rental properties are in compliance with the Reduction of Lead Risk in Housing law.

State laws and regulations with impact on childhood lead poisoning

- ✓ Requirements to perform lead hazard reduction at each turnover in rental housing built before 1950. [Environment Article (EA) §6-8]
- ✓ Outreach programs to parents, health care providers, and property owners, especially in at-risk areas. [EA§ 6-8, Health Article §18-106]

Although children living in pre-1950 housing units are much more likely to have EBL, the severity of the exposure in such housing declined significantly over the years (Figures Three, Four).

Figure Three
Percent of Children 0-72 Months with Blood Lead Level ≥ 10 $\mu\text{g/dL}$ and Age of the Housing

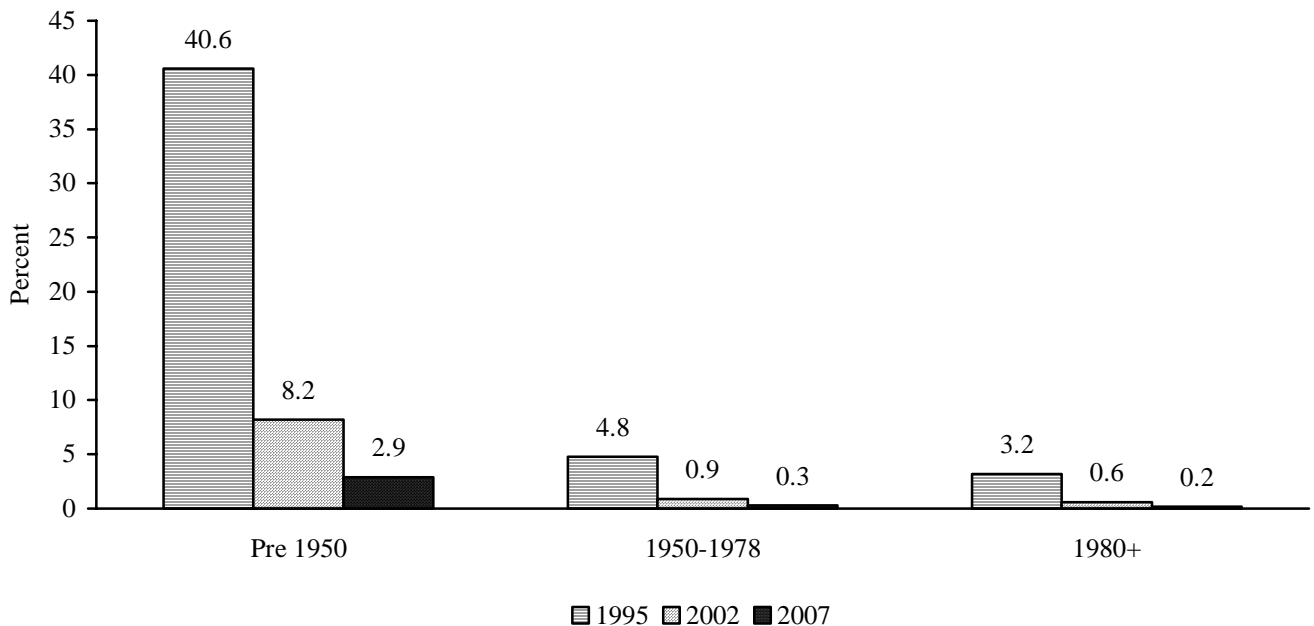
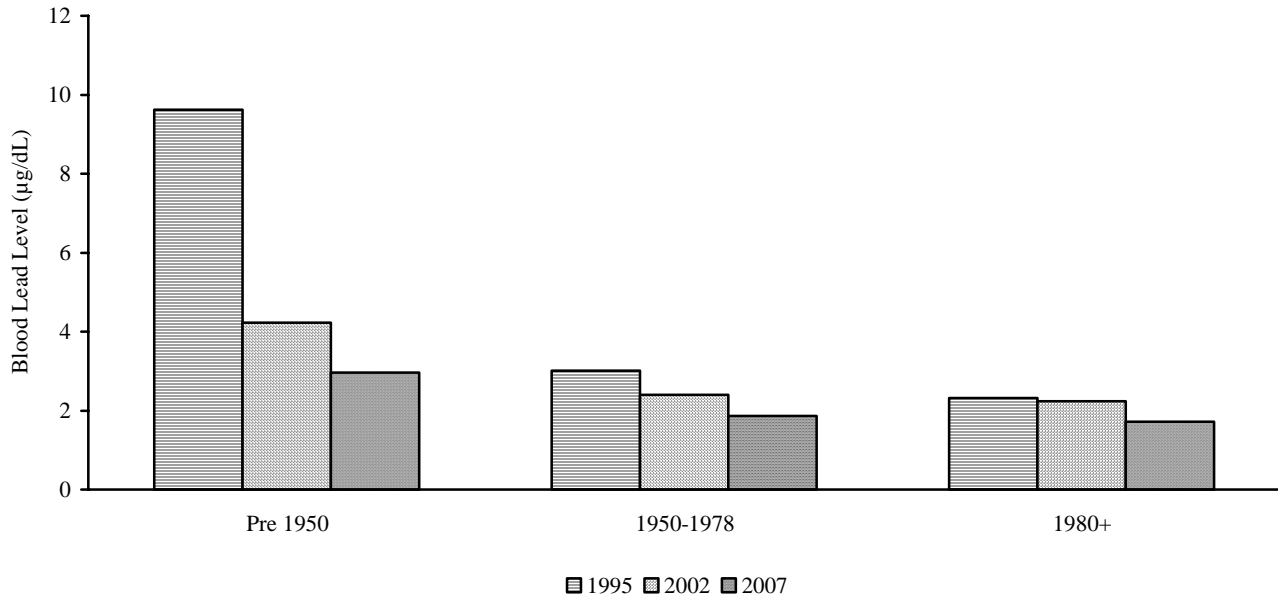


