

***VERMONT*2005**

Childhood Lead Poisoning Prevention Program

Annual Report to the Legislature on **18 V.S.A. § 1756**
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DEPARTMENT OF HEALTH
Agency of Human Services

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Introduction

Although progress has been made, childhood lead poisoning remains a major environmental health threat to young children. A dramatic decline in blood lead levels was documented with the phase out of leaded gasoline that decreased lead emissions starting in the 1970s. In Vermont, data shows a decline in the rate of children with reported elevated blood lead levels from 13% of the children tested in 1994 compared to 3% in 2005. However, in 2005 there were still 262 children identified as lead poisoned. It should be noted that, the decline in the rate of lead poisoning is skewed by the dramatic increases in testing, with almost twice as many children tested in 2004 as were tested in 1994.

Today, the primary sources of lead exposure remain deteriorated lead based paint that generates paint chips and dust, and contaminates soil in and around older housing. In Vermont as many as 70% of housing units were built prior to 1978, the year that lead was banned in residential paint. The most common way young children in homes and childcare facilities become lead poisoned is from lead-contaminated dust or soil that clings to toys, fingers, and other objects they put into their mouths.

In addition to lead exposure related to housing, there are other potential sources which contribute to Vermonters' overall exposure to lead, the extent of which has not been well documented. Nationally reported sources of non-housing based lead include take-home occupational exposures, imported cosmetics and folk remedies, contaminated foods, beverage containers, and miscellaneous sources such as key chain emblems, fishing sinkers, lead ammunition, pool cue chalk and vinyl miniblinds.¹ Additionally the number of individual product units recalled for containing lead in excess of safety

¹ *Managing Elevated Blood Lead Levels Among Young Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention*, App. I, Published Reports of Less Common Causes of Elevated Blood Lead Levels (EBLLs) in Children, http://www.cdc.gov/nceh/lead/CaseManagement/CaseManage_appendixes.htm (accessed Feb. 2, 2006). See also the more extensive but unannotated listing from Lead Advisory Service Australia, Sources of Lead, <http://www.lead.org.au/lasn006.html> (accessed Oct. 11, 2005) (Appendix 1 to this report).

standards by the Consumer Product Safety Commission (CPSC) between January 1, 2005, and December 30, 2005, exceeded 11 million.

Accomplishments

A broad scope of accomplishments in childhood lead poisoning prevention can be identified for 2005. The list that follows is categorized to help delineate the nature of major accomplishments. These accomplishments are discussed in more detail throughout this report.

Human Resources

- Addition of a new three-quarter time position focused on compliance with Vermont's Lead Law
- Enhanced collaborative relationships between the 12 Community Public Health District Offices and the Childhood Lead Poisoning Prevention Program

Outreach and Education

- Two community-based grant awards in Burlington and Bellows Falls
- Postcard reminders to more than 9,000 rental property owners about Vermont's Lead Law
- Continuation of postcard mailings to parents/guardians of 10- and 22-month-old children, reminding of the need for a blood lead test
- Telephone education for parents/guardians of children with a 10 to 14 μ g/dl confirmed blood lead level
- Adaptation for Vermont of What You Should Know About Lead Poisoning: A Resource Manual for Childcare Providers from a University of Connecticut/State of Connecticut publication

Planning Tools and Process

- GIS mapping of lead data
- Strategic planning process by the Childhood Lead Poisoning Prevention Program team

- Initiation of the statewide “Get the Lead Out of Vermont” Task Force, jointly called for by Vermont’s Commissioner of Health and Attorney General

Progress 2005

Year of Transition

The Childhood Lead Poisoning Prevention Program (CLPPP) is located in the Vermont Department of Health (VDH), Health Protection Division, Environmental Health Unit. Staffing includes four full-time positions—program coordinator, surveillance specialist, investigator/case manager, and lead education specialist—and a three-quarter administrative assistant position focused on Essential Maintenance Practices (EMP) compliance. This last position is new as of July 2005, and two of the full-time positions (program coordinator and surveillance specialist) had staff turnover, making 2005 a year of significant transition.

In addition to CLPPP staff, the 12 District Offices of the Community Public Health Division each has a lead designee (in some districts designee responsibilities are shared by more than one person), who carries out education activities locally, monitors local blood lead testing of children, and ensures confirmations of elevated capillary tests.

Strategic Planning

In mid-2005, CLPPP started an internal and external strategic planning process. Internally, program staff met three times over a period of four months to identify program focus areas, review goals and objectives, and develop a list of projects to meet the objectives. The focus areas identified were 1) primary prevention; 2) testing and surveillance; and 3) case management of lead poisoned children. These three areas became the foundation for the revision of Vermont's Lead Elimination Plan as required under the Centers for Disease Control and Prevention (CDC) guidelines.

