Lead-Safe Virginia Program

Childhood Lead Poisoning Prevention Program 2008 Surveillance Summary Report



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For more information and statistics, please visit our Web site at www.vahealth.org/leadsafe Comments on this report should be directed to the Lead-Safe Virginia Program Director Phone (804) 864-7694

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Background

Lead poisoning is usually an asymptomatic disease; therefore blood lead testing needs to be performed based on risk and not just symptoms. Lead exposure can damage children's nervous, hematopoietic, and renal systems. It is especially harmful to the developing nervous systems of fetuses. There is no safe level for lead exposure.

Children under the age of three years (36 months) are at risk due to this age group's frequent hand-to-mouth activity and their developing neurological system. The main source of lead exposure for children in Virginia is house dust contaminated by leaded paint, and soil contaminated by decades of industrial and motor vehicle emissions (leaded gasoline). Although lead paint was banned from residential use in 1978, lead remains a hazard in homes built before the ban, especially pre-1950 housing. Renovation of these older homes can create additional lead hazards for families and workers. The pre-1978 homes of child care providers or daycare centers are also potential areas of exposure.

The primary phase-out of leaded gasoline was completed in 1986; however lead from this source still remains as a hazard because lead is not biodegradable. There are also other pathways to lead exposure from sources such as imported jewelry and toys, home health remedies, imported herbs and spices, imported vinyl mini blinds, and other vinyl products. Many of the imported vinyl products use lead as a stabilizer, and as the product deteriorates the lead becomes available.

Many hobbies or occupations can be considered hazardous activities regarding lead exposure; furniture refinishing and making stained glass are examples. Other activities that may be associated with lead exposure include: using indoor firing ranges; performing renovation, remodeling, and painting; working with lead batteries; performing auto paint refinishing; and making pottery. "Take-home" exposures may result when workers wear their work clothes home and/or wash them with the family laundry. Another take-home exposure may occur when scrap or waste material is brought home from work.

Lead dust in the home is usually a chronic exposure and therefore has more potential to cause permanent damage to the child. An occasional or acute exposure to a toy or similar object where the lead is not readily available to the child will most likely not cause any health problems.

The *Code of Virginia*, sections 32.1-46.1 requires all children determined to be at risk to be tested for elevated blood lead levels at the age of one year (12 months), again at the age of two years (24 months), and between the ages 36 - 72 months if never tested previously or are exposed to a new risk factor. All Medicaid enrolled children must be tested at age one year (12 months) and again at 2 years (24 months) regardless of any risk factors. This periodic testing is both a federal and state requirement. All laboratories are required to report blood lead results electronically within ten days. Lead poisoning is a reportable disease and completion of the Epi-1 form is required.

Mission

The mission of the Lead Safe Virginia Childhood Lead Poisoning Prevention Program is to eliminate lead as a health hazard for children less than six years of age by the year 2010.

Program Activities

The Lead-Safe Virginia Program is funded by the Centers for Disease Control and Prevention (CDC) and the Environmental Protection Agency (EPA).

The objectives of the Lead-Safe Virginia Program include 1) assure all at-risk children receive lead testing 2) coordinate care and referrals for medical and environmental intervention for all children under six years of age with an elevated blood lead level 3) educate the public and health care providers regarding childhood lead poisoning 4) educate realtors, landlords, renovators, painters, homeowners, and others regarding lead-safe work practices and EPA regulations 5) maintain a statewide childhood blood lead surveillance system 6) implement primary prevention measures to reduce children's exposure to lead hazards through activities and collaboration 7) coordinate the implementation and evaluation of the statewide lead elimination plan, *A Collaborative Strategic Plan to Eliminate Childhood Lead Poisoning in Virginia by* 2010.

2008 Data and Statistics

This report summarizes the 2008 data to include both testing and confirmed elevated blood lead level data, and the identification of sources of exposure for children under 6 years of age. A confirmed EBLL is defined as a single elevated venous test $\geq 10~\mu g/dL$ or two elevated capillary tests within 84 days/12 weeks and is only counted once in the year in which it initially occurred.

Testing for lead exposure is a key component of reducing childhood lead poisoning. Early detection of a child's elevated blood lead level (EBLL) provides the opportunity to identify and reduce lead hazards in order to lower the child's exposure and also identify and address hazards to prevent future cases. During 2008, 91,308 children under 6 years (72 months) of age were tested for lead exposure. Of these, 377 children were reported as having a confirmed elevated blood lead test. Of the high-risk age category, under 36 months, 54,634 were tested with 217 confirmed EBLLs. Medicaid enrolled children under 36 months of age accounted for 38.5% of the children tested in this high-risk age category, and 124 of those were confirmed EBLLs. This accounts for 57% of the confirmed EBLLs in this age category. See Figure 3 for Medicaid data results for 2001-2008. The CDC has determined that children enrolled in Medicaid are at high-risk for lead exposure for various reasons. The program is working with the Department of Medical Assistance Services to educate providers regarding the federal and state requirement to test Medicaid enrolled children at both 12 and 24 months of age. The adoption by the National Committee for Quality Assurance (NCQA) through the Healthcare Effectiveness Data and Information Set (HEDIS) a measure for lead testing should help with provider compliance.

There has been a steady increase in the number of children tested for EBLLs between 2001 and 2008. (Figure 1) This increase can be partially attributed to the testing and reporting requirements of 12 VAC 5-120, "Regulations for testing children for elevated blood lead levels", made effective July 1, 2001. These regulations were amended to include CLIA-waived point of care providers in the definition of a laboratory and allowing the use a CLIA-waived, CDC approved lead testing device. Providers are now required to provide lead poisoning prevention materials at all well-child physicals on children under 72 months of age.

Primary prevention is necessary to eliminate lead as a health hazard for children. The Lead-Safe Virginia Program collaborates with local, state, and federal agencies to reduce lead hazards before children become lead poisoned.

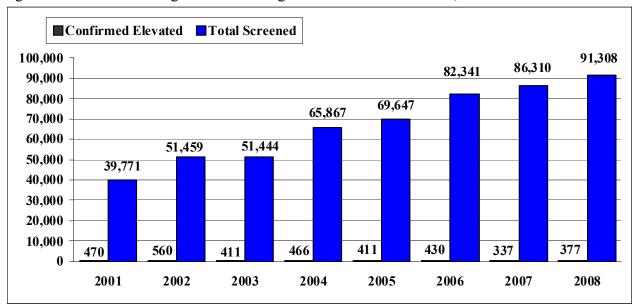


Figure 1. Statewide Testing Results for Virginia Children < 72 months, 2001-2008

Note: Results based on one test per child per year. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require the reporting of all lead tests performed on children under 72 months of age. The number of children tested each year is influenced by several factors that include the number of children born in Virginia each year, migration of children into and out of the state or to a different locality, and the number of children tested in compliance with the regulations. These statistics are preliminary, as the database will accept historical data as made available and continuous data quality control may depict minor changes.

