# 2 LEAD EXPOSURE IN NEW HAMPSHIRE 2 DATA BRIEF

In 2020, 3,108 fewer NH children had blood lead level tests than in 2019 due to the COVID-19 pandemic. This represents a 14% drop in the State's pediatric blood lead level testing rates.

Figure 1: Annual number of children 72 months or younger tested for blood lead levels, 2016 - 2020.

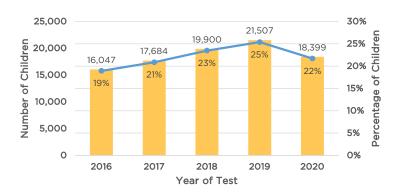
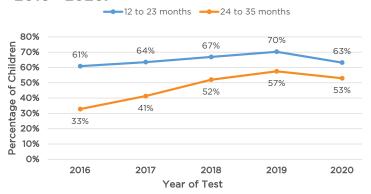
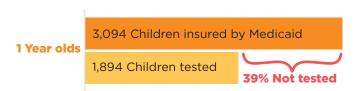


Figure 2: Percentage of 1- and 2-year-old children tested for blood lead levels, 2016 - 2020.



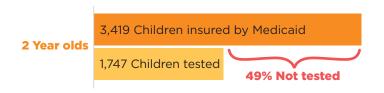
Decreases in the number and rate of children 72 months and younger tested for blood lead levels, as compared to 2019 data were closely associated with the statewide response to the COVID-19 pandemic.

Figure 3: Number of NH one-year-olds enrolled in Medicaid tested for blood lead level, 2020.



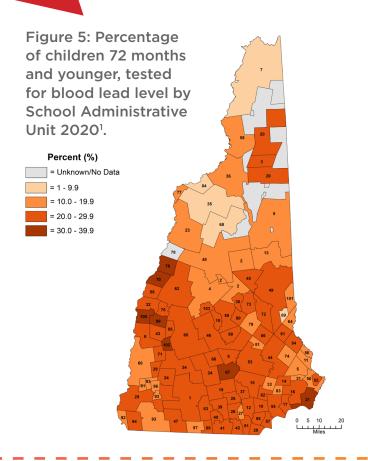
Among the number of NH's one-year-olds continuously enrolled in Medicaid for at least 12 months prior to their 2 year birthday, an estimated 61% were tested for blood lead level in 2020. This proportion has remained relatively stable in recent years (2017-2020).

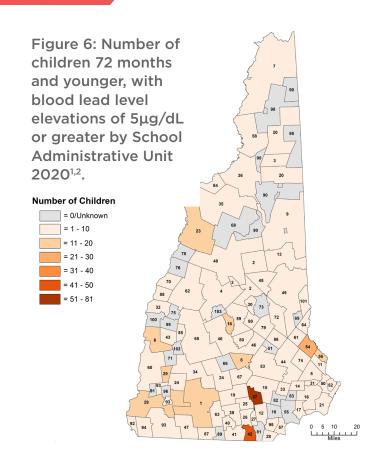
Figure 4: Number of NH two-year-olds enrolled in Medicaid tested for blood lead level, 2020.



Among the number of NH's two-year-olds continuously enrolled in Medicaid for at least 12 months prior to their 3 year birthday, an estimated 51% were tested for blood lead level in 2020. The testing rates among two-year-olds enrolled in Medicaid has increased from 42% (2017) to 51% (2020).

### **Numbers in New Hampshire in 2020**





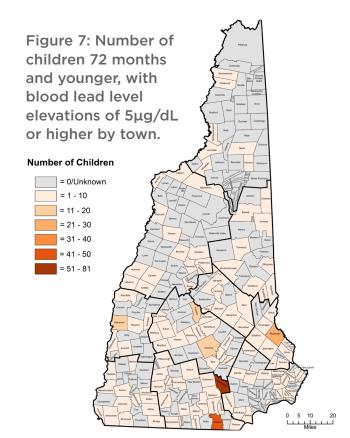
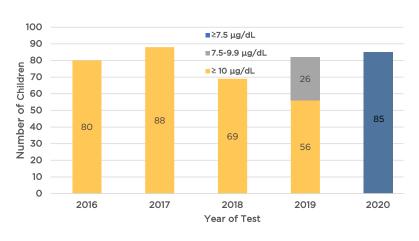


Figure 8: New children 72 months and younger, above the state action limit requiring medical nurse case management, 2016 - 2020.