Concurrently with CLPPP staff planning, the Department of Health began a partnership with the Office of the Attorney General to review the direction of lead poisoning prevention in Vermont and eliminate as much as possible exposure to lead. Measures were undertaken to convene the "Get the Lead Out of Vermont Task Force" to create a

statewide action plan. The Commissioner of Health and the Vermont Attorney General together invited more than 130 community partners to join the Task Force in late 2005 and attend an initial meeting on January 19, 2006.

Primary Prevention

Abatement Projects

In 2005, the Vermont Department of Health Asbestos and Lead Regulatory Program issued 74 permits for abatement projects. This does not mean that 74 Vermont buildings were fully abated but that licensed abatement contractors requested permits to conduct abatement activities in 74 instances, which could include abating a portion of a building or cleaning up a firing range.

Community Grants

In 2005, VDH awarded community grants to Parks Place Community Resource Center in Bellows Falls and the Burlington Lead Program. The primary goals of the community grants were to increase lead screening rates of 1- and 2-year-old children, improve compliance with Vermont's Lead Law, and educate Vermonters about lead hazards and safe renovations.

Lead Safe Bellows Falls was created by a Patch Team operating out of Parks Place Community Resource Center. The Patch Team included members from the Town of Rockingham, Windham Northeast Supervisory Union/Essential Early Education Services (WNESU/EEE), Springfield Area Parent Child Center (SAPCC), VDH Springfield District Office, Early Education Services (EES), Southeastern Vermont Community Action (SEVCA), River Connection, Windham County Reads, and Parks Place. The executive director of Parks Place oversaw the hiring of a program coordinator for Lead Safe Bellows Falls and supervised the coordinator throughout the term of the grant.

The following is from a grant report submitted by Lead Safe Bellows Falls:

By the end of the year [2005], the program had become established in the Bellows Falls area, as community leaders became more concerned about the issue of lead poisoning. This was evidenced by discussions from televised trustee meetings,

interest from the school board, educators, and the Bellows Falls Village Housing Committee. During the final two months of the program (as well as the first two weeks of 2006), the coordinator made presentations to, or collaborated with EES; the city of Manchester, NH; Springfield Area Parent Child Center's Lifeworks clients and staff; Environmental Protection Agency Region I; SEVCA staff; WNESU school nurses; staffers from the Center for Disease Control; and Vermont state representatives and senators.

A pilot project to conduct door-to-door lead testing was the main focus of the Burlington Lead Program (BLP) community grant. The Community Health Center of Burlington (CHCB) was a full partner in this endeavor, hiring and supervising a staff person who performed capillary tests on the children targeted (Burlington residents less than 6 years old). An Advisory Group, which included members from CLPPP and the VDH Burlington District Office, met monthly to support the development of this special project. In 2005, staffing issues prevented the project from being fully implemented, and the BLP was given a grant extension into 2006.

Other important community activities that BLP provided under the grant in 2005 included sponsoring Essential Maintenance Practices classes; inserting lead materials in Welcome Baby bags; making weekly presentations at the Burlington Housing Authority to educate tenants; hosting booths at annual Burlington events; doing live call-in shows on local public access television; running print ads on Burlington buses; and placing articles and editorials in local media outlets.

Essential Maintenance Practices Classes

In the second half of 2005, efforts were undertaken to increase participation in the Essential Maintenance Practices (EMP) training course. A press release regarding Vermont's Lead Law and submission to the community calendars was sent to local papers for each EMP training class. Between January and December, 518 people completed the Essential Maintenance Practices training course. This number is expected to increase in 2006.

Number of Individuals Certified to Perform Essential Maintenance Practices 1996-2005

Year	Contractors	Daycares	Landlords	Maintenance	Other	Total
1996	304	733	3002	117	195	4351
1997	260	419	1693	17	114	2503
1998	137	58	164	52	44	455
1999	99	95	104	17	88	403
2000	44	89	121	18	72	344
2001	78	82	102	38	89	389
2002	99	131	83	39	161	513
2003	80	111	54	36	237	518
2004	67	91	95	51	279	583
2005	90	80	210	36	102	518
Total	1258	1889	5628	421	1381	10577