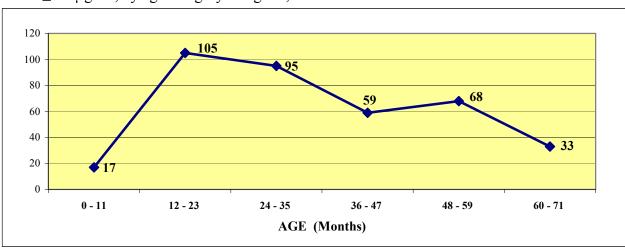


Figure 2. Number of children < 72 months of age with reported confirmed elevated blood lead levels \geq 10 μ g/dL, by age category: Virginia, 2008

Note: A 'confirmed' elevated blood lead level (EBLL) is defined as a single elevated venous test $\geq 10~\mu\text{g/dL}$ or two elevated capillary tests within 84 days/12 weeks and is only counted once in the year in which it initially occurred. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require the reporting of all blood lead tests performed on children under 72 months of age. These statistics are preliminary, as the database will accept historical data as made available and continuous data quality control may depict minor changes.

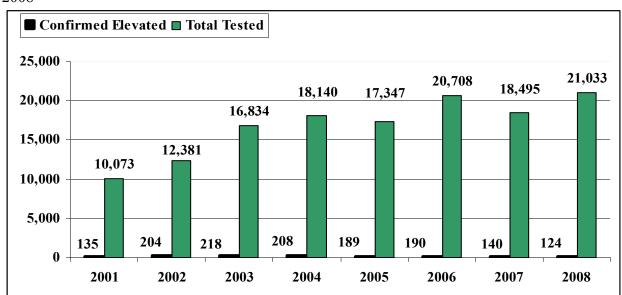


Figure 3. Statewide Testing Results for Medicaid Enrolled Children < 36 months of Age, 2001-2008

Note: A 'confirmed' elevated blood lead level (EBLL) is defined as a single elevated venous test $\ge 10 \,\mu\text{g}/\text{dL}$ or two elevated capillary tests within 84 days/12 weeks and is only counted once in the year in which it initially occurred. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require the reporting of all blood lead tests performed on children under 72 months of age. These statistics are preliminary, as the database will accept historical data as made available and continuous data quality control may depict minor changes. Additional data are obtained through data matching with the state Medicaid agency (DMAS).

Table 1. Number of children confirmed for lead exposure, by age category, by blood lead level: Virginia. 2001 – 2008

Virginia, 2001 – 200	10 - 14	15 - 19	20 - 44	45 - 69		
	μg/dL	μg/dL	μg/dL	μg/dL	≥ 70 µg/dL	Total
< 36 Months of Age						
2001	102	39	35	2	0	178
2002	176	59	51	5	0	291
2003	163	52	41	2	1	259
2004	186	44	42	6	0	278
2005	169	48	28	3	0	242
2006	175	38	35	2	0	252
2007	132	52	32	1	0	217
2008	140	47	29	1	0	217
< 72 Months of Age						
2001	138	65	51	3	0	257
2002	236	84	63	7	0	390
2003	242	72	60	3	3	379
2004	317	69	66	6	2	460
2005	287	70	47	6	1	404
2007	223	70	52	1	0	346
2006	299	58	67	6	0	432
2007	216	68	52	1	0	337
2008	237	79	58	3	0	377

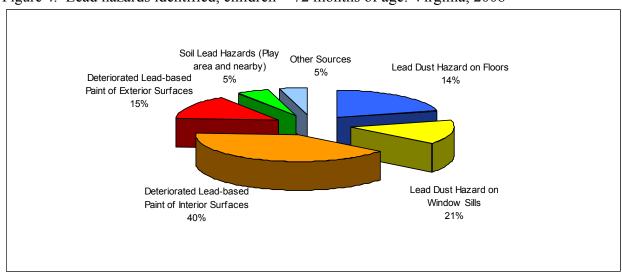
Note: A 'confirmed' elevated blood lead level (EBLL) is defined as a single elevated venous test $\geq 10~\mu g/dL$ or two elevated capillary tests within 84 days/12 weeks and is only counted once in the year in which it initially occurred. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require the reporting of all blood lead tests performed on children under 72 months of age. The number of children tested each year is influenced by several factors that include the number of children born in Virginia each year, migration of children into and out of the state or to a different locality, and the number of children tested in compliance with the regulations. These statistics are preliminary, as the database will accept historical data as made available and continuous data quality control may depict minor changes.

Table 2. Summary of environmental investigations, children < 72 months of age: Virginia, 2008

Number of EBLLs 20 μg/dl or above	61
Number of EBLLs persistent 15-19µg/dl	25
Number of environmental intervention blood lead investigations (EIBLI)	
required	66
Number of environmental investigations performed (Includes secondary	
addresses)	120
Number of EIBLI not performed (5-refused services, 2-moved out of state,	
1 referred to DHCD)	8
Number of "newcomer/refugee" children with EBLL requiring EIBLI	11
Lead dust hazard on floors	108
Lead dust hazard on window sills	157
Deteriorated lead based paint on exterior surfaces	109
Deteriorated lead based paint on interior surfaces	301
Soil lead hazards identified (children's play area)	20
Soil lead hazards identified (non play areas)	16
Lead in water above 15 ppb (private wells-3; plumbing -5)	8
Occupational exposure from parent (construction worker)	1
Mini blinds	7
Home/folk remedies (kohl, eye-liner from Morocco)	4
Furniture (1-bookcase, 3-bathtub glaze, 4-radiator, 1-bird bath)	9
Toys (matchbox car)	1
Consignment shop (beaded homemade bracelet)	1
Bullet (oral)	1
Clothing (zipper on a sweatshirt)	1
Reported exposure from renovation activities	1
Note: Environmental intervention blood lead investigations are performed on all confirmed venous elevated blood	d lead levels $> 20 \text{ µg/dL}$ or persistent conf

Note: Environmental intervention blood lead investigations are performed on all confirmed venous elevated blood lead levels $\geq 20~\mu\text{g/dL}$ or persistent confirmed blood lead levels of 15 to 19 $\mu\text{g/dL}$ on children < 72 months of age. Environmental investigations / risk assessments not conducted or completed were due to varying reasons such as the family moved to a new address or the family refused inspection. Multiple environmental investigations may be required for the same child due to the possibility of lead exposure from more than one location.

