# Lead-Safe Virginia Program

Childhood Lead Poisoning Prevention Program
2009 Surveillance Summary Report


VDH VIRGINIA DEPARTMENT OF HEALTH
*Protecting You and Your Environment*

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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.

## *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.*

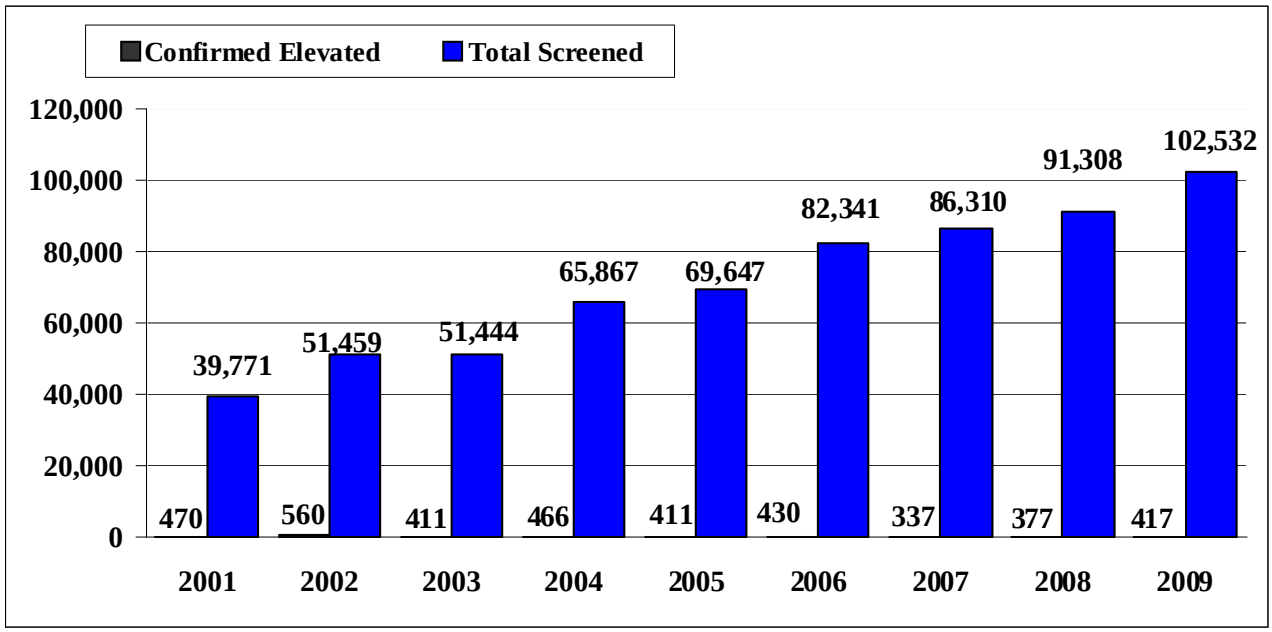
## *2009 Data and Statistics*

This report summarizes the 2009 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 ≥ 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.

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 2009, 102,532 children under 6 years (72 months) of age were tested for lead exposure. Of these, 417 children were reported as having a confirmed elevated blood lead test. Of the high-risk age category, under 36 months, 53,505 were tested with 242 having a confirmed EBLL. Medicaid enrolled children under 36 months of age accounted for 62% of the children tested in this high-risk age category, and 168 of those were confirmed EBLLs. This accounts for 69% of the confirmed EBLLs in this age category. The CDC has determined that children enrolled in Medicaid are at high-risk for lead exposure for various reasons. The Lead Safe Virginia 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 is increasing provider compliance in Virginia. During 2009, there was a 58% increase in the testing rate for Virginia children under 36 months of age enrolled in Medicaid. (Figure 3).

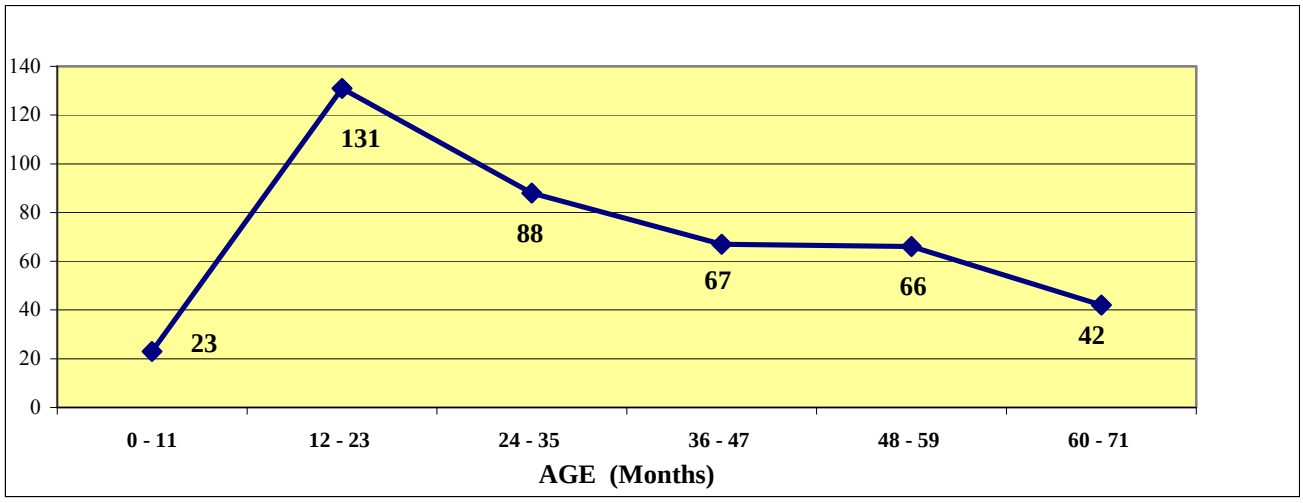
Overall there has been a steady increase in the number of children tested for EBLLs between 2001 and 2009. (Figure 1) This increase can be partially attributed to the testing and reporting requirements of 12 VAC 5-120, "Regulations for testing children for elevated blood lead levels", made effective July 1, 2001. During 2009 these regulations were amended to: 1) include CLIA-waived point of care providers in the definition of a laboratory, 2) allow the use of a CLIA-waived, CDC approved lead testing device, and 3) require providers to provide lead poisoning prevention materials at all well-child physicals on children under 72 months of age.