Figure Four
Mean Blood Lead Level of Children 0-72 Months and Age of the Housing



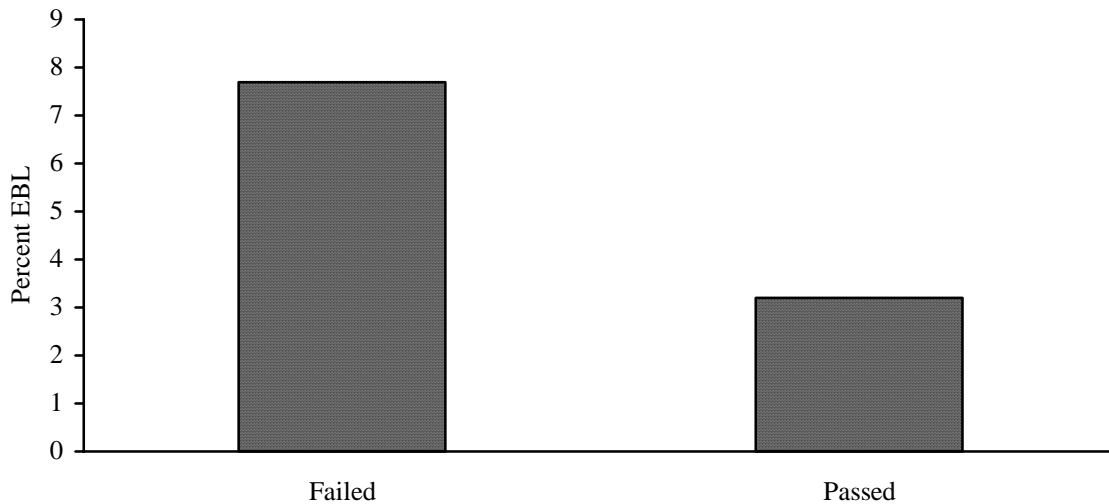
Figures Three and Four are based on matching address information in the surveillance file for these years with the Maryland Department of Assessment and Taxation (MDAT) file in which the year structure built is included. Age of the housing for more than 50% of addresses for 1995 and 2002, and more than 32% of addresses for 2007 could not be determined. This was because either the addresses could not be matched or the year structure built was missing in the MDAT file. Those addresses are not included in Figures Three and Four.

One requirement of the law calls for the owners of pre-1950 rental units to do lead hazard reduction at each turn-over of the occupancy. Since the inception of the law, records of such compliance are maintained in the Lead Program’s “Inspection/Certificate” file (Form330.dbf). Upon inspection of the property, the inspector may issue a certificate with grade “Pass” (in compliance with the law) or “Fail” (not in compliance).