On July 1, 2019, the NH action level requiring a public health nurse home visit and a lead exposure investigation was lowered from 10  $\mu$ g/dL or higher, to 7.5  $\mu$ g/dL or higher for children ages 72 months or younger.



<sup>&</sup>lt;sup>1</sup>A SAU map with towns can be found at <a href="https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/sau-map.pdf">https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/sau-map.pdf</a>
<sup>2</sup> 5μg/dL is the blood lead level at with lead exposure investigations and medical case management is recommended for children 72 months and younger.

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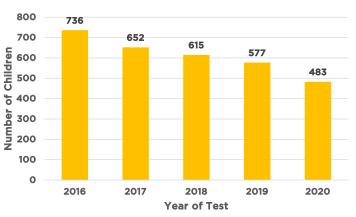
# NH requires blood lead level testing of all children ages 1 and 2 years.

Effective April 9, 2018, NH became a Universal blood lead level testing state. *All* NH children are required to have their blood tested for lead at age 1 year, and *again*, a second test, at age 2 years. It is also recommended to test all children 3 to 6 years who have not been previously tested.



Figure 9: Number of children aged 72 months and younger with elevated blood lead levels at CDC's Reference Level of 5  $\mu$ g/dL or higher, at which lead exposure investigations and medical case management are recommended.

In 2020, 3,108 fewer NH children had blood level tests than in 2019, due to the COVID-19 pandemic. This represents a 14% drop in the State's pediatric blood lead level testing rates.

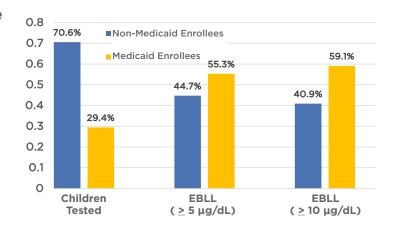


36%

In 2020, 36% of children with elevated blood lead levels in NH at the CDC's reference level of 5  $\mu$ g/dL or greater, were residing in rural areas. Rural areas are those communities with a population density of 150 persons or less per square mile.

# Figure 10: NH Medicaid enrollees constitute a higher proportion (%) of tested children aged 72 months or younger with elevated blood lead levels (EBLL).

In NH, the percentage of children aged 72 months or younger with confirmed EBLL above the CDC reference level of 5  $\mu$ g/dL who were enrolled in Medicaid (2020) exceeded the percentage of Medicaid enrolled children tested for blood lead. Among NH's children with EBLL, 55% were Medicaid enrollees. Yet only 29% of NH children tested for blood lead levels were enrolled in Medicaid.





This Data Brief was prepared by The State of New Hampshire – DHHS, Division of Public Health Services, Healthy Homes and Lead Poisoning Prevention Program. Please send your questions, comments, and feedback via email to hhlppp.data@dhhs.nh.gov. This publication was supported by Cooperative Agreement NUE2EH001408-02, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

## **Lead by the Numbers in 2020**

Lead poisoning is

100% preventable



Of structures in NH's highest risk communities that were built prior to 1978 when lead paint was banned for residential use.



Or 50% of NH children, 72 months or younger, reside in housing units built before the 1978 ban on lead in residential paint, where they are potentially exposed to lead hazards.



In 2020, 3,108 fewer NH children had blood lead level tests than in 2019, due to the COVID-19 pandemic. This represents a 14% drop in the State's pediatric blood lead level testing rate.



Parents of children with blood lead levels greater than 5 µg/dL, report that renovations have taken place in the home within the last six months.