Figure 1. Statewide Testing Results for Virginia Children < 72 months, 2001-2009



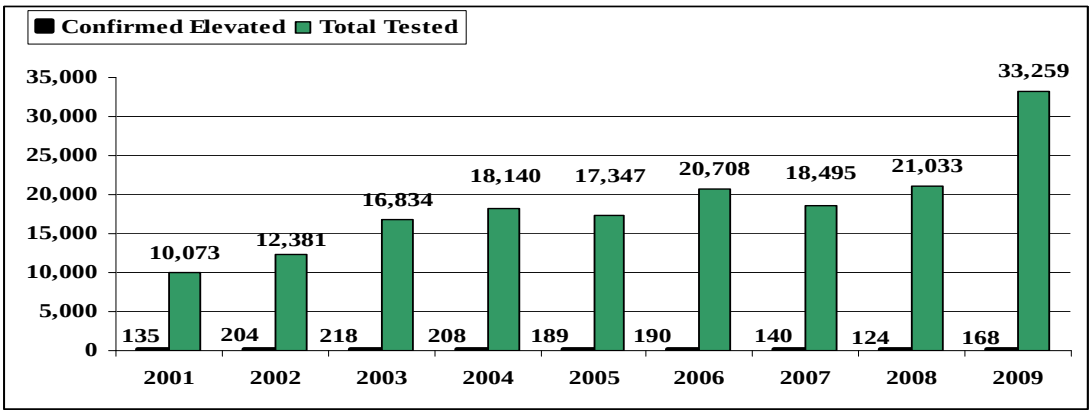

Note: Results based on one test per child per year. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require the reporting of all lead tests performed on children under 72 months of age. The number of 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 ≥ 10 µg/dL, by age category: Virginia, 2009




Note: 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 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. Testing results for Medicaid enrolled children < 36 months of age, Virginia 2001-2009




Note: 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 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 – 2009

| | 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 | 242 |
| 2006 | 175 | 38 | 35 | 2 | 0 | 252 |
| 2007 | 132 | 52 | 32 | 1 | 0 | 217 |
| 2008 | 140 | 47 | 29 | 1 | 0 | 217 |
| 2009 | 161 | 38 | 38 | 5 | 0 | 242 |
| < 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 |
| 2009 | 286 | 63 | 61 | 7 | 0 | 417 |

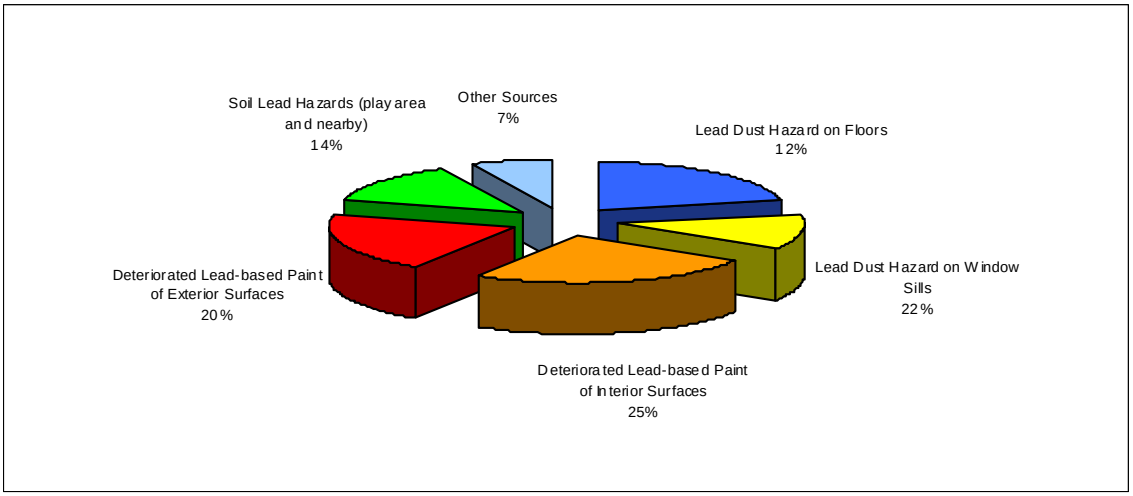
Note: A 'confirmed' elevated blood lead level (EBLL) is defined as a single elevated venous test ≥ 10 µg/dL or two elevated capillary tests within 84 days/12 weeks and is only counted once in the year in which it initially occurred. The reporting of elevated blood lead levels is required under the Regulations for Disease Reporting and Control. Effective July 1, 2001, regulations require 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, 2009