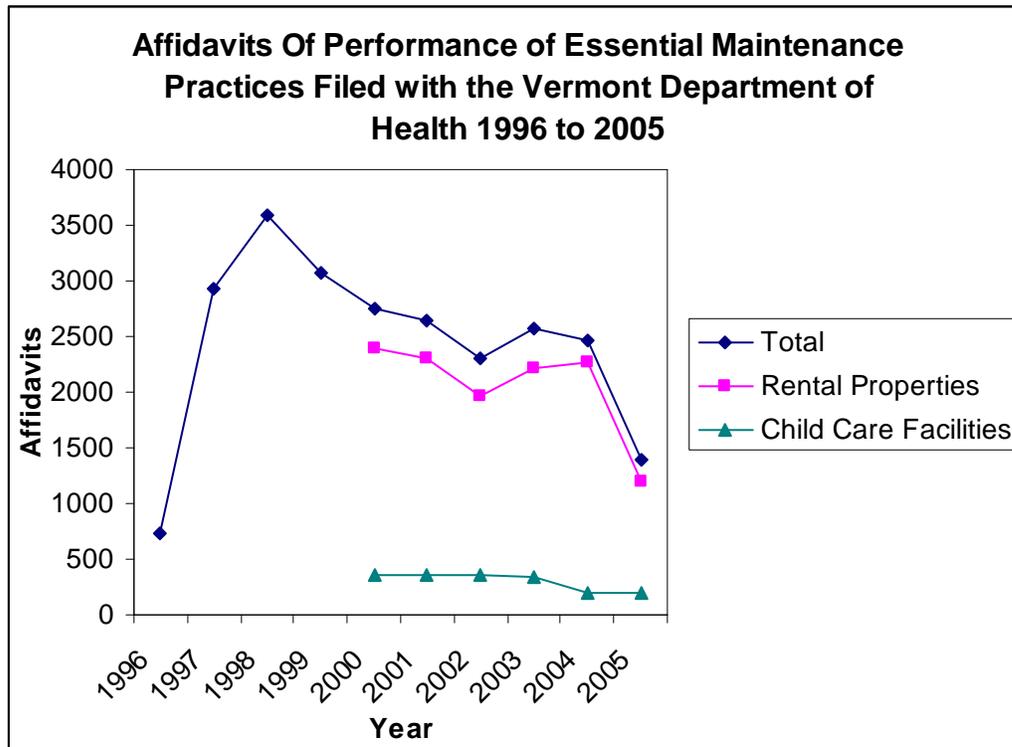
EMP Compliance

In 2005, there was a continued decline in the overall number of pre-1978 rental property and child care facility owners who complied with the Vermont Lead Law 18 V.S.A. §1759 by completing Essential Maintenance Practices including the submission of an Affidavit of Performance of Essential Maintenance Practices with the Vermont Department of Health. The Vermont Department of Health received 1,194 affidavits for target rental properties and 201 for child care facilities in 2005.

Affidavits of Performance of Essential Maintenance Practices Received by the Vermont Department of Health

Year	Rental Properties	Child Care Centers	Total
1996			729
1997			2928
1998			3584
1999			3067
2000	2388	358	2746
2001	2295	350	2645
2002	1958	354	2312
2003	2223	344	2567
2004	2270	197	2467
2005	1194	201	1395

Affidavit data from Vermont Childhood Lead Poisoning Prevention Program 1996 to 1999 includes rental properties and child care centers
Affidavits are reported by unit or building based on property owner preference



Source: The Vermont Department of Health, Childhood Lead Poisoning Prevention Program
1996 through 1999 Data includes both rental properties and child care facilities.
The year filed is determined by the date all work is completed.
In 2006 this will change to the notary date on the affidavit.

In an effort to increase compliance, VDH requested and recorded data from the local towns and the Vermont Grand List to further develop a data set of all Vermont rental properties and owners. Though not complete, the resulting list includes approximately 9,200 rental property owners and represents the largest compilation of landlords and their properties that CLPPP has ever had. Work will continue in the future to update and refine this data set, which is essential to monitor Lead Law compliance.

Using the new data set, in November 2005, VDH designed and mailed a Lead Law reminder postcard to more than 9,000 rental property and child care facility owners.

CLPPP worked to improve the quality of compliance in 2005 by returning affidavits to property owners who submitted them with errors; for example, if an affidavit was not notarized, it would be returned for notarization.

Also, in 2005, a revised affidavit form was introduced with improved instructions and simplification of language. The new affidavit was designed to fit on 8 ½ x11” paper (the previous affidavit was on legal-size paper), making it more convenient for mailing as well as easily printed from the Internet.

Despite these efforts, VDH received 1,395 affidavits for 2005: 1,194 for rental properties (1,076 fewer than 2004) and 201 for child care facilities (4 more than 2004). This number of affidavits demonstrates a continued overall decline in compliance with the Vermont Lead Law 18 V.S.A. §1759. VDH will develop more approaches to addressing compliance issues in 2006.

General Education

In addition to the efforts by the community grantees, the Vermont Department of Health placed print ads in Kids Vermont Resource Guide and Parent’s Home Companion and contracted with the Vermont Voltage for ads in its printed programs.

Parent’s Home Companion

WHICH ONE OF THESE HOUSES HAS DANGEROUS LEVELS OF LEAD?

THE TRUTH IS...IT COULD BE ALL OF THEM.