Figure 4. Lead hazards identified, children < 72 months of age: Virginia, 2008



		Population			Number	Percent	Confirmed Blood Lead Level Category				
Locality	FIPS	< 36 Months	Number Tested	Testing Rate/1000 [^]	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL
Accomack County	51001	1,401	646	461	8	1.2%	5	2	1	0	0
Albemarle County	51003	2,965	514	173	2	0.4%	1	0	1	0	0
Alleghany County	51005	428	23	54	1	4.3%	1	0	0	0	0
Amelia County	51007	423	44	104	0	0.0%	0	0	0	0	0
Amherst County	51009	1,055	245	232	1	0.4%	1	0	0	0	0
Appomattox County	51011	500	136	272	0	0.0%	0	0	0	0	0
Arlington County	51013	6,564	2096	319	5	2.3%	2	3	0	0	0
Augusta County	51015	2,197	303	138	0	0.0%	0	0	0	0	0
Bath County	51017	131	11	84	1	9.1%	0	0	1	0	0
Bedford County	51019	1,996	280	140	0	0.0%	0	0	0	0	0
Bland County	51021	173	34	197	0	0.0%	0	0	0	0	0
Botetourt County	51023	1,055	105	100	0	0.0%	0	0	0	0	0
Brunswick County	51025	546	128	234	1	0.8%	1	0	0	0	0
Buchanan County	51027	738	120	163	1	0.8%	1	0	0	0	0
Buckingham County	51029	419	86	205	1	1.2%	1	0	0	0	0
Campbell County	51031	1,748	344	197	2	0.6%	1	0	1	0	0
Caroline County	51033	858	150	175	2	1.3%	1	0	1	0	0
Carroll County	51035	992	158	159	0	0.0%	0	0	0	0	0
Charles City County	51036	242	25	103	0	0.0%	0	0	0	0	0
Charlotte County	51037	398	73	183	2	2.7%	2	0	0	0	0
Chesterfield County	51041	10,159	1581	156	5	0.3%	4	1	0	0	0
Clarke County	51043	369	51	138	0	0.0%	0	0	0	0	0
Craig County	51045	163	15	92	0	0.0%	0	0	0	0	0
Culpeper County	51047	1,315	278	211	1	0.4%	0	1	0	0	0
Cumberland County	51049	350	42	120	0	0.0%	0	0	0	0	0
Dickenson County	51051	535	19	36	0	0.0%	0	0	0	0	0
Dinwiddie County	51053	786	43	55	1	2.3%	0	1	0	0	0
Essex County	51057	314	23	73	0	0.0%	0	0	0	0	0

		Population			Number	Percent	Confirmed Blood Lead Level Category				
Locality	FIPS	< 36 Months	Number Tested	Testing Rate/1000	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL
Fairfax County	51059	40,580	5129	126	12	0.2%	8	3	1	0	0
Fauquier County	51061	2,048	227	111	0	0.0%	0	0	0	0	0
Floyd County	51063	462	13	28	0	0.0%	0	0	0	0	0
Fluvanna County	51065	762	16	21	0	0.0%	0	0	0	0	0
Franklin County	51067	1,520	93	61	2	2.2%	1	1	0	0	0
Frederick County	51069	2,296	255	111	0	0.0%	0	0	0	0	0
Giles County	51071	581	43	74	0	0.0%	0	0	0	0	0
Gloucester County	51073	1,141	54	47	0	0.0%	0	0	0	0	0
Goochland County	51075	492	188	382	0	0.0%	0	0	0	0	0
Grayson County	51077	507	56	110	0	0.0%	0	0	0	0	0
Greene County	51079	668	7	10	0	0.0%	0	0	0	0	0
Greensville County	51081	261	3	11	0	0.0%	0	0	0	0	0
Halifax County	51083	1,323	127	96	1	0.8%	0	1	0	0	0
Hanover County	51085	3,290	477	145	3	0.6%	3	0	0	0	0
Henrico County	51087	10,648	2027	190	10	0.5%	8	1	1	0	0
Henry County	51089	1,920	122	64	1	0.8%	0	1	0	0	0
Highland County	51091	58	12	207	0	0.0%	0	0	0	0	0
Isle of Wight County	51093	1,047	132	126	1	0.8%	0	1	0	0	0
James City County	51095	1,597	429	269	1	0.2%	1	0	0	0	0
King and Queen County	51097	220	22	100	0	0.0%	0	0	0	0	0
King George County	51099	715	67	94	1	1.5%	0	0	1	0	0
King William County	51101	517	63	122	0	0.0%	0	0	0	0	0
Lancaster County	51103	286	61	213	0	0.0%	0	0	0	0	0
Lee County	51105	808	58	72	1	1.7%	1	0	0	0	0
Loudoun County	51107	9,919	843	85	0	0.0%	0	0	0	0	0
Louisa County	51109	939	104	111	1	1.0%	1	0	0	0	0
Lunenburg County	51111	393	77	196	2	2.6%	1	0	1	0	0
Madison County	51113	391	10	26	1	10.0%	0	0	1	0	0

		Population			Number	Percent		Confirmed Blood Lead Level Category				
Locality	FIPS	< 36 Months	Number Tested	Testing Rate/1000^	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL	
Mathews County	51115	230	31	135	0	0.0%	0	0	0	0	0	
Mecklenburg County	51117	1,033	231	224	2	0.9%	2	0	0	0	0	
Middlesex County	51119	211	42	199	0	0.0%	0	0	0	0	0	
Montgomery County	51121	2,421	129	53	0	0.0%	0	0	0	0	0	
Nelson County	51125	469	63	134	0	0.0%	0	0	0	0	0	
New Kent County	51127	420	96	229	2	2.1%	2	0	0	0	0	
Northampton County	51131	437	198	453	3	1.5%	1	2	0	0	0	
Northumberland County	51133	317	39	123	0	0.0%	0	0	0	0	0	
Nottoway County	51135	517	110	213	2	1.8%	2	0	0	0	0	
Orange County	51137	918	51	56	1	2.0%	1	0	0	0	0	
Page County	51139	756	148	196	0	0.0%	0	0	0	0	0	
Patrick County	51141	675	113	167	0	0.0%	0	0	0	0	0	
Pittsylvania County	51143	2,100	307	146	0	0.0%	0	0	0	0	0	
Powhatan County	51145	786	71	90	0	0.0%	0	0	0	0	0	
Prince Edward County	51147	573	217	379	1	0.5%	1	0	0	0	0	
Prince George County	51149	1,159	51	44	0	0.0%	0	0	0	0	0	
Prince William County	51153	14,421	1453	101	1	0.1%	1	0	0	0	0	
Pulaski County	51155	1,149	207	180	0	0.0%	0	0	0	0	0	
Rappahannock County	51157	217	41	189	0	0.0%	0	0	0	0	0	
Richmond County	51159	213	28	131	0	0.0%	0	0	0	0	0	
Roanoke County	51161	2,627	168	64	0	0.0%	0	0	0	0	0	
Rockbridge County	51163	681	31	46	0	0.0%	0	0	0	0	0	
Rockingham County	51165	2,512	1046	416	2	0.2%	1	1	0	0	0	
Russell County	51167	919	142	155	3	2.1%	1	0	2	0	0	
Scott County	51169	708	88	124	2	2.3%	0	0	2	0	0	
Shenandoah County	51171	1,126	188	167	2	1.1%	1	1	0	0	0	
Smyth County	51173	1,064	370	348	0	0.0%	0	0	0	0	0	
Southampton County	51175	532	73	137	1	1.4%	1	0	0	0	0	

