2019 LEAD EXPOSURE IN NEW HAMPSHIRE

DATA BRIEF

In 2019, nearly 600 children living in NH had blood lead levels high enough to impair their ability to think, concentrate and learn. Lead poisoning is entirely preventable.

Figure 1: Annual number (and percentage) of children tested for blood lead, ages 0 - 6 years old, 2015 - 2019.

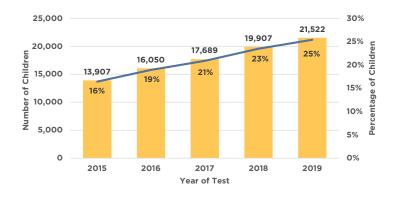


Figure 2: Percentage of 1-and 2-year-old children tested for blood lead, 2015 - 2019.

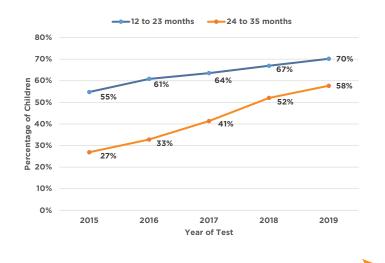
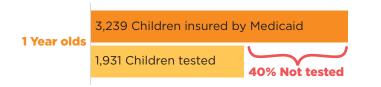
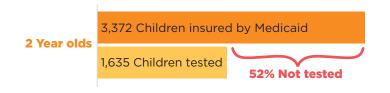


Figure 3: Number of NH one-year-olds enrolled in Medicaid tested for blood lead, 2019.



Among the number of NH's one-year-olds continuously enrolled in Medicaid for at least 12 months prior to their 2nd year birthday, an estimated 60% were tested for blood lead in 2019. This proportion has remained relatively stable in recent years.

Figure 4: Number of NH two-year-olds enrolled in Medicaid tested for blood lead, 2019.



Among the number of NH's two-year-olds continuously enrolled in Medicaid for at least 12 months prior to their 3rd year birthday, an estimated 48% were tested for blood lead in 2019. Similar to one-year-old Medicaid enrollees, this proportion has also remained relatively stable in recent years.

Testing at 182 years old

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 <6 years with elevated blood lead levels at CDC's reference level of $5\mu g/dL$ or higher where lead exposure investigations and medical case management is recommended.

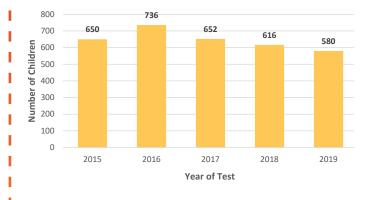


Figure 11: Percentage of newly arrived refugees 0 - 72 months with an elevated blood lead level of 5 μ g/dL or higher within 3 months of arrival.

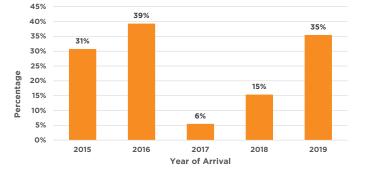
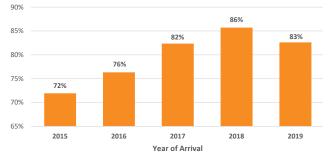




Figure 10: Percentage of newly arrived refugees aged 0 - 16 years tested for blood lead levels within 3 months of arrival, 2015 -2019.



Current federal guidelines require that all refugee arrivals aged 6 months to 16 years are tested for blood lead levels upon entry into the United States. In 2019, a total of 92 refugee children arrived in NH. Of these newly arrived refugees, 83% were tested for blood lead levels within 3 months of arrival.

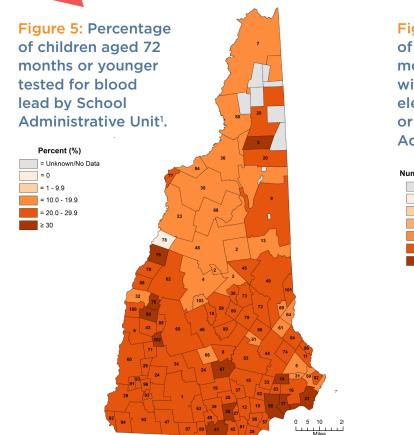
35%

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In 2019, 35% (11 out of 31) of children newly arrived refugees in NH tested for blood lead within 3 months of arrival had a blood lead level of 5ug/dL or higher. This compares to an estimated 22.7% of newly arrived refugees in US with an elevated blood lead level of 5ug/dL or higher within 3 months of arrival.

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.