CHANCES ARE SOMEONE YOU KNOW LIVES IN A HOUSE WITH LEAD PAINT.

Most homes built before 1978 have it. Why should you be concerned? Lead poisoning can permanently reduce intelligence and cause brain damage, learning disabilities, attention disorders, hyperactivity, stunted growth, and other health problems.

PARENTS – Have your children tested for lead at ages 1 and 2!
LANDLORDS & DAYCARE PROVIDERS – Know and follow the Lead Law.
RENOVATORS & DO-IT-YOURSELFERS – Work lead safe!

To learn more go to www.HealthyVermonters.info or call 800-439-8350.

HEALTHY VERMONTERS 2010

Kids Vermont Resource Guide



renovating soon?

Renovating homes built before 1978 can release dangerous lead dust and debris into your home. Learn to keep your family safe from **lead poisoning**.

- call 1-800-439-8550 for information or a free renovation workbook
- take a lead safety class
- or hire a lead safe contractor

 **VERMONT**
DEPARTMENT OF HEALTH
www.healthyvermonters.info

Vermont Voltage



test all kids for lead at ages 1 & 2

Your child could have **lead poisoning** and you wouldn't even know.

You can find out with a simple blood test.

Ask your child's health care provider at your next visit.

For information call the **Vermont Department of Health**
1-800-439-8550

 **VERMONT**
DEPARTMENT OF HEALTH
www.HealthyVermonters.info

Outreach with the Vermont Voltage continued in August 2005 when CLPPP staff members hosted a booth at a Voltage home game in St. Albans. The Voltage makes a point of reaching out to young people and encouraging family attendance at games. About 800 spectators attended. CLPPP distributed coloring books, refrigerator magnets, and a variety of informational materials. In addition to this one game, lead poisoning prevention was featured at all home games through an ad in the printed programs and through a large broadside on the perimeter of the field.

Each year CLPPP, along with colleagues from the Environmental Health Unit, attends two major home shows, overseeing a display that includes lead materials along with other Healthy Homes information such as fact sheets about radon, mold, drinking water, indoor air, and the like. The Burlington Home Show was held in March 2005 and the

Vermont Home and Garden Show was held in April 2005.

National Lead Poisoning Prevention Week was October 23–29, 2005. CLPPP developed a display that was used in 13 locations throughout the state. Locations included the 12 district offices of VDH and the lobby shared by the central office of VDH and Vermont Community College in Burlington.

In October 2005, CLPPP sought permission and modified the University of Connecticut's *What You Should Know About Lead Poisoning: A Resource Manual for Childcare Providers* for use in Vermont. The manual was edited to include Vermont specific resources and information on the Vermont Lead Law.

Vermont Department of Health Internal Collaboration

District Office staff play a critical role in disseminating information to target populations throughout the state. In 2005, efforts were undertaken to improve internal communication and the knowledge base of VDH staff at the central and local level. Lead designees in each of the 12 District Offices are key staff for the lead program. To coordinate efforts and to share best practices, the lead designees and centralized CLPPP staff participated in monthly conference calls and an in-person meeting.

Examples of activities carried out in the District Offices include: distributing materials in Welcome Baby bags, creating lead displays for Health Fairs, advertising EMP classes, conducting lead training with Town Health Officers, making presentations at county child care associations, and collaborating with community partners such as Maternal Child Health and the Family Infant Toddler Project.

Testing and Surveillance

Testing Recommendation

Test all children at age 1 and 2. The test at age 2 may be omitted IF:

- The child is not insured by Medicaid or Dr. Dynosaur; AND
- The child lives in housing built after 1978; AND
- The child attends child care in a building built after 1978.

In 2005, 8,868 children less than age 6 (0-70.99 months) received a blood lead test.

Testing of 1 year olds in Vermont has risen from 45% in 1997 to 75% in 2005. And in both 2004 and 2005, more than one-third of 2 year olds were tested for lead, up from 20% in 1997.

Percent of Vermont Children Tested by Age and Year, 1997–2005

	Age						
	<1 yr	1	2	3	4	5	0-5
1997	7%	45%	20%	14%	11%	4%	16%
1998	6%	50%	19%	11%	8%	3%	15%
1999	6%	60%	15%	8%	5%	2%	16%
2000	6%	59%	16%	7%	5%	2%	15%
2001	6%	65%	13%	6%	4%	2%	16%
2002	6%	68%	15%	6%	4%	2%	16%
2003	7%	67%	19%	7%	4%	2%	17%
2004	7%	73%	36%	8%	5%	2%	22%
2005	7%	75%	37%	6%	3%	2%	22%

The focus of CLPPP's work is on children under the age of 6. The following table shows testing data for 2005, including the number of children tested by age and the number of elevations by age. A child with a confirmed venous blood lead level of 10µg/dl or greater is considered to be lead poisoned by the CDC and VDH.

