New Hampshire Healthy Homes and Lead Poisoning Prevention Program

2009 Childhood Blood Lead Surveillance Data

This data summary is an overview of the 2009 blood lead testing data for New Hampshire residents as reported to the New Hampshire Department of Health and Human Services. The New Hampshire Healthy Homes and Lead Poisoning Prevention Program (NH HHLPPP) maintains an extensive blood lead surveillance system for the purpose of monitoring trends in blood lead levels in adults and children in New Hampshire. The data are used to help identify populations at risk for elevated blood lead levels (BLLs), to determine whether screening guidelines are being followed in high-risk populations, and to ensure that appropriate environmental and medical follow-up are provided to children with elevated BLLs. An estimated 50 licensed laboratories that serve approximately 1,500 medical clinics, hospitals, and employer groups report to the NH HHLPPP. The work described here was partially funded by a cooperative agreement with the U.S. Centers for Disease Control and Prevention (CDC).

A confirmed venous BLL that meets or exceeds 10 micrograms per deciliter of blood (mcg/dL) for children six years of age or younger is defined as an elevated BLL. In 2009, 118 New Hampshire children six years of age or younger were newly identified with elevated BLLs, or 0.8% of the 15,051 children screened in the State. Appendix A illustrates the number of newly confirmed elevated BLLs over the past several years.

Several factors influence the rate of lead poisoning in a community. Cities and towns with 27% or more pre-1950 housing stock are considered high risk. All one- and two-year-old children in these communities should be tested for lead. Some communities are determined to be at even higher risk for lead poisoning due to additional factors, such as the fraction of the population that is under the age of six; the fraction under the age of six living in poverty; the percentage of children under the age of six, enrolled in Medicaid or other federal assistance programs; and special populations living in the communities. The communities of Berlin, Claremont/Newport, Franklin/Laconia, Manchester, Nashua, and Rochester continue to be classified as the State's "higher risk" communities. In order to reach the goal of elimination of childhood lead poisoning, New Hampshire focuses on these higher risk areas through community involvement, primary prevention strategies, and screening efforts. Appendix B lists the percentage of children screened, by age and higher risk community, compared with all other towns, over the last three years. Only data for children six years of age or younger are presented.

For more information, please contact Paul Lakevicius, Program Planner III, with the NH HHLPPP at 603-271-3854 or by e-mail at paul.lakevicius@dhhs.state.nh.us.



New Hampshire Healthy Homes and Lead Poisoning Prevention Program

Newly Confirmed Elevated Blood Lead Levels (≥10 mcg/dL) by Year, NH

Lead Levels (≥10 mcg/dL) by Year, NH Lead Level (mcg/dL)										
		Lead Le	evei (mc	g/aL)						
Year	Age Range (months)	10-14	15-19	20+	Total	Confirmed Elevations/Total Children Screened (%)				
	0-11	11	2	3	16	0.8%				
	12-23	87	34	18	139	2.1%				
2003	24-35	49	13	13	75	2.5%				
	36-71	33	4	8	45	2.1%				
	Total	180	53	42	275	2.0%				
	0-11	15	2	8	25	1.2%				
	12-23	89	25	24	138	2.0%				
	12-23	09	23	24	130	2.0 /6				
2004	24-35	35	13	16	64	2.0%				
	36-71	40	9	7	56	2.6%				
	Total	179	49	55	283	1.9%				
	0-11	8	4	3	15	0.8%				
	12-23	77	26	10	113	1.6%				
2005	24-35	36	13	8	57	1.7%				
	36-71	19	7	4	30	1.6%				
	Total	140	50	25	215	1.5%				
	0-11	4	0	1	5	0.2%				
	12-23	57	19	22	98	1.2%				
2006	24-35	37	8	11	56	1.7%				
	36-71	27	7	8	42	2.6%				
	Total	125	34	42	201	1.3%				
	0-11	7	3	4	14	0.8%				
	12-23	51	25	17	93	1.2%				
2007	24-35	28	9	4	41	1.1%				
	36-71	13	6	3	22	1.0%				
	Total	99	43	28	170	1.1%				
	0-11	5	1	1	7	0.4%				
2008 [†]	12-23	33	23	5	61	0.8%				
	24-35	30	10	6	46	1.2%				
	36-71	20	3	3	26	1.1%				
	Total	88	37	15	140	0.9%				
	0-11	3	4	2	9	0.7%				
	12-23	44	13	7	64	0.9%				
2009	24-35	23	4	4	31	0.8%				
	36-71	12	2	0	14	0.6%				
	Total	82	23	13	118	0.8%				

