Lead-Safe Virginia Program

Childhood Lead Poisoning Prevention Program
2015 Surveillance Summary Report

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

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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.

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. [1] It is especially harmful to the developing nervous systems of fetuses. Lead is a dangerous neurotoxin that persists in the environment and bioaccumulates when taken into the human body. Scientific consensus shows **that there is no safe level of lead exposure.** [5] EPA and [2, 3, 4] CDC have recognized this.

Authority to develop the protocol for testing Virginia children for elevated blood lead levels is found in the *Code of Virginia §32.1-46.1 Board to establish protocol for identification of children with elevated blood-lead levels regulations*. Virginia regulations 12VAC5-90-215 describe the schedule and criteria for testing and 12VAC5-90-10 define an elevated blood lead level. Laboratories are required to report any detectable blood lead level in children less than 6 years of age.

The elevated blood lead level where public health follow up is initiated is 10 µg/dL, and the child's provider coordinates follow up at levels of levels 5-9 µg/dL. Providers are also required by regulations to provide lead poisoning prevention materials at all well-child checkups on children less than 6 years (72 months) of age. [4] Evidence suggests that for children with BLLs 5–9 μg/dL, no single source of exposure predominates. For these children, the contribution of multiple sources, including drinking water, seems likely, particularly for children who do not have well-established risk factors such as living in old housing or having a parent who is exposed to lead at work.

Children less than three years of age (36 months) are at high-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 deteriorated lead-based paint, and soil contaminated by deteriorated exterior house paint and 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-1960 housing. Lead can also be present in water distribution lines, household plumbing, and faucets. Lead was banned from solder used for household plumbing in 1986, and lead in components was further reduced effective in 2014.

Renovation of older homes can create additional lead hazards for families and workers. Pre-1978 child care centers or in-home daycare houses are also potential areas of exposure. [6] The EPA Renovation, Repair, and Painting Rule (RRP), the most important new effort in the last ten years to help combat childhood lead poisoning, requires individuals and firms renovating or painting pre-1978 residences, schools, or child care centers, take lead-safe work practices training and be certified. They must also provide a brochure to households undergoing repair, renovations including window replacement, and painting.

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, and is found in soil near

highways or roads. There are also other pathways to lead exposure from sources such as imported or costume jewelry, antique or imported toys, home health remedies, kohl, 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, making bullets, fishing lures, or stained glass are examples. Other activities that may be associated with lead exposure include: using indoor firing ranges; fishing with lures made with lead; performing renovation, remodeling, painting, plumbing; working with lead batteries; performing auto paint refinishing; working in the recycling industry; 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 paint is still used in marine paint on boats and bridges; and is present in the paint of older vehicles and can become a hazard when unsafe lead paint work practices are used.

References and Resources

[1] CDC. Guidelines for the identification and management of lead exposure in pregnant and lactating women. Atlanta, GA: CDC; 2010, *available at* http://www.cdc.gov/nceh/lead/publications/leadandpregnancy2010.pdf Accessed September 8, 2016.

[2] CDC, What do Parents Need to Know to Protect Their Children (2012), *available at* http://www.cdc.gov/nceh/lead/ACCLPP/blood_lead_levels.htm

[3] CDC. Preventing lead poisoning in young children. Atlanta, GA: CDC; 2005. http://www.cdc.gov/nceh/lead/publications/prevleadpoisoning.pdf. Accessed September 8, 2016

[4] CDC, Lead in Drinking Water and Human Blood Lead Levels in the United States (2012), *available at* *http://www.cdc.gov/mmwr/preview/mmwrhtml/su6104a1.htm?s_cid=su6104a1_w*

[5] EPA, Basic Information about Lead in Drinking Water, last updated May 9, 2016 https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

[6] EPA, Lead Renovation, Repair and Painting Program Rules, *available at* *https://www.epa.gov/lead/lead-renovation-repair-and-painting-program-rules*

2015 Data and Statistics

This report summarizes the 2015 reported data of confirmed elevated blood lead levels (EBLL). An EBLL is defined by regulations as a single elevated venous test ≥ 10 μg/dL or two elevated capillary tests within 84 days/12 weeks performed by a CLIA-approved laboratory and is only counted once in the year in which it initially occurred. Although these data are based on 10 ug/dL as the reported elevated level defined by regulations, it must be noted that there is ***no safe blood lead level,*** and all detectable blood lead levels are reported.