To determine the impact of this requirement on blood lead level of children 0-72 months who may have been living in such units, the addresses from the 2007 lead surveillance file were matched against the addresses in “Form330.dbf” file. More than 10,000 pre-1950 addresses in the Surveillance file were matched, of which 9,319 had “Pass”ed inspection, and 575 addresses “Fail”ed. The remainder were not coded.

Figure Five shows that the compliance of pre-1950 property owners impacts children’s blood lead level. More than 7% of children living in properties whose owner did not comply with the law had BLL ≥ 10 $\mu\text{g/dL}$, while only 3% of children living in properties whose owner followed the requirements of the law had blood lead level ≥ 10 $\mu\text{g/dL}$.

Figure Five
Percent of Children 0-72 Months Living in Pre-1950 Housing with EBL and the Inspection Status of the House

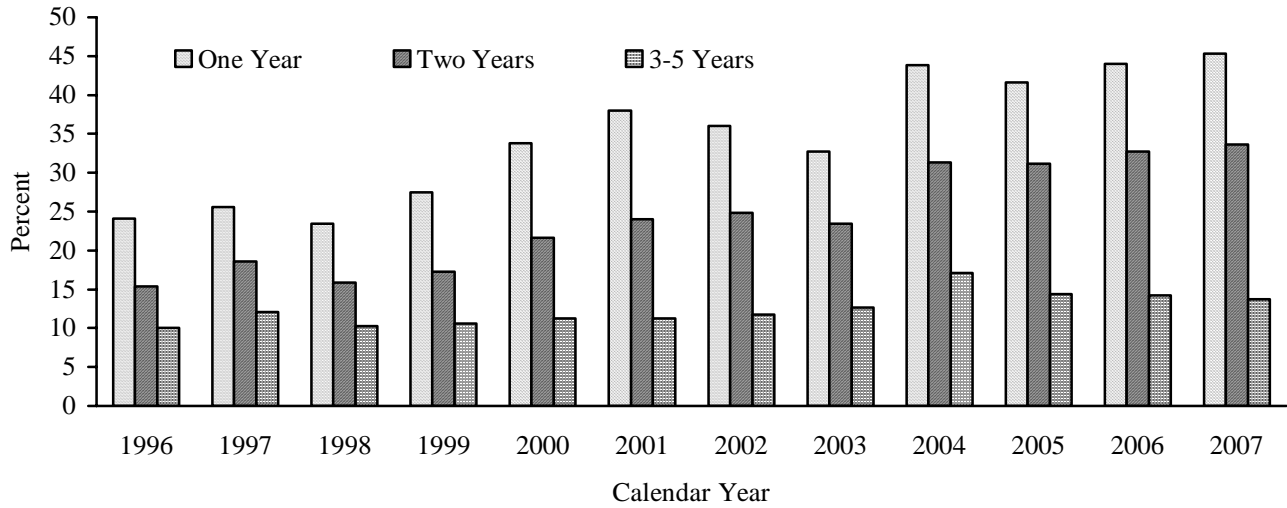


Secondary Prevention: The second element of the Elimination Plan is to identify children who may be at risk of lead exposure, so that preventive action can be implemented. Children ages one and two, and children living in areas with high proportion of pre-1950 housing units are most likely to be exposed to lead. To that end, Maryland requires that children at ages one and two years and children living in “at-risk” areas be tested. The State has a targeted testing plan that identifies “at-risk areas.” Universal blood lead testing applies to Baltimore City children (Ordinance 20, effective July 2000) and children on Medical Assistance programs. The percentage of one and two year old children tested for lead has increased substantially since 2004 (Figure Six).