Attention Deficit Disorder cases were attributed to lead exposure.

www.aap.org



It only takes a speck of lead dust the size of a grain of salt to poison a child.



### **Medical Nurse Case Management**

Nurse case management services are provided by NH DHHS Division of Public Health Services at no cost to the families of all children with confirmed elevated blood lead levels above the State's public health action level. Nurse case management services begin with a nurse home visit to each child's home and continue until child's blood lead level has dropped below 5  $\mu$ g/dL or until child is over 72 months of age.

# Table 1: **NH Statewide and Select High-Risk Communities**2020 Testing Data for Children Aged 72 Months and Younger

TOWN	AGE GROUP (IN MONTHS)	TOTAL NUMBER SCREENED	POPULATION CENSUS 2010	PERCENTAGE SCREENED (%)³	SCREENING RATES, (PERCENTAGE CHANGE FROM A YEAR EARLIER)	NUMBER OF CHILDREN WITH EBLL (≥ 5 μg/dL)	NUMBER OF CHILDREN ELIGIBLE FOR CASE MANAGEMENT (≥ 7.5 µg/dL)	
	0 to 11	4	87	4.6	<b>↓</b> -50.0	0	0	
BERLIN	12 to 23	79	75	105.3	<b>→</b> -1.3	< 5	0	
	24 to 35	62	102	60.8	<b>↑</b> 5.1	0	0	
	36 to 72	8	284	2.8	<b>→</b> -61.9	< 5	<5	
CLAREMONT	0 to 11	2	128	1.6	<b>↑</b> 0.2	0	0	
	12 to 23	103	172	59.9	<b>↑</b> 0.0	9	< 5	
	24 to 35	64	177	36.2	<b>→</b> -13.5	7	0	
	36 to 72	56	526	10.6	<b>→</b> -36.4	< 5	< 5	
	0 to 11	7	440	1.6	<b>→</b> -72.0	< 5	0	
CONCORD								
	12 to 23	275	452	60.8	-5.2	11	< 5	
	24 to 35	234	489	47.9	<b>↑</b> 0.4	5	0	
	36 to 72	76	1,441	5.3	<b>→</b> -11.7	0	0	
	0 to 11	4	89	4.5	<b>↑</b> 301.3	0	0	
CONUMANA	12 to 23	55	95	57.9	<b>189.5</b>	< 5	0	
CONWAY	24 to 35	41	99	41.4	<b>1</b> 70.9	0	0	
	36 to 72	14	329	4.3	<b>↑</b> 75.1	< 5	< 5	
DOVER								
	0 to 11	6	374	1.6	<b>→</b> -72.7	0	0	
	12 to 23	136	356	38.2	<b>↓</b> -42.6	< 5	< 5	
	24 to 35	185	341	54.3	<b>↑</b> 1.7	< 5	0	
	36 to 72	24	1,087	2.2	<b>↓</b> -69.6	0	0	
FARMINGTON	0 to 11	3	87	3.4	<b>→</b> -50.0	0	0	
	12 to 23	62	98	63.3	<b>↑</b> 51.2	< 5	0	
	24 to 35	41	72	56.9	<b>1</b> 2.5	< 5	0	
	36 to 72	12	265	4.5	<b>→</b> -25.0	5	0	
FRANKLIN	0 to 11	3	99	3.0	<b>→</b> -72.7	< 5	0	
	12 to 23	70	96	72.9	<b>↑</b> 7.7	7	< 5	
	24 to 35	42	95	44.2	<b>→</b> -30.0	< 5	< 5	
	36 to 72	19	318	6.0	<b>→</b> -24.0	0	0	
GREENVILLE	0 to 11	0	19	0.0	<b>-</b> 0.0	0	0	
	12 to 23	15	23	65.2	<b>→</b> -6.3	< 5	0	
	24 to 35	8	26	30.8	<b>→</b> -46.7	0	0	
	36 to 72	4	84	4.8	<b>→</b> -33.3	0	0	
	0 to 11	8	45	17.8		0	0	
HAVERHILL					<b>A</b> 1100 7			
	12 to 23	13	35	37.1	↑ 1198.7 ↑ 677.0	< 5	0	
	24 to 35	22	69	31.9	<b>↑</b> 633.0	6	< 5	
	36 to 72	11	123	8.9	<b>↑</b> 448.7	< 5	0	
HILLSBORO	0 to 11	3	67	4.5	<b>-</b> 0.0	0	0	
	12 to 23	41	77	53.2	<b>→</b> -12.8	< 5	0	
	24 to 35	36	74	48.6	<b>→</b> -5.3	< 5	0	
	36 to 72	13	240	5.4	<b>→</b> -38.1	< 5	< 5	
HINSDALE	0 to 11	2	45	4.4	<b>↑</b> 0.1	0	0	
	12 to 23	21	31	67.7	<b>→</b> -34.4	< 5	0	
	24 to 35	14	41	34.1	-54.8	0	0	
	36 to 72	3	133	2.3	<b>↓</b> -57.1	0	0	

