



MARYLAND DEPARTMENT OF THE ENVIRONMENT

Lead Poisoning Prevention Program

Childhood Blood Lead Surveillance in Maryland

2004 Annual Report

Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence

Supplementary Data Tables: Supplement #3



July 2005

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Allegany County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	795	37	4.7	0	0.0	0	0.0
One Year	805	516	64.1	7	1.4	0	0.0
Two Years	843	472	56.0	13	2.8	3	0.6
Three Years	814	107	13.1	3	2.8	0	0.0
Four Years	743	107	14.4	0	0.0	0	0.0
Five Years	747	90	12.0	1	1.1	0	0.0
Total	4,747	1,329	28.0	24	1.8	3	0.2
6-17 Years	12,261	70	0.6	2	2.9	0	0.0

Anne Arundel County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	7,117	628	8.8	1	0.2	0	0.0
One Year	7,239	2,654	36.7	7	0.3	0	0.0
Two Years	7,062	1,652	23.4	8	0.5	3	0.2
Three Years	7,082	706	10.0	6	0.8	2	0.3
Four Years	6,700	636	9.5	3	0.5	1	0.2
Five Years	6,695	530	7.9	2	0.4	0	0.0
Total	41,895	6,806	16.2	27	0.4	6	0.1
6-17 Years	90,622	668	0.7	1	0.1	0	0.0

Baltimore County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	9,669	1,551	16.0	6	0.4	1	0.1
One Year	9,703	4,774	49.2	38	0.8	2	0.0
Two Years	9,647	3,472	36.0	31	0.9	3	0.1
Three Years	9,677	1,857	19.2	17	0.9	1	0.1
Four Years	9,429	1,927	20.4	10	0.5	1	0.1
Five Years	9,080	1,366	15.0	6	0.4	2	0.1
Total	57,205	14,947	26.1	108	0.7	10	0.1
6-17 Years	135,001	2,524	1.9	16	0.6	4	0.2

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Baltimore City

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	9,465	1,587	16.8	35	2.2	4	0.3
One Year	9,087	5,858	64.5	342	5.8	46	0.8
Two Years	8,797	4,745	53.9	337	7.1	39	0.8
Three Years	8,837	2,592	29.3	220	8.5	30	1.2
Four Years	8,200	2,478	30.2	162	6.5	22	0.9
Five Years	8,410	1,710	20.3	87	5.1	6	0.4
Total	52,796	18,970	35.9	1,183	6.2	147	0.8
6-17 Years	122,850	4,965	4.0	151	3.0	15	0.3

Calvert County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	1,042	98	9.4	0	0.0	0	0.0
One Year	1,010	384	38.0	0	0.0	0	0.0
Two Years	1,136	188	16.5	0	0.0	0	0.0
Three Years	1,099	68	6.2	0	0.0	0	0.0
Four Years	1,108	46	4.2	0	0.0	0	0.0
Five Years	1,109	54	4.9	0	0.0	0	0.0
Total	6,504	838	12.9	0	0.0	0	0.0
6-17 Years	16,969	87	0.5	0	0.0	0	0.0

Caroline County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	374	13	3.5	0	0.0	0	0.0
One Year	358	328	91.6	5	1.5	0	0.0
Two Years	389	236	60.7	7	3.0	0	0.0
Three Years	455	88	19.3	3	3.4	0	0.0
Four Years	385	84	21.8	2	2.4	1	1.2
Five Years	418	45	10.8	0	0.0	0	0.0
Total	2,379	794	33.4	17	2.1	1	0.1
6-17 Years	6,127	50	0.8	2	4.0	0	0.0

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Carroll County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	2,029	170	8.4	0	0.0	0	0.0
One Year	2,092	493	23.6	6	1.2	1	0.2
Two Years	2,207	225	10.2	3	1.3	0	0.0
Three Years	2,226	143	6.4	2	1.4	0	0.0
Four Years	2,190	154	7.0	1	0.6	0	0.0
Five Years	2,194	138	6.3	1	0.7	0	0.0
Total	12,938	1,323	10.2	13	1.0	1	0.1
6-17 Years	31,820	133	0.4	1	0.8	0	0.0

Cecil County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	1,262	67	5.3	1	1.5	0	0.0
One Year	1,248	469	37.6	1	0.2	0	0.0
Two Years	1,281	146	11.4	3	2.1	0	0.0
Three Years	1,262	134	10.6	0	0.0	0	0.0
Four Years	1,280	143	11.2	1	0.7	0	0.0
Five Years	1,215	114	9.4	0	0.0	0	0.0
Total	7,548	1,073	14.2	6	0.6	0	0.0
6-17 Years	17,817	116	0.7	1	0.9	1	0.9

Charles County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	1,744	246	14.1	2	0.8	1	0.4
One Year	1,843	612	33.2	2	0.3	0	0.0
Two Years	1,907	516	27.1	3	0.6	0	0.0
Three Years	1,856	243	13.1	1	0.4	0	0.0
Four Years	1,800	255	14.2	1	0.4	0	0.0
Five Years	1,869	168	9.0	0	0.0	0	0.0
Total	11,019	2,040	18.5	9	0.4	1	0.0
6-17 Years	26,071	259	1.0	2	0.8	0	0.0