Testing for lead exposure is a key component of reducing childhood lead poisoning. Early detection of a child's 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 2015, 211 children less than 6 years of age (72 months) were reported as having a confirmed elevated blood lead test. Of the high-risk age category, less than 3 years (36 months), 164 were reported having a confirmed EBLL.

Reported elevated blood lead level trends (2001-2015) are shown in Figure 1. These results are effected 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, the number of children determined to be at risk and required to be tested, and any influx of refugee children who often come into the state with an existing elevated blood lead level

Figure 1. Virginia: Reported confirmed elevated blood lead levels, by age category, by year, 2001- 2015

	10 - 14 µg/dL	15 - 19 µg/dL	20 - 44 µg/dL	45 - 69 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	248
2006	175	38	35	2	0	250
2007	132	52	32	1	0	217
2008	140	47	29	1	0	217
2009	161	38	38	5	0	242
2010	129	42	39	3	0	213
2011	95	26	33	2	0	156
2012	64	20	27	0	0	111
2013	61	20	30	0	0	111
2014	116	29	39	1	0	185
2015	90	35	38	1	0	164
< 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
2006	299	58	67	6	0	432
2007	216	68	52	1	0	337
2008	237	79	58	3	0	377
2009	286	63	61	7	0	417
2010	206	53	62	3	0	324
2011	152	43	56	3	0	254
2012	89	33	32	1	0	155
2013	81	23	35	1	0	140
2014	140	47	39	1	0	227
2015	118	47	44	2	0	211

Note: A confirmed elevated blood lead level (EBLL) is defined as a single elevated venous test ≥ 10 ug/dL or two elevated capillary tests within 84 days/12 weeks and is 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. 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. All children are not required to be tested in Virginia, so reported elevated levels may vary depending on the number of children determined to be at risk each year and subsequently tested.

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 36 months of age: Virginia, 2015

Locality	FIPS	Population < 36 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Accomack County	51001	1,155	1	1	0	0	0	0
Albemarle County	51003	3,303	0	0	0	0	0	0
Alleghany County	51005	455	2	0	1	1	0	0
Amelia County	51007	442	1	1	0	0	0	0
Amherst County	51009	1,036	0	0	0	0	0	0
Appomattox County	51011	493	0	0	0	0	0	0
Arlington County	51013	7,466	3	2	0	1	0	0
Augusta County	51015	2,249	0	0	0	0	0	0
Bath County	51017	92	1	1	0	0	0	0
Bedford County	51019	1,904	2	1	0	1	0	0
Bland County	51021	165	0	0	0	0	0	0
Botetourt County	51023	896	0	0	0	0	0	0
Brunswick County	51025	508	0	0	0	0	0	0
Buchanan County	51027	652	0	0	0	0	0	0
Buckingham County	51029	584	1	0	1	0	0	0
Campbell County	51031	1,783	1	1	0	0	0	0
Caroline County	51033	1,188	1	1	0	0	0	0
Carroll County	51035	926	1	0	0	1	0	0
Charles City County	51036	165	0	0	0	0	0	0
Charlotte County	51037	438	2	1	1	0	0	0
Chesterfield County	51041	11,511	3	3	0	0	0	0
Clarke County	51043	425	0	0	0	0	0	0
Craig County	51045	160	0	0	0	0	0	0
Culpeper County	51047	1,904	0	0	0	0	0	0
Cumberland County	51049	385	0	0	0	0	0	0
Dickenson County	51051	515	0	0	0	0	0	0
Dinwiddie County	51053	933	0	0	0	0	0	0
Essex County	51057	389	0	0	0	0	0	0
Fairfax County	51059	43,507	17	9	5	3	0	0
Fauquier County	51061	2,154	1	0	0	1	0	0
Floyd County	51063	495	1	1	0	0	0	0
Fluvanna County	51065	932	1	1	0	0	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 36 months of age: Virginia, 2015