[†]Definition of confirmed elevations changed slightly

Appendix B

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New Hampshire Healthy Homes and Lead Poisoning Prevention Program

2007-2009 Blood Lead Screens

		Pre-1950 Housing (%) ²		2007 Screens		2008 Screens		2009 Screens		
Town	Family Income <= 200% FPL (%) ¹		Group	Initial Screening Rate ³	Confirmed Elevations/Total Children Screened ⁵	Initial Screening Rate ⁴	Confirmed Elevations/Total Children Screened ⁵	Initial Screening Rate ⁴	Confirmed Elevations/Total Children Screened ⁵	
			12-23	72.2%		86.1%		78.3%		
			24-35	64.7%		72.5%		77.5%		
Berlin	33.2%	69.0%	0-71		0.5%		2.3%		0.5%	
			12-23	65.2%		72.3%		43.5%		
			24-35	51.6%		43.2%		23.2%		
Claremont	27.9%	49.7%	0-71		1.6%		2.4%		1.7%	
			12-23	87.3%		70.4%		76.1%		
			24-35	40.9%		48.9%		33.0%		
Newport	31.8%	41.6%	0-71		1.7%		0.8%		1.1%	
			12-23	55.0%		53.5%		37.2%		
			24-35	23.4%		24.2%		17.2%		
Franklin	35.6%	50.9%	0-71		2.9%		3.9%		2.6%	
			12-23	62.9%		65.2%		73.0%		
			24-35	18.1%		25.7%		28.7%		
Laconia	27.8%	44.8%	0-71		1.1%		4.2%		0.9%	
			12-23	75.1%		73.6%		83.3%		
			24-35	52.1%		45.9%		51.7%		
Manchester	25.9%	43.8%	0-71		2.0%		1.9%		1.5%	
			12-23	47.5%		52.1%		59.5%		
			24-35	20.9%		29.7%		33.0%		
Nashua	18.8%	25.8%	0-71		0.9%	0.4 =04	0.4%		0.6%	
			12-23	59.9%		61.5%		57.8%		
	7.4.40	0.4 50/	24-35	38.0%	1.004	44.2%	4.004	43.2%		
Rochester	24.1%	31.5%	0-71	10.00	1.8%	17.70	1.2%		0.0%	
A.H. O.H.			12-23	48.6%		47.7%		44.6%		
All Other	47.00	00.40	24-35	21.3%	0.007	21.3%	0.50/	22.1%	0.00/	
Towns	17.6%	26.1%	0-71	E0.00/	0.8%	FA 60 /	0.5%	FA 60 /	0.6%	
			12-23	52.2%		52.0%		50.6%		
			24-35	25.4%		25.7%		26.8%		
NH Total	19.0%	28.8%	0-71		1.1%		0.9%		0.8%	

¹ Federal poverty level =\$13,290 for 3 person household, source:US Census 2000,

² US Census, 2000

³SCREENS = any test in this CY where (1) the child has never had a confirmed elevation, and (2) the test is not a confirmation test, only includes one test per child for time frame CONFIRMED ELEVATIONS = children confirmed as elevated (one venous >=10 or two capiliaries <= 12 wks apart >=10) for the first time

^{*}SCREENS = any test in this CY where the child has never had a confirmed elevation, only includes one test per child for time frame

CONFIRMED ELEVATIONS = children confirmed as elevated (one venous >=10) for the first time, definition changed in 2008

⁵ Rates may be unstable due to small numbers