| | |
|---|---|
| Number of EBLLs 20 µg/dl or above identified as new cases | 55 |
| Number of EBLLs increasing or persistent 15-19µg/dl | 7 |
| Number of environmental intervention blood lead investigations (EIBLI) required | 52 |
| Number of environmental investigations performed *(Includes secondary addresses)* | 66 |
| Number of EIBLI not performed (family moved-3, family refused services-1, unable to reach family-1, RHA property-1) | 6 |
| Number of "newcomer/refugee" children with EBLL requiring EIBLI | 4 |
| Lead dust hazard on floors | 19 |
| Lead dust hazard on window sills | 33 |
| Lead dust hazard on window wells | 4 |
| Lead dust hazard other area (hall wall, computer stand, vent top, HVAC, mini-blind, porch rail-2) | 7 |
| Deteriorated lead based paint on interior surfaces | 38 |
| Deteriorated lead based paint on exterior surfaces | 31 |
| Soil lead hazards identified (children's play area) | 14 |
| Soil lead hazards identified (non play areas) | 7 |
| Lead in water above 15 ppb | 0 |
| Occupational exposure from parent or caregiver | 0 |
| Mini blinds | 4 |
| Kohl (eye-liner from Morocco) | 2 |
| Home remedies | 1 |
| Other (metal skewers, metal chain, spice, pottery imported from Mexico) | 4 |

Note: Environmental intervention blood lead investigations are performed on all confirmed venous elevated blood lead levels ≥ 20 µg/dL or persistent confirmed blood lead levels of 15 to 19 µg/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. Each source of exposure (dust etc.) was only counted once per address.

Figure 4. Lead hazards identified, children < 72 months of age: Virginia, 2009



**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 36 months of age: Virginia, 2009**

| Locality | FIPS | Population < 36 Months | Number Tested | Testing Rate/1000^ | Number Confirmed Elevated | Percent 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 | 1,401 | 724 | 517 | 6 | 0.8% | 4 | 2 | 0 | 0 | 0 |
| Albemarle County | 51003 | 2,965 | 572 | 193 | 3 | 0.5% | 2 | 0 | 1 | 0 | 0 |
| Alleghany County | 51005 | 428 | 81 | 189 | 1 | 1.2% | 0 | 0 | 1 | 0 | 0 |
| Amelia County | 51007 | 423 | 71 | 168 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Amherst County | 51009 | 1,055 | 224 | 212 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Appomattox County | 51011 | 500 | 127 | 254 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Arlington County | 51013 | 6,564 | 2,254 | 343 | 7 | 0.3% | 6 | 1 | 0 | 0 | 0 |
| Augusta County | 51015 | 2,197 | 435 | 198 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Bath County | 51017 | 131 | 30 | 229 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Bedford County | 51019 | 1,996 | 258 | 129 | 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 | 171 | 162 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Brunswick County | 51025 | 546 | 166 | 304 | 1 | 0.6% | 1 | 0 | 0 | 0 | 0 |
| Buchanan County | 51027 | 738 | 84 | 114 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Buckingham County | 51029 | 419 | 128 | 305 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Campbell County | 51031 | 1,748 | 263 | 150 | 2 | 0.8% | 0 | 1 | 1 | 0 | 0 |
| Caroline County | 51033 | 858 | 222 | 259 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Carroll County | 51035 | 992 | 199 | 201 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Charles City County | 51036 | 242 | 30 | 124 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Charlotte County | 51037 | 398 | 116 | 291 | 3 | 2.6% | 1 | 0 | 0 | 2 | 0 |
| Chesterfield County | 51041 | 10,159 | 2,123 | 209 | 1 | 0.0% | 1 | 0 | 0 | 0 | 0 |
| Clarke County | 51043 | 369 | 48 | 130 | 1 | 2.1% | 0 | 1 | 0 | 0 | 0 |
| Craig County | 51045 | 163 | 19 | 117 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Culpeper County | 51047 | 1,315 | 729 | 554 | 1 | 0.1% | 1 | 0 | 0 | 0 | 0 |
| Cumberland County | 51049 | 350 | 53 | 151 | 1 | 1.9% | 1 | 0 | 0 | 0 | 0 |
| Dickenson County | 51051 | 535 | 41 | 77 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Dinwiddie County | 51053 | 786 | 87 | 111 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Essex County | 51057 | 314 | 46 | 146 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 36 months of age: Virginia, 2009**

| Locality | FIPS | Population < 36 Months | Number Tested | Testing Rate/1000^ | Number Confirmed Elevated | Percent 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 |
| Fairfax County | 51059 | 40,580 | 6,931 | 171 | 21 | 0.3% | 15 | 2 | 4 | 0 | 0 |
| Fauquier County | 51061 | 2,048 | 410 | 200 | 2 | 0.5% | 1 | 0 | 1 | 0 | 0 |
| Floyd County | 51063 | 462 | 23 | 50 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Fluvanna County | 51065 | 762 | 136 | 178 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Franklin County | 51067 | 1,520 | 115 | 76 | 1 | 0.9% | 1 | 0 | 0 | 0 | 0 |
| Frederick County | 51069 | 2,296 | 306 | 133 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Giles County | 51071 | 581 | 19 | 33 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Gloucester County | 51073 | 1,141 | 82 | 72 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Goochland County | 51075 | 492 | 248 | 504 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Grayson County | 51077 | 507 | 70 | 138 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Greene County | 51079 | 668 | 97 | 145 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Greensville County | 51081 | 261 | 9 | 34 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Halifax County | 51083 | 1,323 | 173 | 131 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Hanover County | 51085 | 3,290 | 550 | 167 | 2 | 0.4% | 2 | 0 | 0 | 0 | 0 |
| Henrico County | 51087 | 10,648 | 2,552 | 240 | 7 | 0.3% | 4 | 1 | 2 | 0 | 0 |
| Henry County | 51089 | 1,920 | 156 | 81 | 2 | 1.3% | 1 | 0 | 1 | 0 | 0 |
| Highland County | 51091 | 58 | 9 | 155 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Isle of Wight County | 51093 | 1,047 | 224 | 214 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| James City County | 51095 | 1,597 | 220 | 138 | 2 | 0.9% | 0 | 2 | 0 | 0 | 0 |
| King and Queen County | 51097 | 220 | 26 | 118 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| King George County | 51099 | 715 | 174 | 243 | 1 | 0.6% | 1 | 0 | 0 | 0 | 0 |
| King William County | 51101 | 517 | 49 | 95 | 1 | 2.0% | 1 | 0 | 0 | 0 | 0 |
| Lancaster County | 51103 | 286 | 50 | 175 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Lee County | 51105 | 808 | 143 | 177 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Loudoun County | 51107 | 9,919 | 976 | 98 | 3 | 0.3% | 3 | 0 | 0 | 0 | 0 |
| Louisa County | 51109 | 939 | 180 | 192 | 1 | 0.6% | 1 | 0 | 0 | 0 | 0 |
| Lunenburg County | 51111 | 393 | 112 | 285 | 2 | 1.8% | 1 | 1 | 0 | 0 | 0 |
| Madison County | 51113 | 391 | 54 | 138 | 1 | 1.9% | 1 | 0 | 0 | 0 | 0 |