HUDSON    12 to 23	ER OF PREN E FOR SE EMENT Lg/dL)
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24 to 35   158   285   55.4   10.7   0   0   0   0   0   0   0   0   0	
NEENE   12 to 23	
REENE	
REENE	
ACONIA   24 to 35   119   185   64.3   1.7   1.7   1.5   0.0	
Continue	
LACONIA   12 to 23   93   178   52.2	5
LACONIA   12 to 23   93   178   52.2	
24 to 35   95   174   54.6   -15.9   < 5   0   36 to 72   21   506   4.2   -22.3   < 5   0   0   0   1   1   1   184   0.5   -66.7   0   0   0   0   0   12 to 23   115   174   66.1   -25.0   < 5   < 5   0   0   0   1   1   1   184   0.5   -66.7   0   0   0   0   0   0   0   0   0	
Control   Con	
Description	
LEBANON    12 to 23	
24 to 35   97   160   60.6   ↑ 31.1   < 5   0.0	
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MANCHESTER         0 to 11         27         1,525         1.8	
MANCHESTER  12 to 23  992  1,512  65.6  ↓ -10.1  28  24 to 35  875  1,498  58.4  ↓ -6.5  35  6  36 to 72  184  4,165  4,4  ↓ -6.1.2  18  5  12 to 23  737  1,088  67.7  ↓ -7.4  27  24 to 35  36 to 72  166  3,274  51  ↓ -47.8  24 to 35  36 to 72  166  3,274  51  ↓ -47.8  24 to 35  39  12 to 23  34 123  35.0  ↓ -31.7  √ -20.4  √ 5  √ -31.7  ✓ 5  0 to 11  2	
MANCHESTER  24 to 35 36 to 72 184 4,165 4,4 4 -61.2 18 5  0 to 11 41 1,076 3.8 67.7 -7.4 27 -7.7 -7.8 -7.8 -7.8 -7.8 -7.8 -7.8 -7.	
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NASHUA       12 to 23       737       1,088       67.7       ↓ -7.4       27       ✓         24 to 35       595       1,078       55.2       ↓ -16.9       11       0         36 to 72       166       3,274       5.1       ↓ -47.8       < 5       ✓         NEWMARKET       12 to 23       43       123       35.0       ↓ -31.7       < 5       0         12 to 23       43       123       31.7       ↓ -20.4       < 5       ✓         24 to 35       39       123       31.7       ↓ -20.4       < 5       ✓         36 to 72       6       327       1.8       ↓ -33.3       < 5       0         0 to 11       2       74       2.7       ♠ 0.1       0       0         12 to 23       57       92       62.0       ♠ 1.8       0       0         12 to 23       50       77       64.9       ♠ 42.9       < 5       0         24 to 35       50       77       64.9       ♠ 42.9       < 5       0         24 to 35       29       63       46.0       ♠ -47.8       < 5       0         24 to 35       29       63       46.0	
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NEWMARKET       24 to 35       39       123       31.7	
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