		Population			Number	Percent		Confirmed Blood Lead Level Category				
Locality	FIPS	< 36 Months	Number Tested	Testing Rate/1000 [^]	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL	
Spotsylvania County	51177	4,013	337	84	3	0.9%	3	0	0	0	0	
Stafford County	51179	4,089	324	79	1	0.3%	1	0	0	0	0	
Surry County	51181	230	23	100	0	0.0%	0	0	0	0	0	
Sussex County	51183	375	63	168	1	1.6%	1	0	0	0	0	
Tazewell County	51185	1,358	397	292	0	0.0%	0	0	0	0	0	
Warren County	51187	1,255	133	106	0	0.0%	0	0	0	0	0	
Washington County	51191	1,565	166	106	0	0.0%	0	0	0	0	0	
Westmoreland County	51193	551	53	96	0	0.0%	0	0	0	0	0	
Wise County	51195	1,382	34	25	0	0.0%	0	0	0	0	0	
Wythe County	51197	899	219	244	1	0.5%	1	0	0	0	0	
York County	51199	2,021	66	33	0	0.0%	0	0	0	0	0	
Alexandria	51510	5,177	1194	231	3	0.3%	3	0	0	0	0	
Bedford	51515	211	107	507	0	0.0%	0	0	0	0	0	
Bristol	51520	557	50	90	1	2.0%	0	1	0	0	0	
Buena Vista	51530	231	16	69	0	0.0%	0	0	0	0	0	
Charlottesville	51540	1,237	61	49	0	0.0%	0	0	0	0	0	
Chesapeake	51550	8,475	720	85	3	0.4%	3	0	0	0	0	
Colonial Heights	51570	517	87	168	0	0.0%	0	0	0	0	0	
Covington	51580	216	44	204	1	2.3%	1	0	0	0	0	
Danville	51590	1,747	321	184	4	1.2%	1	0	3	0	0	
Emporia	51595	216	59	273	2	3.4%	0	1	1	0	0	
Fairfax	51600	807	448	555	1	0.2%	1	0	0	0	0	
Falls Church	51610	344	147	427	0	0.0%	0	0	0	0	0	
Franklin	51620	263	101	384	0	0.0%	0	0	0	0	0	
Fredericksburg	51630	710	139	196	3	2.2%	3	0	0	0	0	
Galax	51640	275	167	607	1	0.6%	1	0	0	0	0	
Hampton	51650	5,595	617	110	2	0.3%	1	0	1	0	0	
Harrisonburg	51660	1,208	413	342	0	0.0%	0	0	0	0	0	

		Population			Number	Percent	Confirmed Blood Lead Level Category				
Locality	FIPS	< 36 Months	Number Tested	Testing Rate/1000 [^]	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL
Hopewell	51670	986	110	112	2	1.8%	1	1	0	0	0
Lexington	51678	113	14	124	0	0.0%	0	0	0	0	0
Lynchburg	51680	2,297	895	390	1	0.1%	0	1	0	0	0
Manassas	51683	1,817	512	282	1	0.2%	1	0	0	0	0
Manassas Park	51685	635	221	348	1	0.5%	1	0	0	0	0
Martinsville	51690	529	81	153	0	0.0%	0	0	0	0	0
Newport News	51700	8,617	1093	127	7	0.6%	4	2	1	0	0
Norfolk	51710	10,201	1553	152	16	1.0%	10	6	0	0	0
Norton	51720	116	4	34	0	0.0%	0	0	0	0	0
Petersburg	51730	1,313	200	152	8	4.0%	5	2	1	0	0
Poquoson	51735	344	14	41	0	0.0%	0	0	0	0	0
Portsmouth	51740	4,374	615	141	7	1.1%	4	2	1	0	0
Radford	51750	357	42	118	0	0.0%	0	0	0	0	0
Richmond	51760	7,608	2442	321	34	1.4%	25	6	3	0	0
Roanoke	51770	3,837	461	120	7	1.5%	4	3	0	0	0
Salem	51775	671	144	215	0	0.0%	0	0	0	0	0
Staunton	51790	775	366	472	0	0.0%	0	0	0	0	0
Suffolk	51800	2,740	554	202	6	1.1%	2	1	2	1	0
Virginia Beach	51810	18,395	1156	63	0	0.0%	0	0	0	0	0
Waynesboro	51820	786	77	98	4	5.2%	1	1	2	0	0
Williamsburg	51830	195	7	36	0	0.0%	0	0	0	0	0
Winchester	51840	853	190	223	0	0.0%	0	0	0	0	0
Unknown *			13357		3	0.0%	3	0	0	0	0
VIRGINIA		276,483	54,634	198	217	0.4%	140	47	29	1	0

Note: 2000 U.S. Census Population Data were used. Results based on one test per child per year. A confirmed elevated blood lead level (EBLL) is defined as a single elevated venous test $\geq 10 \,\mu\text{g}/\text{dL}$ or two elevated capillary tests within 84 days/12 weeks and is only counted once in the year in which it initially occurred. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require the reporting of all lead tests performed on children under 72 months of age. The number of children tested each year is influenced by several factors that include the number of children born in Virginia each year, migration of children into and out of the state or to a different locality, and the number of children tested in compliance with the regulations. Ageulations only require testing at 1 and 2 years of age if determined to be at risk. These statistics are preliminary, as the database will accept historical data as made available and continuous data quality control may depict minor changes in data. Unknown addresses are due to providers not submitting a child's address with the laboratory lead test request, or in some cases, the laboratory not forwarding this information as required.