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 36 months of age: Virginia, 2009**

| Locality | FIPS | Population < 36 Months | Number Tested | Testing Rate/1000^ | Number Confirmed Elevated | Percent 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 |
| Mathews County | 51115 | 230 | 45 | 196 | 1 | 2.2% | 1 | 0 | 0 | 0 | 0 |
| Mecklenburg County | 51117 | 1,033 | 277 | 268 | 1 | 0.4% | 1 | 0 | 0 | 0 | 0 |
| Middlesex County | 51119 | 211 | 74 | 351 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Montgomery County | 51121 | 2,421 | 62 | 26 | 1 | 1.6% | 0 | 1 | 0 | 0 | 0 |
| Nelson County | 51125 | 469 | 136 | 290 | 2 | 1.5% | 1 | 1 | 0 | 0 | 0 |
| New Kent County | 51127 | 420 | 80 | 190 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Northampton County | 51131 | 437 | 222 | 508 | 2 | 0.9% | 1 | 1 | 0 | 0 | 0 |
| Northumberland County | 51133 | 317 | 46 | 145 | 3 | 6.5% | 0 | 0 | 1 | 2 | 0 |
| Nottoway County | 51135 | 517 | 146 | 282 | 4 | 2.7% | 2 | 0 | 2 | 0 | 0 |
| Orange County | 51137 | 918 | 182 | 198 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Page County | 51139 | 756 | 129 | 171 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Patrick County | 51141 | 675 | 104 | 154 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Pittsylvania County | 51143 | 2,100 | 418 | 199 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Powhatan County | 51145 | 786 | 108 | 137 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Prince Edward County | 51147 | 573 | 269 | 469 | 1 | 0.4% | 1 | 0 | 0 | 0 | 0 |
| Prince George County | 51149 | 1,159 | 76 | 66 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Prince William County | 51153 | 14,421 | 1,881 | 130 | 5 | 0.3% | 4 | 1 | 0 | 0 | 0 |
| Pulaski County | 51155 | 1,149 | 182 | 158 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Rappahannock County | 51157 | 217 | 72 | 332 | 2 | 2.8% | 2 | 0 | 0 | 0 | 0 |
| Richmond County | 51159 | 213 | 35 | 164 | 2 | 5.7% | 2 | 0 | 0 | 0 | 0 |
| Roanoke County | 51161 | 2,627 | 243 | 93 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Rockbridge County | 51163 | 681 | 47 | 69 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Rockingham County | 51165 | 2,512 | 956 | 381 | 3 | 0.3% | 0 | 2 | 1 | 0 | 0 |
| Russell County | 51167 | 919 | 86 | 94 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Scott County | 51169 | 708 | 161 | 227 | 1 | 0.6% | 1 | 0 | 0 | 0 | 0 |
| Shenandoah County | 51171 | 1,126 | 163 | 145 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Smyth County | 51173 | 1,064 | 364 | 342 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Southampton County | 51175 | 532 | 109 | 205 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 36 months of age: Virginia, 2009**