Locality	FIPS	Population < 36 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Franklin County	51067	1,881	2	1	0	1	0	0
Frederick County	51069	2,876	0	0	0	0	0	0
Giles County	51071	529	0	0	0	0	0	0
Gloucester County	51073	1,089	5	3	1	1	0	0
Goochland County	51075	606	1	1	0	0	0	0
Grayson County	51077	416	0	0	0	0	0	0
Greene County	51079	772	0	0	0	0	0	0
Greensville County	51081	282	0	0	0	0	0	0
Halifax County	51083	1,134	1	1	0	0	0	0
Hanover County	51085	3,047	1	0	0	1	0	0
Henrico County	51087	12,142	9	3	4	2	0	0
Henry County	51089	1,721	0	0	0	0	0	0
Highland County	51091	43	0	0	0	0	0	0
Isle of Wight County	51093	1,067	0	0	0	0	0	0
James City County	51095	1,985	0	0	0	0	0	0
King and Queen County	51097	212	0	0	0	0	0	0
King George County	51099	1,093	0	0	0	0	0	0
King William County	51101	588	0	0	0	0	0	0
Lancaster County	51103	258	0	0	0	0	0	0
Lee County	51105	792	0	0	0	0	0	0
Loudoun County	51107	15,955	4	3	0	1	0	0
Louisa County	51109	1,213	0	0	0	0	0	0
Lunenburg County	51111	407	1	1	0	0	0	0
Madison County	51113	425	1	1	0	0	0	0
Mathews County	51115	223	1	1	0	0	0	0
Mecklenburg County	51117	924	3	2	1	0	0	0
Middlesex County	51119	271	1	1	0	0	0	0
Montgomery County	51121	2,625	0	0	0	0	0	0
Nelson County	51125	433	0	0	0	0	0	0
New Kent County	51127	562	0	0	0	0	0	0
Northampton County	51131	411	0	0	0	0	0	0
Northumberland County	51133	310	1	1	0	0	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 36 months of age: Virginia, 2015

Locality	FIPS	Population < 36 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Nottoway County	51135	518	1	1	0	0	0	0
Orange County	51137	1,152	1	1	0	0	0	0
Page County	51139	761	1	0	0	1	0	0
Patrick County	51141	535	0	0	0	0	0	0
Pittsylvania County	51143	1,907	1	0	1	0	0	0
Powhatan County	51145	810	1	1	0	0	0	0
Prince Edward County	51147	621	0	0	0	0	0	0
Prince George County	51149	1,161	0	0	0	0	0	0
Prince William County	51153	19,497	8	4	3	1	0	0
Pulaski County	51155	1,041	0	0	0	0	0	0
Rappahannock County	51157	188	0	0	0	0	0	0
Richmond County	51159	230	0	0	0	0	0	0
Roanoke County	51161	2,604	0	0	0	0	0	0
Rockbridge County	51163	603	3	1	1	1	0	0
Rockingham County	51165	2,682	0	0	0	0	0	0
Russell County	51167	916	0	0	0	0	0	0
Scott County	51169	696	0	0	0	0	0	0
Shenandoah County	51171	1,455	1	0	0	1	0	0
Smyth County	51173	1,002	0	0	0	0	0	0
Southampton County	51175	566	0	0	0	0	0	0
Spotsylvania County	51177	4,765	0	0	0	0	0	0
Stafford County	51179	5,085	2	2	0	0	0	0
Surry County	51181	221	0	0	0	0	0	0
Sussex County	51183	326	0	0	0	0	0	0
Tazewell County	51185	1,360	0	0	0	0	0	0
Warren County	51187	1,366	0	0	0	0	0	0
Washington County	51191	1,584	2	1	1	0	0	0
Westmoreland County	51193	527	0	0	0	0	0	0
Wise County	51195	1,406	0	0	0	0	0	0
Wythe County	51197	907	0	0	0	0	0	0
York County	51199	2,214	0	0	0	0	0	0
Alexandria	51510	6,510	11	4	2	5	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 36 months of age: Virginia, 2015