Numbers in New Hampshire in 2019



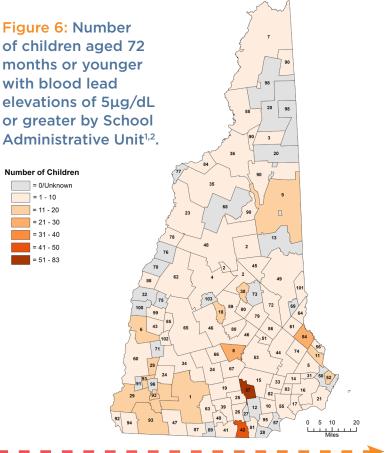
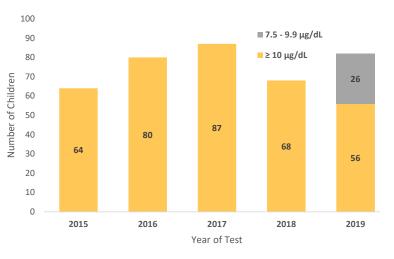
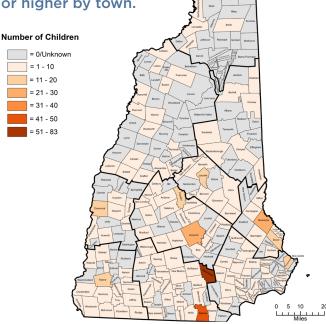


Figure 8: New children aged 72 months or younger above the state action limit requiring medical nurse case management, 2015 - 2019.



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 aged 72 months and younger.

Figure 7: Number of children aged 72 months or younger with blood lead level elevations of 5µg/dL or higher by town.



¹ A SAU map with towns can be found at <u>https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/sau-map.pdf</u> ² 5μg/dL is the blood lead level at which Lead Exposure Investigations and Medical Case Management is Recommended by the CDC for Children <6 years.

Lead by the Numbers in 2019

Lead poisoning is preventable



Of structures in NH's highest risk communities built prior to 1978 when lead paint was banned



Children 72 months or younger had blood lead levels high enough to call for medical management

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Parents notified that their children had elevated blood lead level 3 µg/dL or higher



Parents of children with blood lead levels greater than 7.5 μ g/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



Testing A Child for Lead Exposure

- **Single Visit**
- **Simple Finger Stick**
- **Answer in 3 Minutes**

Children's blood lead levels can easily and accurately be tested with a simple, fingerstick blood sample during a Well Child Check visit at age 1 year and again at age 2 years at healthcare provider offices with point-of-care testing using Lead Care II analzyers.

Table 1: NH Statewide and Select High-RiskCommunities - 2019 Testing Data6 Years or Younger

TOWN	AGE GROUP (IN MONTHS)	TOTAL NUMBER SCREENED	POPULATION CENSUS 2010	PERCENTAGE SCREENED (%) ³	SCREENING RATES, PERCENTAGE CHANGE FROM A YEAR EARLIER (2018)	NUMBER OF CHILDREN WITH 5 - 9 μg/dL	NUMBER OF CHILDREN WITH ≥10 µg/dL
BERLIN	0 to 11	8	87	9.2	+ -11.1	0	0
	12 to 23	80	75	106.7	1 4.3	<5	0
	24 to 35	59	102	57.8	+ -18.1	<5	0
	36 to 72	21	284	7.4	† 5.0	<5	0
CLAREMONT	0 to 11	2	128	1.6	- 0.0	0	0
	12 to 23	103	172	59.9	† 8.4	7	<5
	24 to 35	74	177	41.8	1 .4	<5	0
	36 to 72	88	526	16.7	† 6.0	<5	<5
CONCORD	0 to 11	25	440	5.7	† 31.6	<5	0
	12 to 23	290	452	64.2	↑ 5.1	10	<5
	24 to 35	233	489	47.7	↑ 8.4	<5	<5
	36 to 72	86	1,441	6.0	+ -14.0	6	0
	0 to 11	1	89	1.1	- 0.0	0	0
	12 to 23	19	95	20.0	+ -17.4	<5	õ
CONWAY	24 to 35	24	99	24.2	↑ 33.3	<5	0
	36 to 72	8	329	2.4	- 0.0	<5	0
DOVER		22				<5	0
	0 to 11 12 to 23	22	374 356	5.9 66.6	 ↑ 83.3 ↓ -2.5 	<5 7	
	24 to 35	182	341	53.4	-2.5↑ 4.6	5	0
	36 to 72	79	1,087	7.3	4.6↑ 6.8	5	0
FARMINGTON			-				
	0 to 11	6	87	6.9	100.0	0	0
	12 to 23	41	98	41.8	-26.8	<5	0
	24 to 35	40	72	55.6	+ -4.8	<5	<5
	36 to 72	16	265	6.0	† 77.8	<5	0
FRANKLIN	0 to 11	11	99	11.1	+ -35.3	0	0
	12 to 23	65	96	67.7	1 .6	5	<5
	24 to 35	60	95	63.2	17.7	11	0
	36 to 72	25	318	7.9	+ -32.4	<5	0
GREENVILLE	0 to 11	0	19	0.0	- 0.0	0	0
	12 to 23	16	23	69.6	+ -23.8	<5	0
	24 to 35	15	26	57.7	+ -6.3	0	0
	36 to 72	6	84	7.1	+ -40.0	0	0
HAVERHILL	0 to 11	0	45	0.0	- 0.0	0	0
	12 to 23	1	35	2.9	- 0.0	0	0
	24 to 35	3	69	4.4	- 0.0	0	0
	36 to 72	2	123	1.6	- 0.0	0	0
HILLSBORO	0 to 11	0	67	0.0	+ -100.0	0	0
	12 to 23	47	77	61.0	+ -8.0	<5	0
	24 to 35	38	74	51.4	↑ 21.9	<5	<5
	36 to 72	21	240	8.8	↑ 5.0	<5	0
HINSDALE	0 to 11	2	45	4.4	- 0.0	<5	0
	12 to 23	32	31	103.2	▲ 0.0▲ 6.7	<5	0
	24 to 35	32	41	75.6	10.710.7	0	0
	36 to 72	7	133	5.3	↓ -46.2	<5	0
	001072	,	100	0.0	¥ 70.2		5

³Screening Rates Presented may exceed 100% in situations where number of children screened exceeds 2010 Census Population.