| Locality | FIPS | Population < 36 Months | Number Tested | Testing Rate/1000^ | Number Confirmed Elevated | Percent 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 |
| Spotsylvania County | 51177 | 4,013 | 579 | 144 | 1 | 0.2% | 1 | 0 | 0 | 0 | 0 |
| Stafford County | 51179 | 4,089 | 456 | 112 | 1 | 0.2% | 1 | 0 | 0 | 0 | 0 |
| Surry County | 51181 | 230 | 27 | 117 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Sussex County | 51183 | 375 | 88 | 235 | 1 | 1.1% | 1 | 0 | 0 | 0 | 0 |
| Tazewell County | 51185 | 1,358 | 293 | 216 | 2 | 0.7% | 2 | 0 | 0 | 0 | 0 |
| Warren County | 51187 | 1,255 | 136 | 108 | 2 | 1.5% | 1 | 1 | 0 | 0 | 0 |
| Washington County | 51191 | 1,565 | 68 | 43 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Westmoreland County | 51193 | 551 | 83 | 151 | 1 | 1.2% | 1 | 0 | 0 | 0 | 0 |
| Wise County | 51195 | 1,382 | 191 | 138 | 1 | 0.5% | 1 | 0 | 0 | 0 | 0 |
| Wythe County | 51197 | 899 | 227 | 253 | 1 | 0.4% | 1 | 0 | 0 | 0 | 0 |
| York County | 51199 | 2,021 | 72 | 36 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Alexandria | 51510 | 5,177 | 1,503 | 290 | 6 | 0.4% | 4 | 1 | 1 | 0 | 0 |
| Bedford | 51515 | 211 | 95 | 450 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Bristol | 51520 | 557 | 64 | 115 | 1 | 1.6% | 0 | 1 | 0 | 0 | 0 |
| Buena Vista | 51530 | 231 | 9 | 39 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Charlottesville | 51540 | 1,237 | 361 | 292 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Chesapeake | 51550 | 8,475 | 1,100 | 130 | 5 | 0.5% | 5 | 0 | 0 | 0 | 0 |
| Colonial Heights | 51570 | 517 | 149 | 288 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Covington | 51580 | 216 | 150 | 694 | 1 | 0.7% | 1 | 0 | 0 | 0 | 0 |
| Danville | 51590 | 1,747 | 770 | 441 | 7 | 0.9% | 6 | 1 | 0 | 0 | 0 |
| Emporia | 51595 | 216 | 121 | 560 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Fairfax | 51600 | 807 | 523 | 648 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Falls Church | 51610 | 344 | 145 | 422 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Franklin | 51620 | 263 | 130 | 494 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Fredericksburg | 51630 | 710 | 182 | 256 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Galax | 51640 | 275 | 186 | 676 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Hampton | 51650 | 5,595 | 872 | 156 | 2 | 0.2% | 1 | 0 | 0 | 1 | 0 |
| Harrisonburg | 51660 | 1,208 | 411 | 340 | 3 | 0.7% | 2 | 1 | 0 | 0 | 0 |

## Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 36 months of age: Virginia, 2009

| Locality | FIPS | Population < 36 Months | Number Tested | Testing Rate/1000^ | Number Confirmed Elevated | Percent 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 |
| Hopewell | 51670 | 986 | 194 | 197 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Lexington | 51678 | 113 | 30 | 265 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Lynchburg | 51680 | 2,297 | 848 | 369 | 2 | 0.2% | 1 | 1 | 0 | 0 | 0 |
| Manassas | 51683 | 1,817 | 742 | 408 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Manassas Park | 51685 | 635 | 330 | 520 | 2 | 0.6% | 1 | 1 | 0 | 0 | 0 |
| Martinsville | 51690 | 529 | 114 | 216 | 3 | 2.6% | 2 | 1 | 0 | 0 | 0 |
| Newport News | 51700 | 8,617 | 1,418 | 165 | 7 | 0.5% | 5 | 1 | 1 | 0 | 0 |
| Norfolk | 51710 | 10,201 | 2,306 | 226 | 10 | 0.4% | 8 | 1 | 1 | 0 | 0 |
| Norton | 51720 | 116 | 29 | 250 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Petersburg | 51730 | 1,313 | 404 | 308 | 10 | 2.5% | 7 | 1 | 2 | 0 | 0 |
| Poquoson | 51735 | 344 | 25 | 73 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Portsmouth | 51740 | 4,374 | 859 | 196 | 4 | 0.5% | 4 | 0 | 0 | 0 | 0 |
| Radford | 51750 | 357 | 37 | 104 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Richmond | 51760 | 7,608 | 2,990 | 393 | 40 | 1.3% | 24 | 4 | 12 | 0 | 0 |
| Roanoke | 51770 | 3,837 | 683 | 178 | 14 | 2.0% | 11 | 2 | 1 | 0 | 0 |
| Salem | 51775 | 671 | 159 | 237 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Staunton | 51790 | 775 | 429 | 554 | 2 | 0.5% | 1 | 1 | 0 | 0 | 0 |
| Suffolk | 51800 | 2,740 | 532 | 194 | 3 | 0.6% | 2 | 1 | 0 | 0 | 0 |
| Virginia Beach | 51810 | 18,395 | 1,669 | 91 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Waynesboro | 51820 | 786 | 352 | 448 | 6 | 1.7% | 2 | 1 | 3 | 0 | 0 |
| Williamsburg | 51830 | 195 | 1 | 5 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Winchester | 51840 | 853 | 261 | 306 | 3 | 1.1% | 0 | 1 | 2 | 0 | 0 |
| **VIRGINIA** | | **276,483** | **53,505** | **194** | **242** | **0.5%** | **161** | **38** | **38** | **5** | **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 ≥ 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 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. ^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.

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 72 months of age: Virginia, 2009**