Identifying Children with Lead Exposure

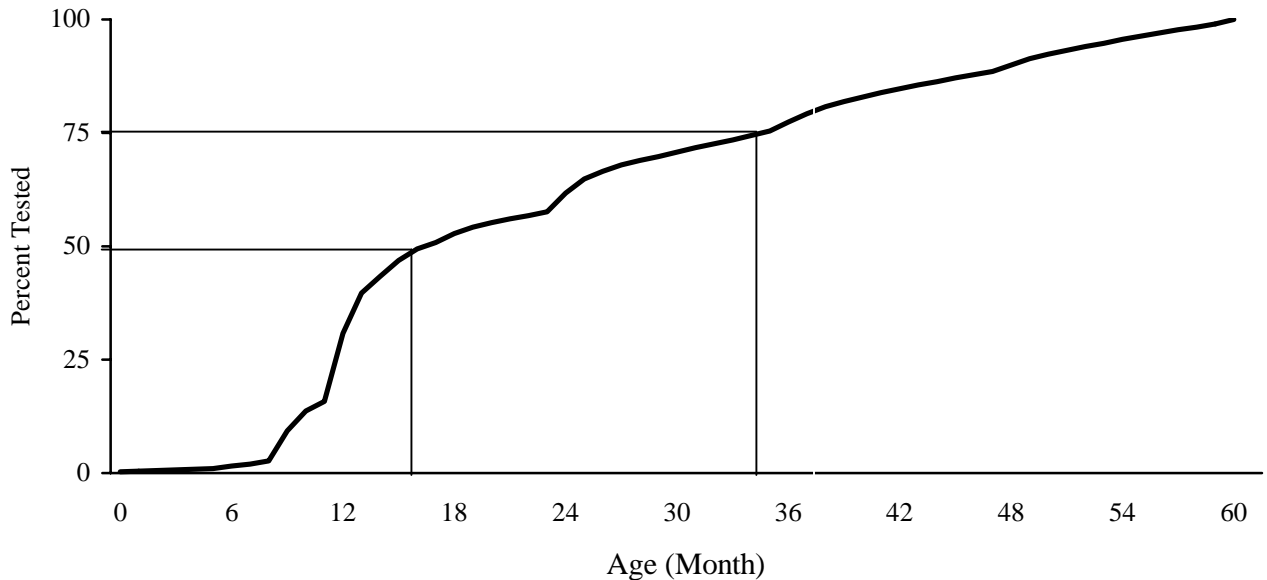
The critical issue in childhood lead poisoning is early detection. Because there are no specific clinical symptoms, a blood lead test is the most reliable technique to identify children with elevated blood lead levels. If there is any suspicion that a child is exposed to lead, a health care provider should do a blood lead test.

Figure Six
Percent of Children One and Two Years Old Tested for Lead vs. Children of Other Ages



To determine the extent of blood lead testing of children 0-72 months we looked at the 2001 birth cohort. Using the US Census Bureau population estimate for children up to one year of age in 2001 for the state of Maryland (70,145), we found that 56,410 (80.4%) had at least one blood lead test before age six. Those who were tested, mostly were tested around age one year. Close to 50% of the children received their first blood lead test before they reached 18 months of age. Almost three quarters of children were tested before 36 months of age (Figure Seven).

Figure Seven
Cumulative Blood Lead Testing of Children 0-72 Months by Age (Birth cohort 2001)



Tertiary Prevention: Maryland’s Lead Poisoning Prevention Program has well-established case management guidance and environmental investigation protocols for follow-up of children with elevated blood lead level. As of February 24, 2006, one venous or two capillary blood lead tests

≥10 µg/dL will trigger the Notice of EBL under the Reduction of Lead Risk in Housing Law. A venous blood lead test ≥10 µg/dL in Baltimore City or a venous blood lead test ≥15 µg/dL in Maryland counties initiates environmental investigation. Tables Three and Four outline the State’s protocol for diagnostic and follow up blood lead testing.

Table Three
Blood Lead Diagnostic and Follow-Up: Confirmation of a Capillary Blood Lead Test

BLL (µg/dL)	Confirm with venous blood lead test within
≤9	Routine blood lead test according to protocol
10 –19	3 months
20 – 44	1 week to 1 month*
45 – 59	48 hours
60-69	24 hours
≥70	Immediately as an emergency lab test

* The higher the BLL, the more urgent the need for confirmatory testing.