Locality	FIPS	Population < 36 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Bedford	51515	245	1	0	1	0	0	0
Bristol	51520	659	0	0	0	0	0	0
Buena Vista	51530	257	0	0	0	0	0	0
Charlottesville	51540	1,463	3	3	0	0	0	0
Chesapeake	51550	8,444	3	3	0	0	0	0
Colonial Heights	51570	569	0	0	0	0	0	0
Covington	51580	206	0	0	0	0	0	0
Danville	51590	1,629	0	0	0	0	0	0
Emporia	51595	244	0	0	0	0	0	0
Fairfax	51600	759	0	0	0	0	0	0
Falls Church	51610	487	0	0	0	0	0	0
Franklin	51620	380	0	0	0	0	0	0
Fredericksburg	51630	984	4	1	2	1	0	0
Galax	51640	252	0	0	0	0	0	0
Hampton	51650	5,379	5	3	1	1	0	0
Harrisonburg	51660	1,488	1	1	0	0	0	0
Hopewell	51670	1,073	0	0	0	0	0	0
Lexington	51678	111	0	0	0	0	0	0
Lynchburg	51680	2,805	2	2	0	0	0	0
Manassas	51683	1,892	0	0	0	0	0	0
Manassas Park	51685	777	0	0	0	0	0	0
Martinsville	51690	517	0	0	0	0	0	0
Newport News	51700	8,220	9	4	3	2	0	0
Norfolk	51710	10,274	6	3	1	2	0	0
Norton	51720	160	0	0	0	0	0	0
Petersburg	51730	1,316	1	1	0	0	0	0
Poquoson	51735	299	0	0	0	0	0	0
Portsmouth	51740	4,244	3	1	1	1	0	0
Radford	51750	360	0	0	0	0	0	0
Richmond	51760	8,003	12	6	2	4	0	0
Roanoke	51770	4,345	7	3	1	2	1	0
Salem	51775	704	0	0	0	0	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 36 months of age: Virginia, 2015

Locality	FIPS	Population < 36 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Staunton	51790	811	1	1	0	0	0	0
Suffolk	51800	3,446	4	1	1	2	0	0
Virginia Beach	51810	17,628	0	0	0	0	0	0
Waynesboro	51820	931	0	0	0	0	0	0
Williamsburg	51830	264	0	0	0	0	0	0
Winchester	51840	1,096	0	0	0	0	0	0
VIRGINIA		**303,439**	**164**	**90**	**35**	**38**	**1**	**0**

Note: 2010 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 ≥ 10 µg/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 CLIA-approved laboratories to report electronically 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. Regulations only require testing of children determined to be at risk at both 1 and 2 years of age, or up to 6 years if not tested at both 1 and 2 years, or if risk factors change. 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. Data are from the VDH Virginia Electronic Disease Surveillance System (VEDSS).

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 72 months of age: Virginia, 2015

Locality	FIPS	Population < 72 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Accomack County	51001	2,371	1	1	0	0	0	0
Albemarle County	51003	6,687	0	0	0	0	0	0
Alleghany County	51005	957	2	0	1	1	0	0
Amelia County	51007	876	1	1	0	0	0	0
Amherst County	51009	2,101	1	1	0	0	0	0
Appomattox County	51011	993	0	0	0	0	0	0
Arlington County	51013	13,798	3	2	0	1	0	0
Augusta County	51015	4,715	0	0	0	0	0	0
Bath County	51017	196	1	1	0	0	0	0
Bedford County	51019	4,201	2	1	0	1	0	0
Bland County	51021	353	0	0	0	0	0	0
Botetourt County	51023	2,011	0	0	0	0	0	0
Brunswick County	51025	1,024	0	0	0	0	0	0
Buchanan County	51027	1,343	0	0	0	0	0	0
Buckingham County	51029	1,089	1	0	1	0	0	0
Campbell County	51031	3,621	1	1	0	0	0	0
Caroline County	51033	2,417	1	1	0	0	0	0
Carroll County	51035	1,916	1	0	0	1	0	0
Charles City County	51036	368	0	0	0	0	0	0
Charlotte County	51037	858	2	1	1	0	0	0
Chesterfield County	51041	24,257	3	3	0	0	0	0
Clarke County	51043	927	0	0	0	0	0	0
Craig County	51045	319	0	0	0	0	0	0
Culpeper County	51047	3,990	0	0	0	0	0	0
Cumberland County	51049	727	0	0	0	0	0	0
Dickenson County	51051	1,037	0	0	0	0	0	0
Dinwiddie County	51053	1,919	0	0	0	0	0	0
Essex County	51057	796	0	0	0	0	0	0
Fairfax County	51059	87,623	21	13	5	3	0	0
Fauquier County	51061	4,684	1	0	0	1	0	0
Floyd County	51063	1,033	3	2	1	0	0	0
Fluvanna County	51065	1,954	1	1	0	0	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 72 months of age: Virginia, 2015