| Locality | FIPS | Population < 72 Months | Number Tested | Number Confirmed Elevated | Percent 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 | 2,792 | 986 | 7 | 0.7% | 5 | 2 | 0 | 0 | 0 |
| Albemarle County | 51003 | 6,000 | 700 | 5 | 0.7% | 4 | 0 | 1 | 0 | 0 |
| Alleghany County | 51005 | 905 | 100 | 1 | 1.0% | 0 | 0 | 1 | 0 | 0 |
| Amelia County | 51007 | 870 | 131 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Amherst County | 51009 | 2,234 | 291 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Appomattox County | 51011 | 1,047 | 171 | 1 | 0.6% | 1 | 0 | 0 | 0 | 0 |
| Arlington County | 51013 | 12,144 | 3,008 | 11 | 0.4% | 10 | 1 | 0 | 0 | 0 |
| Augusta County | 51015 | 4,521 | 640 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Bath County | 51017 | 279 | 44 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Bedford County | 51019 | 4,290 | 342 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Bland County | 51021 | 379 | 63 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Botetourt County | 51023 | 2,107 | 335 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Brunswick County | 51025 | 1,124 | 347 | 1 | 0.3% | 1 | 0 | 0 | 0 | 0 |
| Buchanan County | 51027 | 1,583 | 249 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Buckingham County | 51029 | 926 | 193 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Campbell County | 51031 | 3,678 | 331 | 3 | 0.9% | 1 | 1 | 1 | 0 | 0 |
| Caroline County | 51033 | 1,690 | 367 | 1 | 0.3% | 1 | 0 | 0 | 0 | 0 |
| Carroll County | 51035 | 1,998 | 273 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Charles City County | 51036 | 472 | 59 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Charlotte County | 51037 | 863 | 178 | 3 | 1.7% | 1 | 0 | 0 | 2 | 0 |
| Chesterfield County | 51041 | 21,322 | 3,618 | 7 | 0.2% | 4 | 2 | 1 | 0 | 0 |
| Clarke County | 51043 | 835 | 91 | 2 | 2.2% | 1 | 1 | 0 | 0 | 0 |
| Craig County | 51045 | 356 | 35 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Culpeper County | 51047 | 2,660 | 1,054 | 2 | 0.2% | 2 | 0 | 0 | 0 | 0 |
| Cumberland County | 51049 | 689 | 72 | 1 | 1.4% | 1 | 0 | 0 | 0 | 0 |
| Dickenson County | 51051 | 1,038 | 88 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Dinwiddie County | 51053 | 1,650 | 179 | 2 | 1.1% | 2 | 0 | 0 | 0 | 0 |
| Essex County | 51057 | 635 | 91 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 72 months of age: Virginia, 2009**

| Locality | FIPS | Population < 72 Months | Number Tested | Number Confirmed Elevated | Percent 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 |
| Fairfax County | 51059 | 81,675 | 12,036 | 31 | 0.3% | 23 | 3 | 5 | 0 | 0 |
| Fauquier County | 51061 | 4,256 | 613 | 4 | 0.7% | 3 | 0 | 1 | 0 | 0 |
| Floyd County | 51063 | 950 | 69 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Fluvanna County | 51065 | 1,567 | 167 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Franklin County | 51067 | 3,147 | 210 | 2 | 1.0% | 1 | 1 | 0 | 0 | 0 |
| Frederick County | 51069 | 4,657 | 518 | 1 | 0.2% | 1 | 0 | 0 | 0 | 0 |
| Giles County | 51071 | 1,138 | 74 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Gloucester County | 51073 | 2,483 | 172 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Goochland County | 51075 | 1,044 | 371 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Grayson County | 51077 | 1,061 | 100 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Greene County | 51079 | 1,372 | 183 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Greensville County | 51081 | 528 | 15 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Halifax County | 51083 | 2,714 | 244 | 1 | 0.4% | 0 | 0 | 1 | 0 | 0 |
| Hanover County | 51085 | 6,872 | 995 | 2 | 0.2% | 2 | 0 | 0 | 0 | 0 |
| Henrico County | 51087 | 21,575 | 4,338 | 11 | 0.3% | 7 | 1 | 3 | 0 | 0 |
| Henry County | 51089 | 3,911 | 231 | 3 | 1.3% | 2 | 0 | 1 | 0 | 0 |
| Highland County | 51091 | 112 | 12 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Isle of Wight County | 51093 | 2,190 | 344 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| James City County | 51095 | 3,307 | 351 | 3 | 0.9% | 1 | 2 | 0 | 0 | 0 |
| King and Queen County | 51097 | 451 | 53 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| King George County | 51099 | 1,510 | 271 | 2 | 0.7% | 1 | 1 | 0 | 0 | 0 |
| King William County | 51101 | 1,121 | 124 | 1 | 0.8% | 1 | 0 | 0 | 0 | 0 |
| Lancaster County | 51103 | 577 | 111 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Lee County | 51105 | 1,648 | 343 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Loudoun County | 51107 | 19,682 | 1,877 | 3 | 0.2% | 3 | 0 | 0 | 0 | 0 |
| Louisa County | 51109 | 1,904 | 305 | 2 | 0.7% | 2 | 0 | 0 | 0 | 0 |
| Lunenburg County | 51111 | 784 | 187 | 3 | 1.6% | 2 | 1 | 0 | 0 | 0 |
| Madison County | 51113 | 864 | 93 | 1 | 1.1% | 1 | 0 | 0 | 0 | 0 |

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 72 months of age: Virginia, 2009**