Table Four
Blood Lead Diagnostic and Follow-Up: Follow-Up for Venous Blood Lead Testing¹

BLL (µg/dL) Venous	Early follow-up(First 2-4 tests after identification)	Late follow-up (After BLL begins to decline)
≤9	Routine blood lead test according to protocol	
10 - 14	3 months ²	6 – 9 months
15 - 19	1 - 3 months ²	3 – 6 months
20 - 24	1 - 3 months ²	1 – 3 months
25 - 44	2 weeks – 1 month	1 month
≥45	As soon as possible	Chelation with subsequent follow-up

1. Seasonal variation of BLLs exists and may be more apparent in colder climate areas. Greater exposure in the summer months may necessitate more frequent follow-up.
2. Some case managers or health care providers may choose to repeat blood lead tests on all new patients within a month to ensure that their BLL level is not rising more quickly than anticipated.

Tables adapted from: *Centers for Disease Control and Prevention. Managing Elevated Blood Lead Levels Among Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention. Atlanta: CDC, 2002.*

Data Quality

The CLR is maintained in the “Systematic Tracking of Elevated Lead Levels and Remediation” (STELLAR) surveillance system, obtained from CDC Lead Poisoning Prevention Program. CLR staff make all efforts to further improve data quality with respect to completeness, timeliness, and accuracy. Staff keep track of laboratory reporting to make sure laboratories are reporting all blood lead tests no later than biweekly. The law requires blood lead results $\geq 20 \mu\text{g/dL}$ to be reported (faxed) within 24 hours after result is known. However, upon CLR request, laboratories agreed to report (fax) the result of all blood lead test $\geq 10 \mu\text{g/dL}$ within 24 hours. For all blood lead tests $\geq 10 \mu\text{g/dL}$, staff check the completeness of data in particular with respect to child’s and guardian’s name, address, and telephone number.

In 2007, close to 91% of blood lead tests were reported to the registry electronically, a 0.6 percentage point drop compared to 2006 (91.6%). This is partially because some clinics began using hand-held lead analyzer in their own clinic and sending the result of tests to the registry in hard copy. The report of these tests in the past would have come to the registry electronically by major labs. The average reporting time, from the time sample is drawn to the time the result enters the CLR database is approximately 7 days. The average time for elevated blood lead results ($\geq 10 \mu\text{g/dL}$) is approximately 30 hours. Table Five provides the summary reports for completeness of data as required by law.

**Table Five
Completeness of Data for 2007**

Item	% Complete
Child’s name	100
Date of Birth	99.8
Sex/Gender	99.0
Race	47.9
Guardian’s name	46.2
Sample type	91.4
Blood lead level	100.0
Address (geocoded)	88.7

Blood Lead Laboratory Reporting Requirement

The amended law and regulations* of 2001 and 2002 require that:

1-The following child's demographic data should be included in each blood lead test reported:

- Date of Birth
- Sex
- Race
- Address
- Test date
- Sample type
- Blood lead level

2-Blood lead results ≥ 20 $\mu\text{g/dL}$ to be reported (fax) within 24 hours after result is known. All other results to be reported every two weeks.

3-Reporting format should comply with the format designed and provided by the Registry.

4-Data should be provided electronically.

* EA §6-303, Blood lead test reporting (COMAR 26.02.01, Blood lead test reporting)

Appendix A
Blood Lead Testing of Children 0-72 Month by Major Age Group and Jurisdiction in 2007

Age Group	Population of Children	Children Tested		Prevalent Cases		Incident Cases	
		Number	Percent	Number	Percent	Number	Percent
Allegany County							
0-35 Months	2,545	1,007	39.6	11	1.1	10	1.0
36-72 Months	2,412	224	9.3	1	0.4	1	0.4
Total	4,957	1,231	24.8	12	1.0	11	0.9
Anne Arundel County							
0-35 Months	22,316	4,948	22.2	16	0.3	14	0.3
36-72 Months	21,462	1,667	7.8	3	0.2	2	0.1
Total	43,779	6,615	15.1	19	0.3	16	0.2
Baltimore County							
0-35 Months	30,235	11,975	39.6	39	0.3	34	0.3
36-72 Months	29,559	4,280	14.5	23	0.5	18	0.4
Total	59,794	16,255	27.2	62	0.4	52	0.3
Baltimore City							
0-35 Months	28,495	12,331	43.3	404	3.3	330	2.7
36-72 Months	26,647	5,339	20.0	220	4.1	105	2.0
Total	55,142	17,670	32.0	624	3.5	435	2.5
Calvert County							
0-35 Months	3,321	621	18.7	1	0.2	1	0.2
36-72 Months	3,489	164	4.7	0	0.0	0	0.0
Total	6,810	785	11.5	1	0.1	1	0.1
Caroline County							
0-35 Months	1,167	698	59.8	6	0.9	3	0.4
36-72 Months	1,323	158	11.9	2	1.3	2	1.3
Total	2,490	856	34.4	8	0.9	5	0.6
Carroll County							
0-35 Months	6,592	995	15.1	1	0.1	1	0.1
36-72 Months	6,954	409	5.9	2	0.5	1	0.2
Total	13,546	1,404	10.4	3	0.2	2	0.1
Cecil County							
0-35 Months	3,949	791	20.0	3	0.4	3	0.4
36-72 Months	3,945	395	10.0	3	0.8	1	0.3
Total	7,894	1,186	15.0	6	0.5	4	0.3