		Population		Number	Percent	Confirmed Blood Lead Level Category					
Locality	FIPS	< 72 Months	Number Tested	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL	
Accomack County	51001	2,792	801	9	1.1%	6	2	1	0	0	
Albemarle County	51003	6,000	607	2	0.3%	1	0	1	0	0	
Alleghany County	51005	905	35	1	2.9%	1	0	0	0	0	
Amelia County	51007	870	97	0	0.0%	0	0	0	0	0	
Amherst County	51009	2,234	3	1	33.3%	1	0	0	0	0	
Appomattox County	51011	1,047	166	0	0.0%	0	0	0	0	0	
Arlington County	51013	12,144	2,740	5	0.2%	2	3	0	0	0	
Augusta County	51015	4,521	388	1	0.3%	1	0	0	0	0	
Bath County	51017	279	16	1	6.3%	0	0	1	0	0	
Bedford County	51019	4,290	359	0	0.0%	0	0	0	0	0	
Bland County	51021	379	72	0	0.0%	0	0	0	0	0	
Botetourt County	51023	2,107	270	0	0.0%	0	0	0	0	0	
Brunswick County	51025	1,124	299	1	0.3%	1	0	0	0	0	
Buchanan County	51027	1,583	271	1	0.4%	1	0	0	0	0	
Buckingham County	51029	926	131	1	0.8%	1	0	0	0	0	
Campbell County	51031	3,678	412	3	0.7%	2	0	1	0	0	
Caroline County	51033	1,690	294	2	0.7%	1	0	1	0	0	
Carroll County	51035	1,998	198	0	0.0%	0	0	0	0	0	
Charles City County	51036	472	47	0	0.0%	0	0	0	0	0	
Charlotte County	51037	863	128	2	1.6%	2	0	0	0	0	
Chesterfield County	51041	21,322	2,778	6	0.2%	4	1	1	0	0	
Clarke County	51043	835	88	0	0.0%	0	0	0	0	0	
Craig County	51045	356	38	0	0.0%	0	0	0	0	0	
Culpeper County	51047	2,660	335	1	0.3%	0	1	0	0	0	
Cumberland County	51049	689	62	0	0.0%	0	0	0	0	0	
Dickenson County	51051	1,038	50	0	0.0%	0	0	0	0	0	
Dinwiddie County	51053	1,650	111	1	0.9%	0	1	0	0	0	
Essex County	51057	635	75	1	1.3%	1	0	0	0	0	

		Population		Number	Percent	Confirmed Blood Lead Level Category						
Locality	FIPS	< 72 Months	Number Tested	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL		
Fairfax County	51059	81,675	8,964	22	0.2%	13	7	2	0	0		
Fauquier County	51061	4,256	356	0	0.0%	0	0	0	0	0		
Floyd County	51063	950	63	0	0.0%	0	0	0	0	0		
Fluvanna County	51065	1,567	33	0	0.0%	0	0	0	0	0		
Franklin County	51067	3,147	204	3	1.5%	2	1	0	0	0		
Frederick County	51069	4,657	468	0	0.0%	0	0	0	0	0		
Giles County	51071	1,138	118	0	0.0%	0	0	0	0	0		
Gloucester County	51073	2,483	109	0	0.0%	0	0	0	0	0		
Goochland County	51075	1,044	285	2	0.7%	1	1	0	0	0		
Grayson County	51077	1,061	72	0	0.0%	0	0	0	0	0		
Greene County	51079	1,372	13	0	0.0%	0	0	0	0	0		
Greensville County	51081	528	5	0	0.0%	0	0	0	0	0		
Halifax County	51083	2,714	165	2	1.2%	1	1	0	0	0		
Hanover County	51085	6,872	813	3	0.4%	3	0	0	0	0		
Henrico County	51087	21,575	3,314	15	0.5%	12	1	2	0	0		
Henry County	51089	3,911	171	1	0.6%	0	1	0	0	0		
Highland County	51091	112	18	0	0.0%	0	0	0	0	0		
Isle of Wight County	51093	2,190	198	1	0.5%	0	1	0	0	0		
James City County	51095	3,307	771	2	0.3%	2	0	0	0	0		
King and Queen County	51097	451	44	0	0.0%	0	0	0	0	0		
King George County	51099	1,510	135	1	0.7%	0	0	1	0	0		
King William County	51101	1,121	130	1	0.8%	1	0	0	0	0		
Lancaster County	51103	577	109	0	0.0%	0	0	0	0	0		
Lee County	51105	1,648	241	1	0.4%	1	0	0	0	0		
Loudoun County	51107	19,682	1,950	2	0.1%	1	0	1	0	0		
Louisa County	51109	1,904	196	1	0.5%	1	0	0	0	0		
Lunenburg County	51111	784	176	2	1.1%	1	0	1	0	0		
Madison County	51113	864	12	1	8.3%	0	0	1	0	0		

		Population		Number	Percent	Coi	Confirmed Blood Lead Level Category					
Locality	FIPS	< 72 Months	Number Tested	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL		
Mathews County	51115	504	59	1	1.7%	1	0	0	0	0		
Mecklenburg County	51117	2,093	465	5	1.1%	3	0	2	0	0		
Middlesex County	51119	452	76	1	1.3%	1	0	0	0	0		
Montgomery County	51121	4,758	267	1	0.4%	0	0	1	0	0		
Nelson County	51125	927	113	0	0.0%	0	0	0	0	0		
New Kent County	51127	867	158	2	1.3%	2	0	0	0	0		
Northampton County	51131	658	239	4	1.7%	1	3	0	0	0		
Northumberland County	51133	1,057	91	0	0.0%	0	0	0	0	0		
Nottoway County	51135	1,856	190	4	2.1%	4	0	0	0	0		
Orange County	51137	1,599	104	1	1.0%	1	0	0	0	0		
Page County	51139	1,359	197	1	0.5%	1	0	0	0	0		
Patrick County	51141	4,194	157	1	0.6%	0	0	1	0	0		
Pittsylvania County	51143	1,589	551	0	0.0%	0	0	0	0	0		
Powhatan County	51145	1,178	133	0	0.0%	0	0	0	0	0		
Prince Edward County	51147	2,402	288	1	0.3%	1	0	0	0	0		
Prince George County	51149	28,789	112	0	0.0%	0	0	0	0	0		
Prince William County	51153	2,339	2,742	3	0.1%	3	0	0	0	0		
Pulaski County	51155	420	407	1	0.2%	0	0	1	0	0		
Rappahannock County	51157	430	57	0	0.0%	0	0	0	0	0		
Richmond County	51159	5,587	56	0	0.0%	0	0	0	0	0		
Roanoke County	51161	867	368	0	0.0%	0	0	0	0	0		
Rockbridge County	51163	1,351	51	0	0.0%	0	0	0	0	0		
Rockingham County	51165	5,163	1,274	2	0.2%	1	1	0	0	0		
Russell County	51167	1,955	295	4	1.4%	2	0	2	0	0		
Scott County	51169	1,487	186	2	1.1%	0	0	2	0	0		
Shenandoah County	51171	2,379	280	2	0.7%	1	1	0	0	0		
Smyth County	51173	2,158	479	2	0.4%	1	0	1	0	0		
Southampton County	51175	1,070	110	3	2.7%	2	1	0	0	0		