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Dorchester County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	359	15	4.2	0	0.0	0	0.0
One Year	329	227	69.0	2	0.9	0	0.0
Two Years	369	143	38.8	6	4.2	1	0.7
Three Years	362	98	27.1	7	7.1	0	0.0
Four Years	337	106	31.5	2	1.9	0	0.0
Five Years	350	40	11.4	0	0.0	0	0.0
Total	2,106	629	29.9	17	2.7	1	0.2
6-17 Years	5,535	76	1.4	2	2.6	0	0.0

Frederick County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	2,873	222	7.7	2	0.9	0	0.0
One Year	3,014	1,120	37.2	7	0.6	0	0.0
Two Years	3,030	487	16.1	6	1.2	1	0.2
Three Years	3,068	371	12.1	2	0.5	1	0.3
Four Years	2,960	351	11.9	3	0.9	0	0.0
Five Years	2,920	245	8.4	2	0.8	0	0.0
Total	17,865	2,796	15.7	22	0.8	2	0.1
6-17 Years	39,736	222	0.6	5	2.3	3	1.4

Garrett County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	391	36	9.2	1	2.8	0	0.0
One Year	383	169	44.1	2	1.2	1	0.6
Two Years	391	139	35.5	2	1.4	1	0.7
Three Years	373	86	23.1	1	1.2	0	0.0
Four Years	386	87	22.5	0	0.0	0	0.0
Five Years	399	46	11.5	1	2.2	1	2.2
Total	2,323	563	24.2	7	1.2	3	0.5
6-17 Years	5,747	25	0.4	0	0.0	0	0.0

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Harford County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	3,237	348	10.8	1	0.3	0	0.0
One Year	3,395	906	26.7	8	0.9	1	0.1
Two Years	3,345	693	20.7	11	1.6	2	0.3
Three Years	3,537	413	11.7	2	0.5	0	0.0
Four Years	3,263	468	14.3	0	0.0	0	0.0
Five Years	3,255	342	10.5	2	0.6	0	0.0
Total	20,032	3,170	15.8	24	0.8	3	0.1
6-17 Years	44,951	341	0.8	3	0.9	0	0.0

Howard County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	3,767	276	7.3	0	0.0	0	0.0
One Year	3,768	753	20.0	7	0.9	0	0.0
Two Years	3,924	507	12.9	3	0.6	0	0.0
Three Years	4,066	310	7.6	2	0.6	1	0.3
Four Years	3,876	283	7.3	1	0.4	0	0.0
Five Years	3,877	209	5.4	0	0.0	0	0.0
Total	23,278	2,338	10.0	13	0.6	1	0.0
6-17 Years	50,459	565	1.1	2	0.4	0	0.0

Kent County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	211	20	9.5	0	0.0	0	0.0
One Year	195	96	49.2	6	6.3	4	4.2
Two Years	190	54	28.4	0	0.0	0	0.0
Three Years	176	19	10.8	0	0.0	0	0.0
Four Years	173	13	7.5	0	0.0	0	0.0
Five Years	199	6	3.0	0	0.0	0	0.0
Total	1,144	208	18.2	6	2.9	4	1.9
6-17 Years	3,239	7	0.2	1	14.3	1	14.3

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Montgomery County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	13,155	2,936	22.3	13	0.4	2	0.1
One Year	12,822	3,949	30.8	18	0.5	3	0.1
Two Years	12,845	3,032	23.6	13	0.4	3	0.1
Three Years	12,799	2,052	16.0	10	0.5	1	0.0
Four Years	12,389	2,532	20.4	15	0.6	0	0.0
Five Years	11,857	1,433	12.1	12	0.8	3	0.2
Total	75,867	15,934	21.0	81	0.5	12	0.1
6-17 Years	160,092	2,611	1.6	11	0.4	1	0.0

Prince George's County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	12,227	1,841	15.1	6	0.3	0	0.0
One Year	12,432	5,547	44.6	26	0.5	6	0.1
Two Years	12,500	4,162	33.3	22	0.5	7	0.2
Three Years	12,587	2,705	21.5	17	0.6	2	0.1
Four Years	11,890	3,243	27.3	10	0.3	0	0.0
Five Years	11,862	2,287	19.3	6	0.3	1	0.0
Total	73,498	19,785	26.9	87	0.4	16	0.1
6-17 Years	158,241	4,277	2.7	20	0.5	3	0.1

Queen Anne's County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	573	36	6.3	2	5.6	0	0.0
One Year	554	160	28.9	1	0.6	0	0.0
Two Years	532	137	25.8	0	0.0	0	0.0
Three Years	589	57	9.7	1	1.8	0	0.0
Four Years	510	27	5.3	0	0.0	0	0.0
Five Years	554	36	6.5	0	0.0	0	0.0
Total	3,312	453	13.7	4	0.9	0	0.0
6-17 Years	7,673	45	0.6	0	0.0	0	0.0