Blood Lead Tests for Vermont Children ages 0 to 6* years, 2005

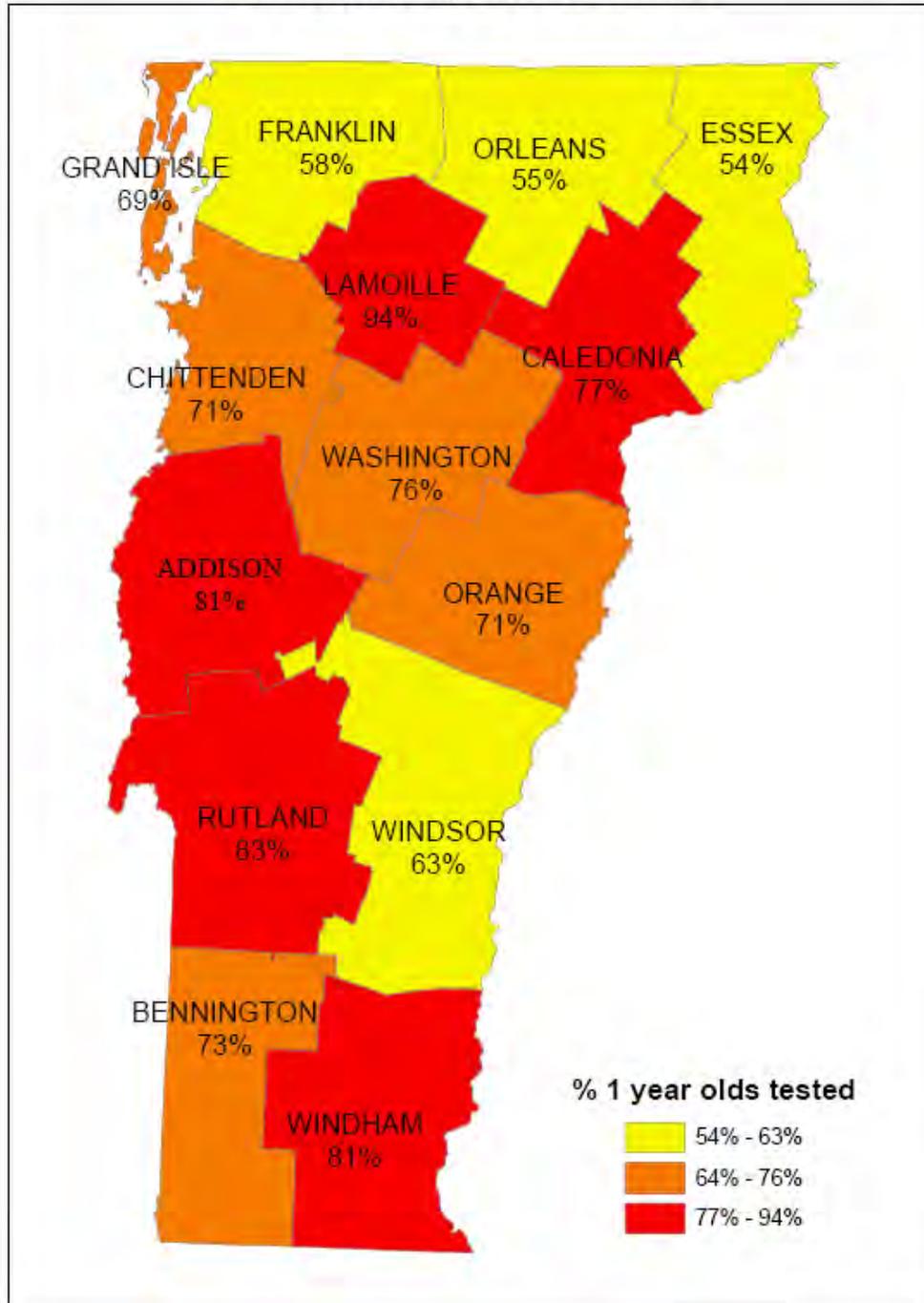
Age	Population	Blood Lead Levels of Children Tested					% ≥ 10 $\mu\text{g/dL}$
		< 10 $\mu\text{g/dL}$	10-14 $\mu\text{g/dL}$	15-19 $\mu\text{g/dL}$	20+ $\mu\text{g/dL}$	Total	
< 1 year	6,420	431	4	6	4	445	3.1
1 year	6,721	5,051	100	25	12	5,188	2.6
2 years	6,562	2,392	61	10	9	2,472	3.2
3 years	6,431	394	11	3	0	408	3.4
4 years	6,776	229	5	1	1	236	3.0
5 years	6,231	114	4	1	0	119	4.2
Total	39,858	8,611	185	46	26	8,868	3.0

Data includes only one blood lead test per child; the highest venous test result or if there is no venous test then the capillary test result.