TOWN	AGE GROUP (IN MONTHS)	TOTAL NUMBER SCREENED	POPULATION CENSUS 2010	PERCENTAGE SCREENED (%) ³	SCREENING RATES, PERCENTAGE CHANGE FROM A YEAR EARLIER (2018)	NUMBER OF CHILDREN WITH 5 - 9 μg/dL	NUMBER OF CHILDREN WITH ≥10 µg/dL
HUDSON	0 to 11	22	257	8.6	+ -21.4	0	0
	12 to 23	186	255	72.9	1 21.6	<5	0
	24 to 35	177	285	62.1	1 27.3	<5	0
	36 to 72	65	953	6.8	1 32.7	0	0
KEENE	0 to 11	1	159	0.6	+ -85.7	<5	0
	12 to 23	144	182	79.12	+ -5.3	7	0
	24 to 35	117	185	63.2	† 6.4	<5	0
	36 to 72	51	613	8.3	1 16.7	<5	<5
LACONIA	0 to 11	11	178	6.2	+ -35.3	0	0
	12 to 23	127	178	71.4	1 2.4	8	0
LACONIA	24 to 35	113	174	64.9	1 39.5	<5	<5
	36 to 72	27	506	5.3	+ -25.0	<5	0
	0 to 11	3	184	1.6	- 0.0	0	0
LEBANON	12 to 23	92	174	52.9	↑ 24.3	<5	0
	24 to 35	74	160	46.3	1 21.3	<5	0
	36 to 72	39	443	8.8	143.8	<5	0
	0 to 11	43	1,525	2.8	+ -25.9	<5	0
MANCHESTER	12 to 23	1,103	1,512	72.9	1 0.4	24	8
MANCHESTER	24 to 35	936	1,498	62.5	1 3.0	15	<5
	36 to 72	475	4,165	11.4	† 13.9	21	<5
	0 to 11	39	1,076	3.6	+ -25.0	0	0
NASHUA	12 to 23	796	1,088	73.2	1 0.9	17	<5
NASHUA	24 to 35	716	1,078	66.4	1 27.9	15	<5
	36 to 72	318	3,274	9.7	† 55.9	8	0
NEWMARKET	0 to 11	10	101	9.9	+ -23.1	0	0
	12 to 23	63	123	51.2	+ -7.4	<5	0
	24 to 35	49	123	39.8	+ -3.9	0	<5
	36 to 72	9	327	2.8	+ -18.2	<5	0
	0 to 11	2	74	2.7	+ -33.3	0	<5
NEWPORT	12 to 23	56	92	60.9	† 33.3	0	0
NEWPORI	24 to 35	35	77	45.5	+ -7.9	<5	0
	36 to 72	23	214	10.8	† 35.3	<5	<5
	0 to 11	0	58	0.0	+ -100.0	0	0
PETERBOROUGH	12 to 23	37	63	58.7	+ -19.6	<5	0
PETERBOROUGH	24 to 35	34	63	54.0	+ -19.1	<5	0
	36 to 72	6	171	3.5	+ -45.5	<5	0
	0 to 11	4	63	6.4	+ -20.0	0	0
PITTSFIELD	12 to 23	26	47	55.3	+ -7.1	<5	0
	24 to 35	19	45	42.2	-24.0	0	0
	36 to 72	13	171	7.6		<5	0
ROCHESTER	0 to 11	16	333	4.8	+ -42.9	0	0
	12 to 23	235	384	61.2	1 3.0	8	<5
	24 to 35	137	380	36.1	-23.0	<5	0
	36 to 72	67	1,043	6.4	1 .5	7	<5
	0 to 11	9	170	5.3	+ -18.2	0	0
SOMERSWORTH	12 to 23	99	163	60.7	1 0.0	<5	0
	24 to 35	66	157	42.0	+ -2.9	<5	0
	36 to 72	37	480	7.7	- 0.0	<5	0
	0 to 11	704	12,994	5.4	+ -7.6	18	1
STATE OF NEW HAMPSHIRE	12 to 23	9,486	13,521	70.2	5 .0	210	32
	24 to 35	8,048	13,959	57.7	↑ 11.1	135	16
	36 to 72	3,284	44,293	7.4	15.7	108	7
TOTAL	0 to 72	21,522	84,767	25.4	1 13.7	471	56
TOTAL	01072	21,322	04,707	23.4	0.1	471	