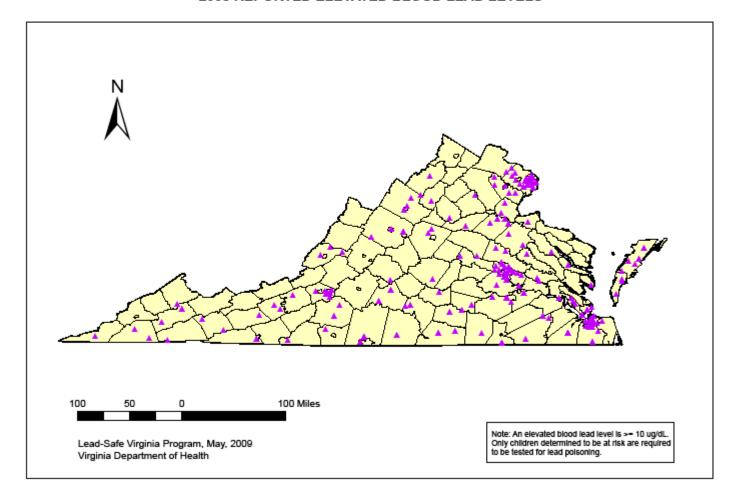
		Population < 72		Number	Percent	Confirmed Blood Lead Level Category							
Locality	FIPS		Number Tested	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL			
Spotsylvania County	51177	8,430	894	6	0.7%	3	2	1	0	0			
Stafford County	51179	8,810	910	2	0.2%	2	0	0	0	0			
Surry County	51181	477	38	0	0.0%	0	0	0	0	0			
Sussex County	51183	713	142	3	2.1%	1	0	2	0	0			
Tazewell County	51185	2,879	825	0	0.0%	0	0	0	0	0			
Warren County	51187	2,576	206	0	0.0%	0	0	0	0	0			
Washington County	51191	3,147	244	0	0.0%	0	0	0	0	0			
Westmoreland County	51193	1,046	122	0	0.0%	0	0	0	0	0			
Wise County	51195	2,802	111	0	0.0%	0	0	0	0	0			
Wythe County	51197	1,823	436	1	0.2%	1	0	0	0	0			
York County	51199	4,439	96	0	0.0%	0	0	0	0	0			
Alexandria	51510	9,262	1,781	4	0.2%	4	0	0	0	0			
Bedford	51515	424	151	0	0.0%	0	0	0	0	0			
Bristol	51520	1,114	100	1	1.0%	0	1	0	0	0			
Buena Vista	51530	461	31	0	0.0%	0	0	0	0	0			
Charlottesville	51540	2,368	90	0	0.0%	0	0	0	0	0			
Chesapeake	51550	17,265	1,345	6	0.4%	6	0	0	0	0			
Colonial Heights	51570	1,113	209	0	0.0%	0	0	0	0	0			
Covington	51580	471	69	1	1.4%	1	0	0	0	0			
Danville	51590	3,502	685	14	2.0%	6	3	5	0	0			
Emporia	51595	436	156	6	3.8%	3	2	1	0	0			
Fairfax	51600	1,538	706	1	0.1%	1	0	0	0	0			
Falls Church	51610	690	205	0	0.0%	0	0	0	0	0			
Franklin	51620	538	135	0	0.0%	0	0	0	0	0			
Fredericksburg	51630	1,332	335	4	1.2%	4	0	0	0	0			
Galax	51640	525	200	2	1.0%	1	0	1	0	0			
Hampton	51650	11,272	1,065	6	0.6%	4	1	1	0	0			
Harrisonburg	51660	2,281	498	2	0.4%	1	1	0	0	0			

		Population		Number	Percent	Confirmed Blood Lead Level Category				
Locality	FIPS	< 72 Months	Number Tested	Confirmed Elevated	Confirmed Elevated	10-14 μg/dL	15-19 μg/dL	20-44 μg/dL	45-69 μg/dL	≥ 70 µg/dL
Hopewell	51670	2,020	331	4	1.2%	3	1	0	0	0
Lexington	51678	247	26	0	0.0%	0	0	0	0	0
Lynchburg	51680	4,660	1,104	3	0.3%	0	2	0	1	0
Manassas	51683	3,636	873	1	0.1%	1	0	0	0	0
Manassas Park	51685	1,235	401	1	0.2%	1	0	0	0	0
Martinsville	51690	1,051	117	0	0.0%	0	0	0	0	0
Newport News	51700	17,107	1,567	11	0.7%	8	2	1	0	0
Norfolk	51710	19,719	2,810	23	0.8%	14	9	0	0	0
Norton	51720	255	14	0	0.0%	0	0	0	0	0
Petersburg	51730	2,610	565	17	3.0%	11	3	3	0	0
Poquoson	51735	738	23	0	0.0%	0	0	0	0	0
Portsmouth	51740	8,555	1,000	12	1.2%	7	4	1	0	0
Radford	51750	661	90	1	1.1%	0	0	1	0	0
Richmond	51760	14,788	4,795	66	1.4%	44	12	9	1	0
Roanoke	51770	7,453	1,243	18	1.4%	10	5	3	0	0
Salem	51775	1,479	363	1	0.3%	1	0	0	0	0
Staunton	51790	1,493	462	1	0.2%	0	0	1	0	0
Suffolk	51800	5,586	858	10	1.2%	5	2	2	1	0
Virginia Beach	51810	37,054	2,059	1	0.0%	0	1	0	0	0
Waynesboro	51820	1,546	135	5	3.7%	2	1	2	0	0
Williamsburg	51830	370	7	0	0.0%	0	0	0	0	0
Winchester	51840	1,722	381	0	0.0%	0	0	0	0	0
Unknown *			20488	3	0.0%					
VIRGINIA		557,454	91,308	377	0.4%	237	79	58	3	0

Note: 2000 U.S. Census Population Data were used. Results based on one test per child per year. A confirmed elevated blood lead level (EBLL) is defined as a single elevated venous test $\geq 10~\mu g/dL$ or two elevated capillary tests within 84 days/12 weeks and is only counted once in the year in which it initially occurred. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require the reporting of all lead tests performed on children under 72 months of age. The number of children tested each year is influenced by several factors that include the number of children born in Virginia each year, migration of children into and out of the state or to a different locality, and the number of children tested in compliance with the regulations only require testing at 1 and 2 years of age if determined to be at risk. These statistics are preliminary, as the database will accept historical data as made available and continuous data quality control may depict minor changes in data. * Unknown addresses are due to providers not submitting a child's address with the laboratory lead test request, or in some cases, the laboratory not forwarding this information as required.