Locality	FIPS	Population < 72 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Franklin County	51067	3,721	2	1	0	1	0	0
Frederick County	51069	6,046	0	0	0	0	0	0
Giles County	51071	1,114	0	0	0	0	0	0
Gloucester County	51073	2,259	6	3	1	2	0	0
Goochland County	51075	1,247	1	1	0	0	0	0
Grayson County	51077	825	0	0	0	0	0	0
Greene County	51079	1,592	0	0	0	0	0	0
Greensville County	51081	596	0	0	0	0	0	0
Halifax County	51083	2,409	1	1	0	0	0	0
Hanover County	51085	6,775	1	0	0	1	0	0
Henrico County	51087	24,540	12	4	5	3	0	0
Henry County	51089	3,537	0	0	0	0	0	0
Highland County	51091	85	0	0	0	0	0	0
Isle of Wight County	51093	2,296	0	0	0	0	0	0
James City County	51095	4,151	0	0	0	0	0	0
King and Queen County	51097	446	0	0	0	0	0	0
King George County	51099	2,184	0	0	0	0	0	0
King William County	51101	1,214	2	2	0	0	0	0
Lancaster County	51103	571	0	0	0	0	0	0
Lee County	51105	1,592	1	1	0	0	0	0
Loudoun County	51107	33,428	4	3	0	1	0	0
Louisa County	51109	2,425	0	0	0	0	0	0
Lunenburg County	51111	818	1	1	0	0	0	0
Madison County	51113	909	1	1	0	0	0	0
Mathews County	51115	418	1	1	0	0	0	0
Mecklenburg County	51117	1,930	3	2	1	0	0	0
Middlesex County	51119	529	1	1	0	0	0	0
Montgomery County	51121	5,247	0	0	0	0	0	0
Nelson County	51125	881	0	0	0	0	0	0
New Kent County	51127	1,197	0	0	0	0	0	0
Northampton County	51131	815	0	0	0	0	0	0
Northumberland County	51133	631	2	2	0	0	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 72 months of age: Virginia, 2015

Locality	FIPS	Population < 72 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Nottoway County	51135	1,073	2	2	0	0	0	0
Orange County	51137	2,416	1	1	0	0	0	0
Page County	51139	1,597	1	0	0	1	0	0
Patrick County	51141	1,111	0	0	0	0	0	0
Pittsylvania County	51143	3,984	2	0	2	0	0	0
Powhatan County	51145	1,739	1	1	0	0	0	0
Prince Edward County	51147	1,243	0	0	0	0	0	0
Prince George County	51149	2,369	0	0	0	0	0	0
Prince William County	51153	39,746	9	5	3	1	0	0
Pulaski County	51155	2,086	0	0	0	0	0	0
Rappahannock County	51157	393	0	0	0	0	0	0
Richmond County	51159	497	0	0	0	0	0	0
Roanoke County	51161	5,594	0	0	0	0	0	0
Rockbridge County	51163	1,292	3	1	1	1	0	0
Rockingham County	51165	5,552	0	0	0	0	0	0
Russell County	51167	1,864	0	0	0	0	0	0
Scott County	51169	1,391	0	0	0	0	0	0
Shenandoah County	51171	2,935	1	0	0	1	0	0
Smyth County	51173	2,081	0	0	0	0	0	0
Southampton County	51175	1,158	0	0	0	0	0	0
Spotsylvania County	51177	10,056	0	0	0	0	0	0
Stafford County	51179	10,647	2	2	0	0	0	0
Surry County	51181	437	0	0	0	0	0	0
Sussex County	51183	646	0	0	0	0	0	0
Tazewell County	51185	2,859	0	0	0	0	0	0
Warren County	51187	2,901	0	0	0	0	0	0
Washington County	51191	3,268	2	1	1	0	0	0
Westmoreland County	51193	1,112	0	0	0	0	0	0
Wise County	51195	2,774	0	0	0	0	0	0
Wythe County	51197	1,930	1	1	0	0	0	0
York County	51199	4,681	0	0	0	0	0	0
Alexandria	51510	11,391	15	7	3	5	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 72 months of age: Virginia, 2015