| Locality | FIPS | Population < 72 Months | Number Tested | Number Confirmed Elevated | Percent 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 |
| Mathews County | 51115 | 504 | 70 | 1 | 1.4% | 1 | 0 | 0 | 0 | 0 |
| Mecklenburg County | 51117 | 2,093 | 527 | 4 | 0.8% | 3 | 1 | 0 | 0 | 0 |
| Middlesex County | 51119 | 452 | 121 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Montgomery County | 51121 | 4,758 | 181 | 2 | 1.1% | 0 | 2 | 0 | 0 | 0 |
| Nelson County | 51125 | 927 | 198 | 2 | 1.0% | 1 | 1 | 0 | 0 | 0 |
| New Kent County | 51127 | 927 | 152 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Northampton County | 51131 | 867 | 277 | 3 | 1.1% | 2 | 1 | 0 | 0 | 0 |
| Northumberland County | 51133 | 658 | 101 | 5 | 5.0% | 0 | 0 | 3 | 2 | 0 |
| Nottoway County | 51135 | 1,057 | 240 | 9 | 3.8% | 6 | 0 | 3 | 0 | 0 |
| Orange County | 51137 | 1,856 | 303 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Page County | 51139 | 1,599 | 186 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Patrick County | 51141 | 1,359 | 120 | 1 | 0.8% | 1 | 0 | 0 | 0 | 0 |
| Pittsylvania County | 51143 | 4,194 | 738 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Powhatan County | 51145 | 1,589 | 198 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Prince Edward County | 51147 | 1,178 | 333 | 1 | 0.3% | 1 | 0 | 0 | 0 | 0 |
| Prince George County | 51149 | 2,402 | 152 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Prince William County | 51153 | 28,789 | 3,503 | 7 | 0.2% | 6 | 1 | 0 | 0 | 0 |
| Pulaski County | 51155 | 2,339 | 357 | 1 | 0.3% | 0 | 0 | 1 | 0 | 0 |
| Rappahannock County | 51157 | 420 | 105 | 2 | 1.9% | 2 | 0 | 0 | 0 | 0 |
| Richmond County | 51159 | 430 | 67 | 2 | 3.0% | 2 | 0 | 0 | 0 | 0 |
| Roanoke County | 51161 | 5,587 | 413 | 1 | 0.2% | 0 | 1 | 0 | 0 | 0 |
| Rockbridge County | 51163 | 1,351 | 69 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Rockingham County | 51165 | 5,163 | 1,185 | 4 | 0.3% | 1 | 2 | 1 | 0 | 0 |
| Russell County | 51167 | 1,955 | 191 | 1 | 0.5% | 1 | 0 | 0 | 0 | 0 |
| Scott County | 51169 | 1,487 | 303 | 1 | 0.3% | 1 | 0 | 0 | 0 | 0 |
| Shenandoah County | 51171 | 2,379 | 259 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Smyth County | 51173 | 2,158 | 465 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Southampton County | 51175 | 1,070 | 153 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 72 months of age: Virginia, 2009**

| Locality | FIPS | Population < 72 Months | Number Tested | Number Confirmed Elevated | Percent 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 |
| Spotsylvania County | 51177 | 8,430 | 1,263 | 3 | 0.2% | 2 | 0 | 1 | 0 | 0 |
| Stafford County | 51179 | 8,810 | 1,032 | 4 | 0.4% | 4 | 0 | 0 | 0 | 0 |
| Surry County | 51181 | 477 | 47 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Sussex County | 51183 | 713 | 185 | 2 | 1.1% | 2 | 0 | 0 | 0 | 0 |
| Tazewell County | 51185 | 2,879 | 657 | 2 | 0.3% | 2 | 0 | 0 | 0 | 0 |
| Warren County | 51187 | 2,576 | 212 | 2 | 0.9% | 1 | 1 | 0 | 0 | 0 |
| Washington County | 51191 | 3,147 | 95 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Westmoreland County | 51193 | 1,046 | 171 | 1 | 0.6% | 1 | 0 | 0 | 0 | 0 |
| Wise County | 51195 | 2,802 | 338 | 1 | 0.3% | 1 | 0 | 0 | 0 | 0 |
| Wythe County | 51197 | 1,823 | 420 | 1 | 0.2% | 1 | 0 | 0 | 0 | 0 |
| York County | 51199 | 4,439 | 123 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Alexandria | 51510 | 9,262 | 2,266 | 8 | 0.4% | 6 | 1 | 1 | 0 | 0 |
| Bedford | 51515 | 424 | 144 | 1 | 0.7% | 0 | 0 | 0 | 1 | 0 |
| Bristol | 51520 | 1,114 | 125 | 2 | 1.6% | 0 | 1 | 1 | 0 | 0 |
| Buena Vista | 51530 | 461 | 21 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Charlottesville | 51540 | 2,368 | 427 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Chesapeake | 51550 | 17,265 | 1,761 | 6 | 0.3% | 5 | 1 | 0 | 0 | 0 |
| Colonial Heights | 51570 | 1,113 | 275 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Covington | 51580 | 471 | 193 | 1 | 0.5% | 1 | 0 | 0 | 0 | 0 |
| Danville | 51590 | 3,502 | 1,350 | 16 | 1.2% | 13 | 2 | 1 | 0 | 0 |
| Emporia | 51595 | 436 | 300 | 2 | 0.7% | 2 | 0 | 0 | 0 | 0 |
| Fairfax | 51600 | 1,538 | 819 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Falls Church | 51610 | 690 | 198 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Franklin | 51620 | 538 | 174 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Fredericksburg | 51630 | 1,332 | 408 | 1 | 0.2% | 1 | 0 | 0 | 0 | 0 |
| Galax | 51640 | 525 | 259 | 1 | 0.4% | 1 | 0 | 0 | 0 | 0 |
| Hampton | 51650 | 11,272 | 1,581 | 3 | 0.2% | 2 | 0 | 0 | 1 | 0 |
| Harrisonburg | 51660 | 2,281 | 543 | 4 | 0.7% | 3 | 1 | 0 | 0 | 0 |