INCIDENCE

VIRGINIA, CHILDREN UNDER 6 YEARS OF AGE, 2008 REPORTED ELEVATED BLOOD LEAD LEVELS



Guidelines for Childhood Lead Poisoning Testing

ALL MEDICAID ENROLLED CHILDREN ARE REQUIRED TO BE TESTED AT 1 AND 2 YEARS OF AGE

To determine risk for other children, please use the chart below.

OTHER RISK FACTORS FOR CHILDREN

Blood lead levels shall be obtained in children at ages 1 and 2 if they meet ANY one of the criteria noted in the box below. In addition, children ages 3-5 years of age who have not previously been tested, and moved to a new address in a high-risk area, or meet ANY one of the criteria in the box below shall also be tested.

- 1. Eligible for or receiving WIC benefits? Medicaid eligible and not tested at both 1 and 2 years of age?
- Living in a ZIP Code determined to be high-risk based on age of housing and other factors? (See attached High Risk ZIP Code list)
- 3. Living in or regularly visiting a house or day care center built before 1950?
- 4. Living in or regularly visiting a house built before 1978 with peeling or chipping paint or recent (within the last 6 months), ongoing or planned renovation?
- 5. Living with or regularly visiting a sibling, housemate or playmate with lead poisoning?
- 6. Living with an adult whose job or hobby involves exposure to lead?
- 7. Living near an active lead smelter, battery recycling plant, or other industry likely to release lead?
- 8. Recent refugee, immigrant, or child adopted from outside of the U.S.
- Take careful history regarding possible lead exposure at each routine visit.
- A child must be tested if the parent or guardian requests testing due to possible exposure (12 VAC 5-120).
- Testing may be performed by venipuncture or capillary. Filter paper methods are also acceptable and often more convenient for the family
 if performed in the provider's office. The use of a CLIA-waived lead testing device must be approved through the Lead-Safe Virginia
 Program at 804-864-7694 to assure proper quality assurance and reporting of data.

CONFIRMATION OF TESTING RESULTS

If result of capillary Testing test (μg/dL) is:	Perform diagnostic test on venous blood <u>within:</u>			
10-19^	Repeat blood test within 30 days to assure lead level is not rising Before 3 months			
20-44	7-30 days (The higher the screen, the sooner the diagnostic test should be performed.)			
45-59	48 hours			
60-69	24 hours			
≥70	Immediately as an emergency lab test			

Note: Confirm elevated capillary blood lead levels $\geq 10~\mu g/dL$. A 'confirmed' elevated blood lead level (EBLL) is defined as a single elevated venous test $\geq 10~\mu g/dL$ or two elevated capillary tests within 84 days/12 weeks — A venous sample is required for environmental investigations. Virginia regulations require reporting of blood lead levels $\geq 10~\mu g/dL$ (using the EPI-1 form) to the Office of Epidemiology. Regulations 12 VAC 5-120 require laboratories and point of care providers using CLIA-waived devices to report all blood lead tests on children under the age of six within ten days of analysis.

MANAGEMENT OF CHILDREN WITH CONFIRMED ELEVATED BLOOD LEAD LEVELS

BLOOD LEAD LEVEL (µg/dL)	ACTION (Case manager assures coordinated action and follow-up)	TIME FRAME (Begin intervention)
10-14	 Provide caregiver lead education: dietary and environmental Follow-up blood lead testing within 30 days to assure not rising Refer for WIC and social services, if needed 	Within 30 days
15-19	 Above actions, plus: Proceed according to actions for 20-40 ug/dL if: A follow-up blood lead is 15 or above, or the blood lead level is increasing 	Within 2 weeks
20-44	 Above actions, plus: Provide coordination of care (case management) Provide environmental investigation and control lead hazards 	Within 1 week
45-69	Above actions	Within 48 hours
70 and above	 Above actions, plus: Hospitalize child and begin medical treatment (chelation therapy as appropriate) immediately. Contact Emergency Lead Healthcare line below. 	Within 24 hours

Emergency Lead Healthcare Information Line

TOLL FREE EMERGENCY (866) 767-5323 (866) SOS-LEAD

Note: For questions related to your local area, refer to your local health department. Local health policy and lead ordinances may have additional requirements. Richmond City has a lead ordinance that requires an investigation at 10 ug/dL.

Developed by the Virginia Department of Health Lead Elimination Plan Medical Committee, following CDC Guidelines and Virginia Regulations. Funded by the Centers for Disease Control and Prevention and the Virginia Department of Health. Revised May 2009.

Current CDC management recommendations adapted from *Managing Elevated Blood Lead Levels Among Young Children:* Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention. (CDC, 2002).

* Investigations may be required where babies or multiple children in a household have elevated blood lead levels. Follow –up care is described in more detail in the VDH "Care Coordination Manual: Children with Lead Poisoning in Virginia".