Locality	FIPS	Population < 72 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Bedford	51515	476	1	0	1	0	0	0
Bristol	51520	1,311	0	0	0	0	0	0
Buena Vista	51530	483	0	0	0	0	0	0
Charlottesville	51540	2,661	3	3	0	0	0	0
Chesapeake	51550	17,400	6	5	0	1	0	0
Colonial Heights	51570	1,152	0	0	0	0	0	0
Covington	51580	404	0	0	0	0	0	0
Danville	51590	3,205	2	1	1	0	0	0
Emporia	51595	513	0	0	0	0	0	0
Fairfax	51600	1,515	0	0	0	0	0	0
Falls Church	51610	931	0	0	0	0	0	0
Franklin	51620	751	0	0	0	0	0	0
Fredericksburg	51630	1,910	6	3	2	1	0	0
Galax	51640	485	0	0	0	0	0	0
Hampton	51650	10,539	6	3	2	1	0	0
Harrisonburg	51660	2,888	2	1	0	1	0	0
Hopewell	51670	2,056	0	0	0	0	0	0
Lexington	51678	233	0	0	0	0	0	0
Lynchburg	51680	5,382	2	2	0	0	0	0
Manassas	51683	3,824	0	0	0	0	0	0
Manassas Park	51685	1,520	0	0	0	0	0	0
Martinsville	51690	998	0	0	0	0	0	0
Newport News	51700	15,971	13	5	5	3	0	0
Norfolk	51710	19,495	6	3	1	2	0	0
Norton	51720	289	0	0	0	0	0	0
Petersburg	51730	2,469	2	1	0	0	1	0
Poquoson	51735	695	0	0	0	0	0	0
Portsmouth	51740	8,343	5	1	1	3	0	0
Radford	51750	715	0	0	0	0	0	0
Richmond	51760	14,987	17	9	3	5	0	0
Roanoke	51770	8,168	10	5	4	0	1	0
Salem	51775	1,445	0	0	0	0	0	0

Reported confirmed elevated blood lead levels (EBLLs), by locality, children under 72 months of age: Virginia, 2015

Locality	FIPS	Population < 72 Months	Number Confirmed Elevated	Confirmed Blood Lead Level Category				
				10-14 µg/dL	15-19 µg/dL	20-44 µg/dL	45-69 µg/dL	≥ 70 µg/dL
Staunton	51790	1,594	1	1	0	0	0	0
Suffolk	51800	7,283	4	1	1	2	0	0
Virginia Beach	51810	34,899	0	0	0	0	0	0
Waynesboro	51820	1,851	0	0	0	0	0	0
Williamsburg	51830	498	0	0	0	0	0	0
Winchester	51840	2,144	0	0	0	0	0	0
VIRGINIA		**611,895**	**211**	**118**	**47**	**44**	**2**	**0**

Note: 2010 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 ≥ 10 µg/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 CLIA-approved laboratories to report electronically 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. Regulations only require testing of children determined to be at risk at both 1 and 2 years of age, or up to 6 years if not tested at both 1 and 2 years, or if risk factors change. 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. Data are from the VDH Virginia Electronic Disease Surveillance System (VEDSS).