**Reported number of children tested for elevated blood lead levels (EBLLs), by locality of residence, under 72 months of age: Virginia, 2009**

| Locality | FIPS | Population < 72 Months | Number Tested | Number Confirmed Elevated | Percent 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 |
| Hopewell | 51670 | 2,020 | 424 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Lexington | 51678 | 247 | 49 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Lynchburg | 51680 | 4,660 | 1,062 | 5 | 0.5% | 3 | 1 | 0 | 1 | 0 |
| Manassas | 51683 | 3,636 | 1,327 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Manassas Park | 51685 | 1,235 | 570 | 2 | 0.4% | 1 | 1 | 0 | 0 | 0 |
| Martinsville | 51690 | 1,051 | 155 | 3 | 1.9% | 2 | 1 | 0 | 0 | 0 |
| Newport News | 51700 | 17,107 | 2,177 | 13 | 0.6% | 10 | 1 | 2 | 0 | 0 |
| Norfolk | 51710 | 19,719 | 3,806 | 21 | 0.6% | 17 | 2 | 2 | 0 | 0 |
| Norton | 51720 | 255 | 54 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Petersburg | 51730 | 2,610 | 880 | 18 | 2.0% | 9 | 4 | 5 | 0 | 0 |
| Poquoson | 51735 | 738 | 37 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Portsmouth | 51740 | 8,555 | 1,443 | 8 | 0.6% | 8 | 0 | 0 | 0 | 0 |
| Radford | 51750 | 661 | 89 | 1 | 1.1% | 1 | 0 | 0 | 0 | 0 |
| Richmond | 51760 | 14,788 | 5,632 | 78 | 1.4% | 52 | 9 | 17 | 0 | 0 |
| Roanoke | 51770 | 7,453 | 1,440 | 19 | 1.3% | 14 | 4 | 1 | 0 | 0 |
| Salem | 51775 | 1,479 | 358 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Staunton | 51790 | 1,493 | 572 | 3 | 0.5% | 1 | 1 | 1 | 0 | 0 |
| Suffolk | 51800 | 5,586 | 950 | 11 | 1.2% | 6 | 4 | 1 | 0 | 0 |
| Virginia Beach | 51810 | 37,054 | 2,685 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Waynesboro | 51820 | 1,546 | 544 | 6 | 1.1% | 2 | 1 | 3 | 0 | 0 |
| Williamsburg | 51830 | 370 | 4 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| Winchester | 51840 | 1,722 | 437 | 4 | 0.9% | 1 | 1 | 2 | 0 | 0 |
| Unknown * | | | 13,040 | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 |
| **VIRGINIA** | | **557,454** | **102,532** | **417** | **0.4%** | **287** | **62** | **61** | **7** | **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 ≥ 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 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. ^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.

# 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?
2. 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 *within:* |
|---|---|
| 10-19^ | Repeat blood test within 30 days to assure lead level is not rising<br>Before 3 months |
| 20-44 | 7-30 days<br>(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 ≥10 µg/dL. 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 A venous sample is required for environmental investigations. Virginia regulations require reporting of blood lead levels ≥10 µg/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<br>• Follow-up blood lead testing within 30 days to assure not rising<br>• Refer for WIC and social services, if needed | Within 30 days |
| 15-19 | • Above actions, plus:<br>• 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:<br>• Provide coordination of care (case management)<br>• Provide environmental investigation and control lead hazards | Within 1 week |
| 45-69 | • Above actions | Within 48 hours |
| 70 and above | • Above actions, plus:<br>• Hospitalize child and begin medical treatment (chelation therapy as appropriate) immediately.<br>• Contact Emergency Lead Healthcare line below. | Within 24 hours |

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".

## 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 EH06-60204CONT and the Virginia Department of Health. Revised May 2009.

## Virginia High-Risk Zip Codes*

| 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 | Fauquier | 23661 | 23944 | 23504 | Prince Edward | 22812 | 23846 |
| 23308 | 24430 | 23937 | 22639 | 23665 | 23952 | 23505 | 23901 | 22815 | 23881 |
| 23336 | 24432 | 23962 | 22643 | Hanover | 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 | Henrico | 24503 | 23510 | Prince William | 22834 | 23890 |
| 23395 | 24476 | Chesapeake City | 24091 | 23226 | 24504 | 23511 | 22134 | 22841 | Tazewell |
| 23399 | 24479 | 23324 | 24105 | 23227 | Madison | 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 | Bath | 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 | Frederick | 24413 | Mathews | 23413 | 22716 | 24245 | Warren |
| 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 | Bristol | 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 | Dinwiddie | 23153 | King William | Montgomery | 22851 | 24016 | 24375 | 24285 |
| 24422 | Buckingham | 23830 | Grayson | 23009 | 24138 | Patrick | 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.**

**Virginia Department of Health, Revised June 2003**

| 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 | 23219 | 23508 | 23923 | 24216 | 24382 | 24590 |
| 22642 | 22901 | 23220 | 23509 | 23924 | 24219 | 24401 | 24592 |
| 22643 | 22903 | 23221 | 23510 | 23930 | 24221 | 24413 | 24594 |
| 22644 | 22931 | 23222 | 23511 | 23934 | 24226 | 24416 | 24598 |
| 22645 | 22935 | 23223 | 23517 | 23936 | 24230 | 24422 | 24602 |
| 22649 | 22937 | 23224 | 23521 | 23937 | 24236 | 24426 | 24605 |
| 22650 | 22938 | 23225 | 23523 | 23938 | 24237 | 24430 | 24613 |
| 22654 | 22939 | 23226 | 23604 | 23942 | 24245 | 24432 | 24622 |
| 22657 | 22943 | 23227 | 23607 | 23944 | 24250 | 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 | |

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*Virginia Department of Health, Revised June 2003*

**LEAD-SAFE VIRGINIA PROGRAM**
**Childhood Lead Poisoning Prevention Program**
**Director: Nancy Van Voorhis, M.P.H.**

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
Email Nancy.VanVoorhis@vdh.virginia.gov or FAX (804) 864-7723

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