			V	irginia High-F	Risk Zip Codes*			多数 二十	· 18 / 大沙里的人们
Accomack	Augusta	Charlotte	Falls Church City	Hampton City	Lunenburg	Norfolk City	Powhatan	Rockingham	Surry
23301	22843	23923	22046	23651	23938	23503	23139	22811	23839
23302	22939	23934	<u>Fauquier</u>	23661	23944	23504	Prince Edward	22812	23846
23308	24430	23937	22639	23665	23952	23505	23901	22815	23881
23336	24432	23962	22643	<u>Hanover</u>	23974	23507	23942	22820	Sussex
23356	24437	23964	22734	23047	Lynchburg City	23508	Prince George	22821	23867
23357	24459	Charlottesville City	Floyd	23069	24501	23509	23842	22832	23888
23359	24467	22903	24072	<u>Henrico</u>	24503	23510	Prince William	22834	_23890
23395	24476	Chesapeake City	24091	23226	24504	23511	22134	22841	Tazewell
23399	24479	23324	24105	23227	<u>Madison</u>	23517	Pulaski	22846	24602
23404	24485	Clarke	24380	23229	22709	23523	24301	22853	24605
23407	24486	22611	Fluvanna	23230	22719	Northampton	24347	24471	24613
23409	<u>Bath</u>	22620	23022	23231	22727	23310	Radford City	Russell	24622
23410	24445	22663	23084	Henry	22732	23350	24141	24237	24651
23417	24460	Covington City	Franklin City	24089	Martinsville City	23354	Rappahanock	24649	Virginia Beach City
23418	24484	24426	23851	Highland	24112	23405	22002	Scott	23521
23420	24487	Craig	<u>Frederick</u>	24413	<u>Mathews</u>	23413	22716	24245	<u>Warren</u>
23421	Bedford	24127	22645	24433	23021	Northumberland	22740	24250	22642
23426	24526	24131	22654	24442	23025	22435	22746	24251	22649
23440	Bland	Culpeper	Fredericksburg City	24458	23045	22473	22747	24258	Washington
23442	24315	22713	22401	24465	23066	22539	22749	Shenandoah	24236
Albermarle	24318	22718	Galax City	24468	23109	22579	Richmond City	22644	24270
22901	24366	22726	24333	Isle of Wright	23125	Norton City	23219	22657	24340
22931	Botetourt	22729	Giles	23315	23130	24273	23220	22660	Waynesboro City
22937	24066	22736	24086	James City	Mecklenburg	Nottoway	23221	22664	22980
22943	24085	Cumberland	24093	23185	23915	23824	23222	22810	Westmoreland
22947	24090	23027	24094	King and Queen	23924	23922	23223	22824	22488
22959	<u>Bristol</u>	Danville City	24124	23023	23968	23930	23224	22842	Winchester City
24590	24201	24540	24128	23108	23970	Orange	23225	22844	22601
Alexandria City	Brunswick	24541	24134	23110	Middlesex	22972	Roanoke City	22847	Wise
22301	23821	Dickenson	24147	23156	23079	Page	24011	Smyth	24216
22302	23868	24226	24150	23177	23149	22650	24013	24316	24219
22305	23920	24272	Goochland	King George	23176	22835	24014	24319	24230
22314	Buchanan	24289	23038	22448	23180	22849	24015	24370	24283
Alleghany	24639	<u>Dinwiddie</u>	23153	King William	Montgomery	22851	24016	24375	24285
24422	Buckingham	23830	Grayson	23009	24138	<u>Patrick</u>	Rockbridge	Southampton	24293
Amelia	23936	23840	24292	23181	24149	24185	24435	23827	Wythe
23083	Buena Vista City	23850	24326	Lancaster	Nelson	Petersburg City	24439	23828	24312
Appomattox	24416	23872	24330	22480	22938	23803	24472	23829	24322
23958	Caroline	23894	24378	22503	22964	Pittsylvania	24473	23837	24323
Arlington	22427	Emporia	Greene	Lee	22969	24139	24483	23844	24350
22201	22514	23847	22935	24221	22971	24531	24555	23866	24368
22203	Carroll	Essex	Halifax	24265	24464	24594	24578	23874	24382
22204	24325	22454	24534	24277	24553	Portsmouth City	24579	Staunton City	
22205	24343	22504	24539	24282	Newport News City	23701		24401	
22206	24352	22509	24577	Lexington City	23604	23702		Suffolk City	
22207		22560	24592	24450	23607	23704		23432	
22211		Fairfax	24598	Louisa		23707		23434	
		22307		23024					

^{*} Areas with these ZIP Codes have >27% of housing built before 1950 and/or an increased prevalence of children with elevated blood lead levels per available data. ZIP Codes are from the 2000 U.S.Census. View http://www.vahealth.org/leadsafe for updates and information on childhood lead poisoning in Virginia and access to publications available to medical professionals, parents and others. Toll free phone (877) 668-7987.

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Virginia High-Risk Zip Codes*									
22002	22709	22969	23301	23701	23964	24270	24442		
22046	22713	22971	23302	23702	23968	24272	24445		
22134	22716	22972	23308	23704	23970	24273	24450		
22201	22718	22980	23310	23707	23974	24277	24458		
22203	22719	23009	23315	23803	24011	24282	24459		
22204	22726	23021	23324	23821	24013	24283	24460		
22205	22727	23022	23336	23824	24014	24285	24464		
22206	22729	23023	23350	23827	24015	24289	24465		
22207	22732	23024	23354	23828	24016	24292	24467		
22211	22734	23025	23356	23829	24066	24293	24468		
22301	22736	23027	23357	23830	24072	24301	24471		
22302	22740	23038	23359	23837	24085	24312	24472		
22305	22746	23045	23395	23839	24086	24315	24473		
22307	22747	23047	23399	23840	24089	24316	24476		
22314	22749	23066	23404	23842	24090	24318	24479		
22401	22810	23069	23405	23844	24091	24319	24483		
22427	22811	23079	23407	23846	24093	24322	24484		
22435	22812	23083	23409	23847	24094	24323	24485		
22448	22815	23084	23410	23850	24105	24325	24486		
22454	22820	23108	23413	23851	24112	24326	24487		
22473	22821	23109	23417	23866	24124	24330	24501		
22480	22824	23110	23418	23867	24127	24333	24503		
22488	22832	23125	23420	23868	24128	24340	24504		
22503	22834	23130	23421	23872	24131	24343	24526		
22504	22835	23139	23426	23874	24134	24347	24531		
22509	22841	23149	23432	23881	24138	24350	24534		
22514	22842	23153	23434	23888	24139	24352	24539		
22539	22843	23156	23440	23890	24141	24366	24540		
22560	22844	23176	23442	23894	24147	24368	24541		
22579	22846	23177	23503	23901	24149	24370	24553		
22601	22847	23180	23504	23915	24150	24375	24555		
22611	22849	23181	23505	23920	24185	24378	24577		
22620	22851	23185	23507	23922	24201	24380	24578		
22639	22853 22901	23219 23220	23508	23923	24216	24382	24590		
22642			23509	23924	24219	24401	24592		
22643	22903	23221	23510	23930	24221	24413	24594		
22644	22931	23222	23511	23934	24226	24416	24598		
22645 22649	22935 22937	23223	23517	23936	24230	24422	24602		
22650	22938	23224 23225	23521 23523	23937 23938	24236 24237	24426 24430	24605 24613		
22654	22939	23225	23604	23938	24237	24430	24622		
22657	22943	23227	23607	23944	24243	24433	24639		
22660	22947	23229	23651	23952	24251	24435	24649		
22663	22959	23230	23661	23958	24258	24437	24651		
22664	22964	23231	23665	23962	24265	24439	21031		
					- :-02				

Codes have >27% of housing built before 1950 and/or an increased prevalence of children with elevated blood lead levels per available data. ZIP Codes are from the 2000 U.S. Census. View http://www.vahealth.org/leadsafe for updates and information on childhood lead poisoning in Virginia and access to publications available to medical professionals, parents and others. Toll free phone (877) 668-7987.

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