Appendix A (continued)
Blood Lead Testing of Children 0-72 Month by Major Age Group and Jurisdiction in 2007

Age Group	Population of Children	Children Tested		Prevalent Cases		Incident Cases	
		Number	Percent	Number	Percent	Number	Percent
Charles County							
0-35 Months	5,722	1,393	24.3	1	0.1	1	0.1
36-72 Months	5,806	606	10.4	0	0.0	0	0.0
Total	11,529	1,999	17.3	1	0.1	1	0.1
Dorchester County							
0-35 Months	1,100	512	46.5	7	1.4	5	1.0
36-72 Months	1,101	164	14.9	2	1.2	2	1.2
Total	2,201	676	30.7	9	1.3	7	1.0
Frederick County							
0-35 Months	9,290	2,343	25.2	9	0.4	9	0.4
36-72 Months	9,396	1,122	11.9	1	0.1	1	0.1
Total	18,686	3,465	18.5	10	0.3	10	0.3
Garrett County							
0-35 Months	1,214	382	31.5	2	0.5	2	0.5
36-72 Months	1,218	159	13.1	0	0.0	0	0.0
Total	2,432	541	22.2	2	0.4	2	0.4
Harford County							
0-35 Months	10,396	2,308	22.2	2	0.1	2	0.1
36-72 Months	10,551	1,038	9.8	4	0.4	3	0.3
Total	20,947	3,346	16.0	6	0.2	5	0.1
Howard County							
0-35 Months	11,936	1,587	13.3	2	0.1	2	0.1
36-72 Months	12,419	747	6.0	1	0.1	0	0.0
Total	24,355	2,334	9.6	3	0.1	2	0.1
Kent County							
0-35 Months	622	251	40.4	2	0.8	1	0.4
36-72 Months	576	83	14.4	0	0.0	0	0.0
Total	1,197	334	27.9	2	0.6	1	0.3
Montgomery County							
0-35 Months	40,447	12,606	31.2	24	0.2	24	0.2
36-72 Months	38,818	5,668	14.6	11	0.2	7	0.1
Total	79,264	18,274	23.1	35	0.2	31	0.2

Appendix A (continued)
Blood Lead Testing of Children 0-72 Month by Major Age Group and Jurisdiction in 2007