VIRGINIA GUIDELINES

TESTING VIRGINIA CHILDREN FOR LEAD EXPOSURE [1]

ALL MEDICAID ENROLLED CHILDREN ARE REQUIRED TO BE TESTED AT BOTH 12 AND 24 MONTHS OF AGE

To determine risk for other children:
Blood lead levels shall be obtained in children at ages 12 ***and*** *24 months of age if they meet ANY one of the criteria noted in the box below. In addition, children over the age of 24 months up to 72 months of age who have not previously been tested and meet ANY one of the criteria in the box below, or experienced a change since testing that has resulted in an increased risk, shall also be tested.*

1. Eligible for or receiving benefits from Medicaid or WIC;
2. Living in or regularly visiting housing or child care facility built before 1960;
3. Living in or regularly visiting housing built before 1978 with peeling or chipping paint or recent (within the last 6 months), ongoing or planned renovations;
4. Living with or regularly visiting housing in which one or more persons have evidence of lead exposure;
5. Living with an adult whose job or hobby involves exposure to lead;
6. Living near an active lead smelter, battery recycling plant, or other industry likely to release lead;
7. The child's parent or guardian requests the child's blood be tested due to any suspected exposure;
8. Recent refugee, immigrant, or child adopted from outside the U.S.

- *Take careful history regarding possible lead exposure at each well-child visit, and provide lead poisoning prevention materials.*
- *Testing may be performed by venipuncture or capillary. Filter paper collection 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 approved by CDC and the FDA may be used as a "screening" test, and any level above5 µg/dL needs to be confirmed by submitting a venous sample to a CLIA-approved laboratory.*

SCHEDULE FOR OBTAINING A CONFIRMATORY SAMPLE [1]

SCREENING TEST RESULT (µg/dL)	PERFORM CONFIRMATORY TEST
5-9	Within 1 to 3 months
10-44	Within 1 week to 1 month (the higher the screening test, the sooner the confirmatory test)
45-59	Within 48 hours
60-69	Within 24 hours
≥ 70	Immediately as an emergency lab test

NOTE: *There is no safe lead level, and providers should communicate with parents/guardian any detectable results, and use best medical judgment to assess each child and coordinate follow up testing and care coordination. A venous sample is required for environmental investigations at levels of 20 ug/dL or persistent or rising 15-19 µg/dL.*

GUIDELINES FOR MANAGEMENT OF CHILDREN WITH CONFIRMED BLOOD LEAD LEVELS ≥ 5µg/dL [2, 3, 4]

BLOOD LEAD LEVEL (µg/dL)	ACTION	TIME FRAME
5-9	**Child's healthcare provider**: • Provides educational materials to include dietary and environmental information • Monitors blood lead level with follow up test	Within 3 months
10-14	**Case manager coordinates with child's healthcare provider:** • Provides educational materials to include dietary and environmental information • Perform nursing assessment • 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 20-44 µg/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**: • Coordinate a timely environmental investigation	Within 1 week
45-69	Above actions, **plus**: • Consider chelation	Within 48 hours
70 and above	Above actions, **plus**: Hospitalize child and begin medical treatment (chelation therapy as appropriate) immediately. **Contact Emergency Lead Healthcare 866-SOS-LEAD (866-767-5323) for consultation and assistance**	Immediate, Within 24 hours

REFERENCES

1. § 32.1-46.1 of the Code of Virginia. Board to establish protocol for identification of children with elevated blood-lead levels.

2. 12VAC5-90 et seq.; Regulations for Disease Reporting and Control (12VAC5-90-215. Schedule and criteria for and confirmation of blood lead testing and information to be provided).

3. Centers for Disease Control and Prevention. *Preventing Lead Poisoning in Young Children.* August 2005.

4. Virginia Lead Elimination Work Group Medical/Education Committee; Recommendations. February 2016.

5. Centers for Disease Control and Prevention, Advisory Committee on Childhood Lead Poisoning. *Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention.* January 4, 2012.

LEAD-SAFE VIRGINIA PROGRAM
Childhood Lead Poisoning Prevention Program
Director: Nancy Van Voorhis, M.P.H., MT (ASCP),
Healthy Homes Specialist, NEHA, NCHH

For more information and statistics, please visit our website
at http://www.vdh.virginia.gov/leadsafe//
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