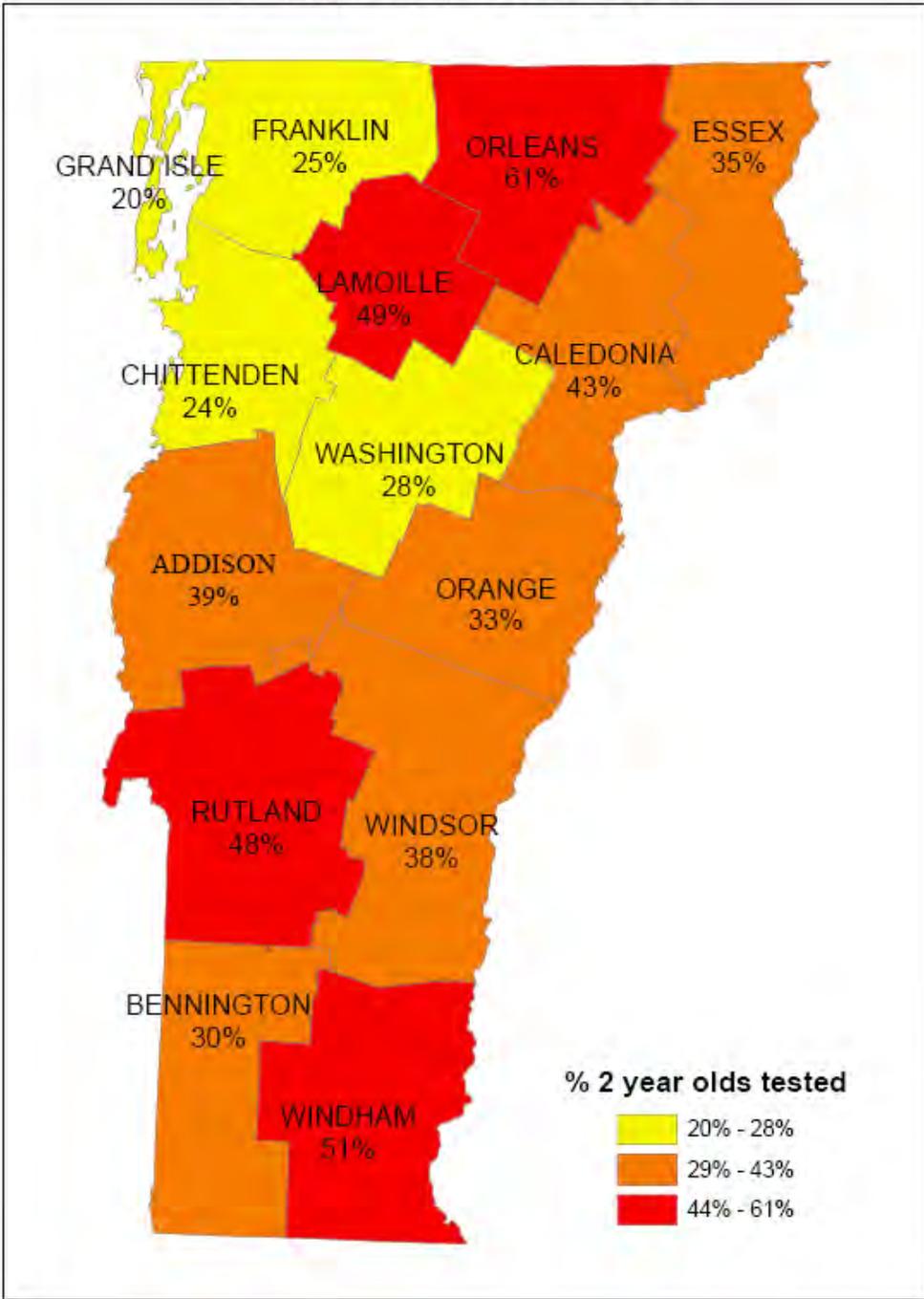
*Ages: < 1 year : <11 months old; 1 year: 11 - 22.99 months; 2 years: 23 - 34.99 months; 3 years: 35 - 46.99 months; 4 years: 47 - 58.99 months; 5 years: 59 - 70.99 months.

The target populations of Vermont's current testing recommendation are 1- and 2-year-old children. Maps on the following page present testing rates by county for these critical age groups. The percentages shown are for the combined calendar years of 2004 and 2005.

PERCENT OF ONE YEAR OLDS TESTED FOR LEAD VERMONT, 2004 - 2005



PERCENT OF TWO YEAR OLDS TESTED FOR LEAD VERMONT, 2004 - 2005



Of those children with elevated capillary blood test results, 62% had a confirmation test in 2005. Elevated capillary blood tests confirmations have increased dramatically since 1997, when only 32% were confirmed. This increase is largely caused by the increase of confirmatory testing among the 10-14 blood lead level range, which rose from 17% in 1997 to 55% in 2005.