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Saint Mary's County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	1,271	178	14.0	0	0.0	0	0.0
One Year	1,335	551	41.3	1	0.2	0	0.0
Two Years	1,402	359	25.6	1	0.3	0	0.0
Three Years	1,346	142	10.5	0	0.0	0	0.0
Four Years	1,282	99	7.7	0	0.0	0	0.0
Five Years	1,370	61	4.5	0	0.0	0	0.0
Total	8,006	1,390	17.4	2	0.1	0	0.0
6-17 Years	17,882	65	0.4	0	0.0	0	0.0

Somerset County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	274	37	13.5	0	0.0	0	0.0
One Year	229	171	74.7	3	1.8	2	1.2
Two Years	255	132	51.8	2	1.5	0	0.0
Three Years	250	56	22.4	3	5.4	1	1.8
Four Years	265	58	21.9	1	1.7	0	0.0
Five Years	235	23	9.8	1	4.3	0	0.0
Total	1,508	477	31.6	10	2.1	3	0.6
6-17 Years	3,741	56	1.5	0	0.0	0	0.0

Talbot County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	366	7	1.9	0	0.0	0	0.0
One Year	327	217	66.4	2	0.9	0	0.0
Two Years	387	147	38.0	2	1.4	0	0.0
Three Years	401	44	11.0	0	0.0	0	0.0
Four Years	380	36	9.5	2	5.6	0	0.0
Five Years	383	37	9.7	0	0.0	0	0.0
Total	2,244	488	21.7	6	1.2	0	0.0
6-17 Years	5,589	35	0.6	0	0.0	0	0.0

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

Washington County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	1,788	91	5.1	3	3.3	0	0.0
One Year	1,690	988	58.5	10	1.0	5	0.5
Two Years	1,760	620	35.2	10	1.6	1	0.2
Three Years	1,767	380	21.5	5	1.3	1	0.3
Four Years	1,624	494	30.4	11	2.2	3	0.6
Five Years	1,623	456	28.1	0	0.0	0	0.0
Total	10,252	3,029	29.5	39	1.3	10	0.3
6-17 Years	22,914	223	1.0	6	2.7	2	0.9

Wicomico County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	1,206	142	11.8	0	0.0	0	0.0
One Year	1,103	653	59.2	10	1.5	1	0.2
Two Years	1,138	511	44.9	12	2.3	0	0.0
Three Years	1,217	230	18.9	9	3.9	2	0.9
Four Years	1,000	223	22.3	5	2.2	1	0.4
Five Years	1,072	158	14.7	4	2.5	0	0.0
Total	6,736	1,917	28.5	40	2.1	4	0.2
6-17 Years	16,237	352	2.2	7	2.0	1	0.3

Worcester County

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	514	43	8.4	0	0.0	0	0.0
One Year	486	237	48.8	2	0.8	0	0.0
Two Years	522	159	30.5	2	1.3	0	0.0
Three Years	463	93	20.1	5	5.4	1	1.1
Four Years	435	93	21.4	2	2.2	1	1.1
Five Years	484	50	10.3	0	0.0	0	0.0
Total	2,904	675	23.2	11	1.6	2	0.3
6-17 Years	7,319	151	2.1	0	0.0	0	0.0

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Lead Poisoning Prevention Program: Childhood Lead Registry
Number and percentage of children with elevated blood lead (EBL) and lead poisoning
by age and county of residence (2004 Childhood Lead Registry Data)

County Unknown

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year		356		5		0	
One Year		1,179		14		0	
Two Years		798		14		0	
Three Years		456		15		0	
Four Years		466		5		0	
Five Years		322		2		0	
Total		3,577		55		0	
6-17 Years		696		4		0	

Statewide

Age Group	Population of Children	Children Tested		Children with Elevated Blood Lead		Children with Lead Poisoning	
		Number	Percent	Number	Percent	Number	Percent
Under One Year	75,709	10,981	14.5	78	0.7	8	0.1
One Year	75,447	33,011	43.8	527	1.6	72	0.2
Two Years	75,859	23,732	31.3	511	2.2	64	0.3
Three Years	76,309	13,450	17.6	331	2.5	43	0.3
Four Years	72,605	14,409	19.8	237	1.6	30	0.2
Five Years	72,177	9,966	13.8	127	1.3	13	0.1
Total	448,106	105,549	23.6	1,811	1.7	230	0.2
6-17 Years	1,008,893	18,619	1.8	237	1.3	31	0.2

Terms and definitions

1. County assignment in the order of priority is based on a) child's census tract, and b) child's zip code address.
2. Population of children has been adapted from US Census Bureau age-sex population projection at the state level for 2004.
3. Elevated blood lead level is defined as any blood lead level ≥ 10 $\mu\text{g/dL}$.
4. Lead Poisoning is defined as a venous blood lead level ≥ 20 $\mu\text{g/dL}$.
5. Blood lead tests with sample type unknown were counted as capillary.
6. Blood lead report with wrong or missing date of birth or date of specimen were assumed to be from children under six (6) years of age, and were counted under "Age Unknown".