

2021



LEAD EXPOSURE IN NEW HAMPSHIRE DATA BRIEF

In 2021, 2,247 fewer NH children had blood lead level tests than in 2020 due to the COVID-19 pandemic and a nationwide recall of point-of-care (in-office) blood lead testing supplies. This represents a 25% drop in the number of children tested for blood lead levels since 2019.

Figure 1: Annual number of children 72 months or younger tested for blood lead levels, 2017-2021.

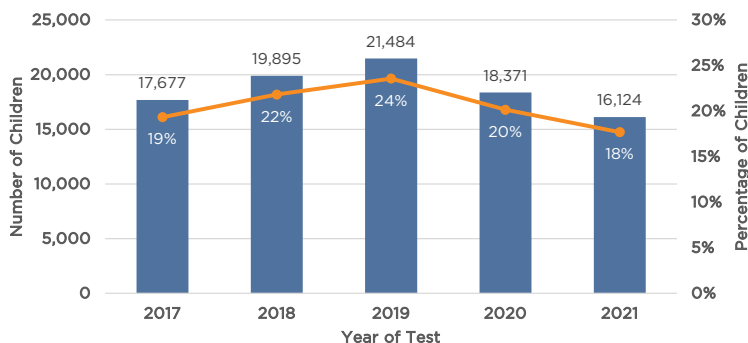


Figure 2: Percentage of 1- and 2-year-old children tested for blood leads levels, 2017-2021.

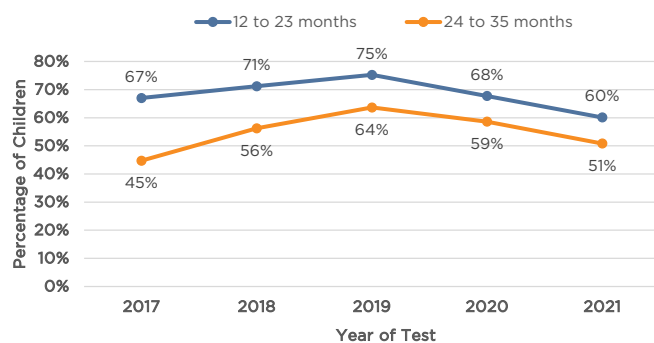
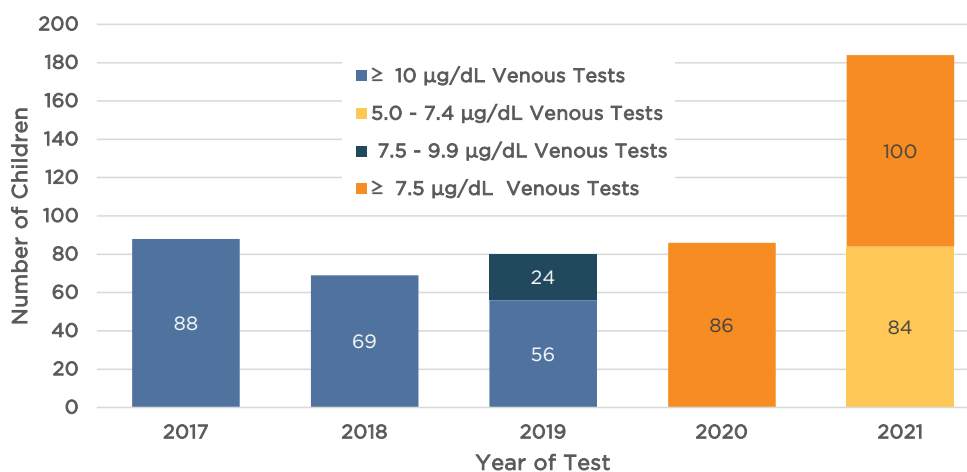


Figure 3: Number of children 72 months or younger, above the NH public health action level requiring medical nurse case management, 2017-2021.

On July 1, 2021, the NH public health action level requiring nurse case management and a lead exposure investigation was lowered from 7.5 µg/dL or higher, to 5 µg/dL or higher, for children 72 months or younger.



Numbers in New Hampshire in 2021

Figure 4: Percentage of children 72 months and younger, tested for blood lead level by School Administrative Unit 2021¹.

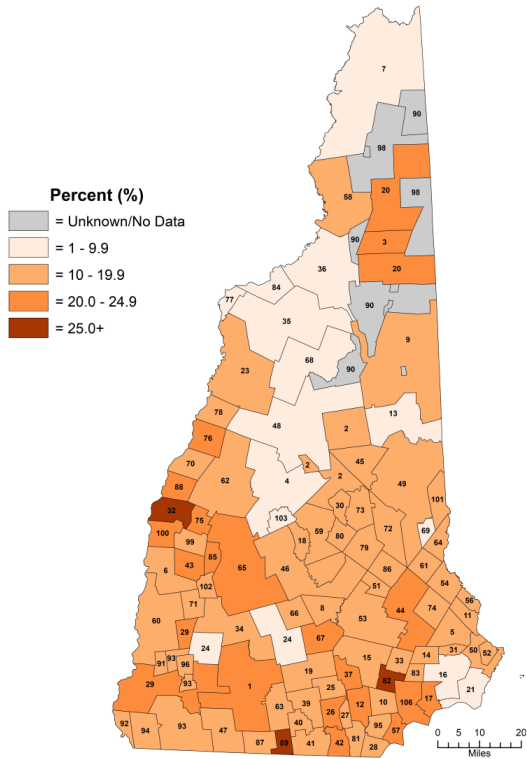


Figure 5: Number of children 72 months and younger, with blood lead level elevations of 5µg/dL or greater by School Administrative Unit 2021^{1,2}.