Percent of Elevated Capillary Blood Tests Confirmed by a Venous Test within 90 days, 1997–2005

	Elevated blood lead level			Overall
	10-14 µg/dl	15-19 µg/dl	20+ µg/dl	
1997	17%	62%	80%	32%
1998	17%	63%	75%	35%
1999	17%	63%	75%	33%
2000	26%	71%	82%	45%
2001	32%	69%	81%	49%
2002	33%	67%	83%	49%
2003	45%	72%	87%	57%
2004	53%	65%	74%	59%
2005	55%	72%	75%	62%
Total	33%	67%	79%	47%

Blood Lead Testing Outreach Efforts

Throughout 2005, VDH continued efforts to increase the percentage of 1- and 2-year-old children tested. All parents of children born in Vermont were mailed postcards when their children were 10 months old and 22 months old reminding them to have their children tested at ages 1 and 2 years. In 2005, postcards were mailed to 11,551 parents or guardians.

Lead Screening Advisory Committee

The Lead Screening Advisory Committee (LSAC) was reconvened and met over a four-month period beginning in December 2004 and concluding in March 2005. LSAC was charged by the Commissioner of Health to revisit the screening recommendations and examine data about elevated blood lead level rates and testing throughout Vermont. The Committee identified some barriers to universal screening, which if successfully addressed, would allow for the screening recommendation to be changed to universal

testing of 1- and 2-year olds. LSAC's work was carried forward and expanded in the "Get the Lead Out of Vermont" Task Force.