Age Group	Population of Children	Children Tested Number	Children Tested Percent	Prevalent Cases Number	Prevalent Cases Percent	Incident Cases Number	Incident Cases Percent
Prince George's County							
0-35 Months	38,714	11,521	29.8	18	0.2	17	0.1
36-72 Months	38,112	6,550	17.2	20	0.3	18	0.3
Total	76,826	18,071	23.5	38	0.2	35	0.2
Queen Anne's County							
0-35 Months	1,728	512	29.6	3	0.6	2	0.4
36-72 Months	1,734	191	11.0	1	0.5	0	0.0
Total	3,462	703	20.3	4	0.6	2	0.3
Saint Mary's County							
0-35 Months	4,175	1,220	29.2	1	0.1	1	0.1
36-72 Months	4,201	248	5.9	1	0.4	0	0.0
Total	8,375	1,468	17.5	2	0.1	1	0.1
Somerset County							
0-35 Months	789	417	52.8	1	0.2	1	0.2
36-72 Months	788	112	14.2	1	0.9	1	0.9
Total	1,577	529	33.5	2	0.4	2	0.4
Talbot							
0-35 Months	1,126	563	50.0	1	0.2	1	0.2
36-72 Months	1,225	139	11.3	3	2.2	2	1.4
Total	2,351	702	29.9	4	0.6	3	0.4
Washington County							
0-35 Months	5,457	1,992	36.5	6	0.3	6	0.3
36-72 Months	5,252	1,072	20.4	2	0.2	0	0.0
Total	10,709	3,064	28.6	8	0.3	6	0.2
Wicomico County							
0-35 Months	3,590	2,126	59.2	16	0.8	12	0.6
36-72 Months	3,441	849	24.7	7	0.8	2	0.2
Total	7,031	2,975	42.3	23	0.8	14	0.5
Worcester County							
0-35 Months	1,586	675	42.6	5	0.7	5	0.7
36-72 Months	1,449	272	18.8	2	0.7	0	0.0
Total	3,035	947	31.2	7	0.7	5	0.5

Appendix A (continued)
Blood Lead Testing of Children 0-72 Month by Major Age Group and Jurisdiction in 2007

Age Group	Population of Children	Children Tested Number	Children Tested Percent	Prevalent Cases Number	Prevalent Cases Percent	Incident Cases Number	Incident Cases Percent
		County Unknown					
0-35 Months		192		1		1	
36-72 Months		86		0		0	
Total		278		1		1	
		Statewide					
0-35 Months	236,512	73,966	31.3	582	0.8	488	0.7
36-72 Months	231,878	31,742	13.7	310	1.0	166	0.5
Total	468,390	105,708	22.6	892	0.8	654	0.6

Appendix B
Blood Lead Testing of Children 0-72 Months: 2000-2007

Calendar Year	Population	Blood Lead Tests		BLL \geq 10 μ g/dL		Lead Poisoning –		
		Number	Percent	Number	Percent	Number	Percent	
2000								
	Baltimore City	50,380	18,033	36.8	2,198	12.2	266	1.5
	Counties	377,559	51,210	13.6	847	1.7	85	0.2
	Unknown		5,273		357		2	
	Total	427,939	74,516	17.4	3,402	4.6	353	0.5
2001								
	Baltimore City	53,149	21,231	40.0	2,027	9.5	230	1.1
	Counties	387,289	55,470	14.3	814	1.5	58	0.1
	Unknown		41		0		0	
	Total	431,438	76,742	17.8	2,841	3.7	288	0.4
2002								
	Baltimore City	52,744	16,595	31.5	1,558	9.4	183	1.1
	Counties	384,073	62,822	16.4	737	1.2	77	0.1
	Unknown		90		2		0	
	Total	436,817	79,507	18.2	2,297	2.9	260	0.3
2003								
	Baltimore City	51,892	18,242	35.2	1,166	6.4	160	0.9
	Counties	386,076	58,470	15.1	552	0.9	77	0.1
	Unknown		9		1		0	
	Total	437,968	76,721	17.5	1,719	2.2	237	0.3
2004								
	Baltimore City	52,796	18,970	35.9	1183	6.2	147	0.8
	Counties	395,310	83,002	21.0	573	0.7	83	0.1
	Unknown		3,577		55			
	Total	448,106	105,549	23.6	1,811	1.7	230	0.2
2005								
					<u>Prevalent cases</u>		<u>Incident cases</u>	
	Baltimore City	53,626	17,943	33.5	854	4.8	534	3.0
	Counties	401,888	80,848	20.1	463	0.6	382	0.5
	Unknown		357		14		0	
	Total	455,514	99,148	21.8	1,331	1.3	916	0.9
2006								
	Baltimore City	54,547	18,363	33.7	843	4.6	573	3.1
	Counties	408,784	84,611	20.7	431	0.5	363	0.4
	Unknown		199		21		20	
	Total	463,331	102,974	22.2	1,274	1.2	936	0.9
2007								
	Baltimore City	55,142	17,670	32.0	624	3.5	435	2.5
	Counties	413,248	87,760	21.2	267	0.3	218	0.2
	Unknown		278		1		1	
	Total	468,390	105,708	22.6	892	0.8	654	0.6