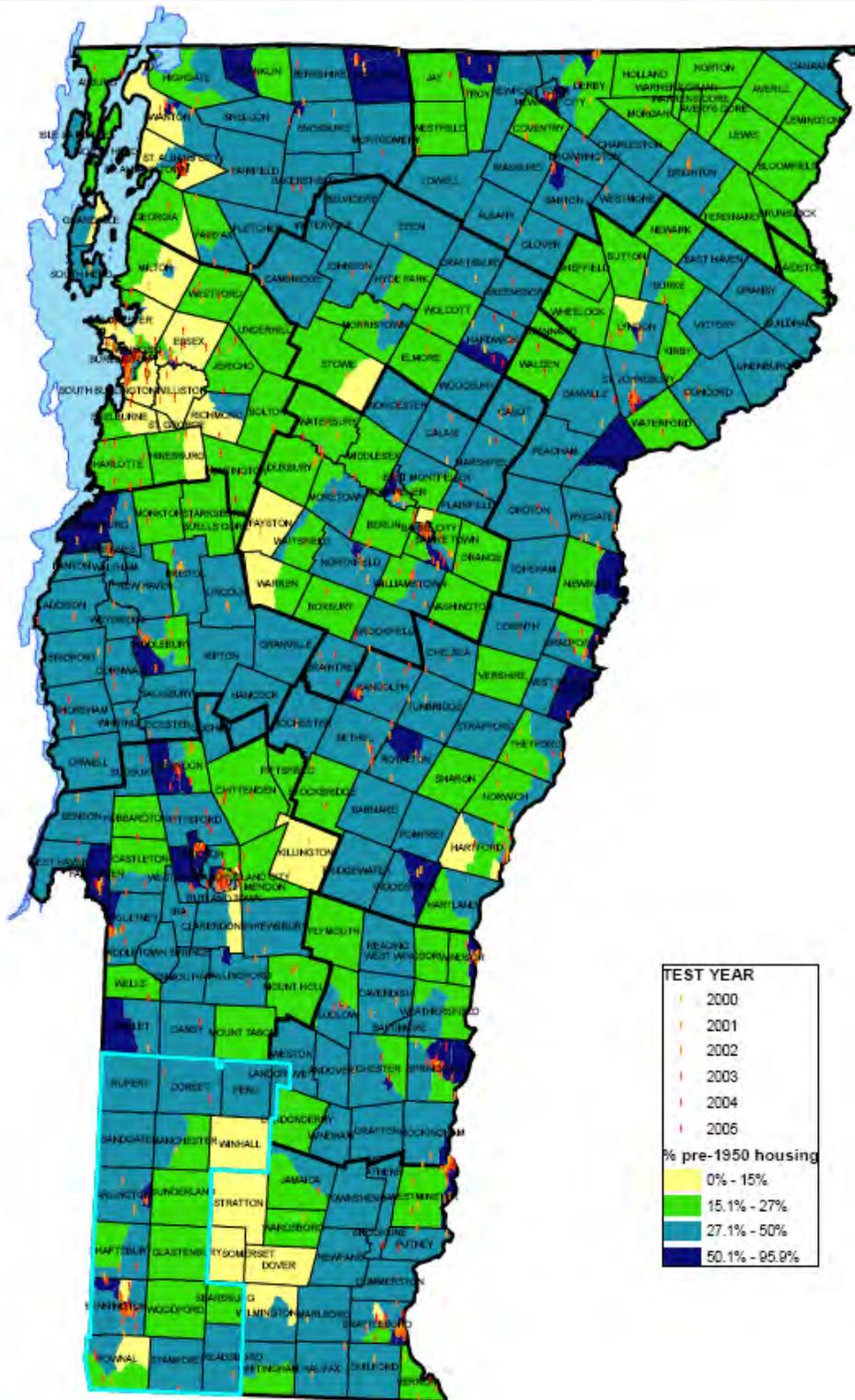
Partnership with Health Surveillance

In 2005, the Childhood Lead Poisoning Prevention Program tapped into the Vermont Department of Health Division of Health Surveillance to analyze longitudinal blood lead data.

New geo-coding techniques and geographic information systems (GIS) technology were employed to assist in identifying high risk communities. Maps of the state's housing age and elevated blood lead data were created. Based on the map the Vermont Department of Health recognized a need to identify rural communities disproportionately affected by lead.

Expanding on the maps the blood lead data was analyzed using GIS technology to identify clusters. Together Health Surveillance and CLPPP worked to identify a new technique to target children living in high risk clusters using blood lead and vital statistics data. Families with children born in 2006 living in high risk clusters will be mailed educational materials.

VERMONT ELEVATED LEAD DATA, 2000 - 2005



Case Management

Review of Capacity and Protocols

In 2005, CLPPP reviewed protocols and resources available for case management. In January 2005, the program began to provide phone consultations with parents of children with confirmed blood lead levels between 10 and 14 μ g/dl. Children with confirmed blood lead levels between 15 and 19 μ g/dl were offered an educational home visit with environmental testing (soil, water, and dust samples). Families with children with confirmed blood lead levels of 20 μ g/dl or greater or whose blood lead levels were between 15 and 19 μ g/dl for a period of greater than 3 months were provided with a full investigation (x-ray fluorescence testing, soil, water and dust sampling). Parents of children with elevated blood lead levels that were not confirmed after follow-up by VDH were mailed an educational packet and environmental survey. Educational material provided in all packets and visits include information on lead poisoning prevention, cleaning, and nutrition.

CLPPP will continue to review regularly its capacity to provide educational home visits to all families with children with confirmed blood lead levels 10 μ g/dl or greater. These procedures are also being reviewed by the statewide Task Force mentioned earlier.

Work Plans

In the case of a child with a confirmed blood lead level 20 μ g/dl or greater, 18 V.S.A. § 1757 requires that a plan be developed to minimize exposure of the child to lead hazards, including requiring owners of target rental housing to initiate interim controls or abate lead-based paint hazards within a specified time frame. In 2005, VDH investigated 10 cases of children with blood lead levels 20 μ g/dl or greater. Work plans were provided to 4 families and 6 target rental property owners.

Resources

Funding Report

In 2005, the Vermont Department of Health Childhood Lead Poisoning Prevention Cooperative Agreement with the Centers for Disease Control and Prevention was continued for the last of a 3-year, non-competitive-year cycle in the amount of \$348,620 for the fiscal year July 1, 2005 through June 30, 2006. This award represented a decline in funding of \$92,881 from the previous fiscal year and mirrored the general decline in federal funding across the nation for childhood lead poisoning prevention programs. An additional \$70,000 was provided to the Vermont Department of Health through a contract with the Vermont Housing and Conservation Board.

Through the years, CLPPP has struggled to meet the requirements of Vermont's Lead Law with limited federal funding and no direct state funding, which restricts the human resources that VDH can use to combat childhood lead poisoning.

The "Get the Lead Out of Vermont" Task Force has a Resources Committee charged to develop options for new and additional funding sources. This committee will be making recommendations as will the other three committees of the Task Force:

- Housing
- Identification and Intervention
- Consumer Products and Other Exposures

The full gamut of lead issues designed to reduce Vermonters exposure to lead is being covered by these committees. Recommendations of the Task Force will be wide ranging and will suggest changes in law and in policy for decision makers to consider.

Recommendations

- Support the efforts of the “Get the Lead Out of Vermont” Task Force and establish a permanent body of stakeholders to continue to advise lead poisoning prevention related efforts and activities in Vermont
- Review and adopt programmatic recommendations of the “Get the Lead Out of Vermont” Task Force that would enhance the effort of the Childhood Lead Poisoning Prevention Program
- Develop a comprehensive approach to educating and seeking compliance of rental property owners and childcare centers regarding the Vermont Lead Law
- Continue to seek diverse funding sources for lead poisoning prevention programs