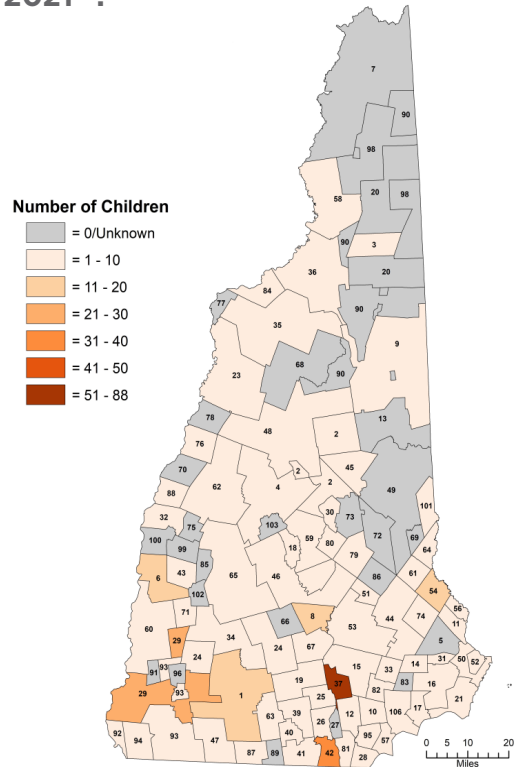
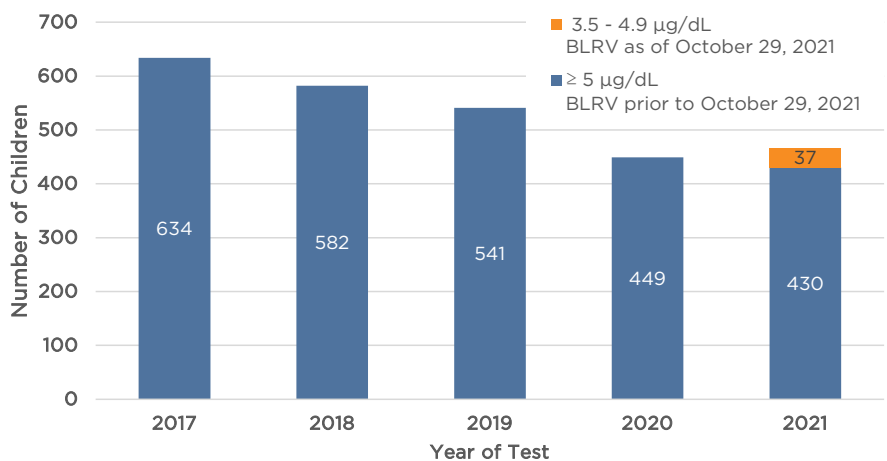


Figure 6: Number of children aged 72 months and younger with elevated blood lead levels at CDC’s Reference Level, or higher, at which lead level exposure investigations and medical case management is recommended.

In October 2021, the Centers for Disease Control and Prevention (CDC) lowered the blood lead reference value (BLRV) from 5 µg/dL to 3.5 µg/dL.



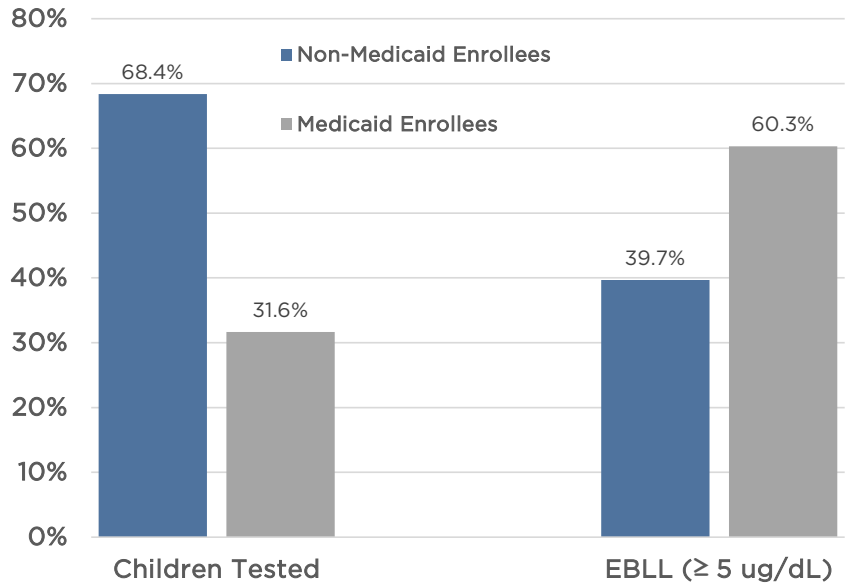
¹A NH SAU map can be found at this link: <https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/sau-regions.pdf>

²5µg/dL is the blood lead level at which lead exposure investigations and medical case management is recommended for children 72 months and younger.

NH Medicaid Enrollees

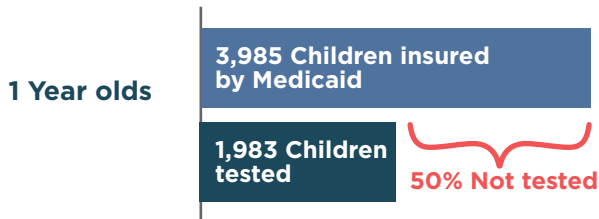
Figure 7: Medicaid enrolled children, 72 months and younger, represent a disproportionate percentage of children with elevated blood lead levels (EBLL).

Even though NH children enrolled in Medicaid only comprise 31.6% of all children tested for blood lead levels, they represent 60.3% of those with EBLLs.



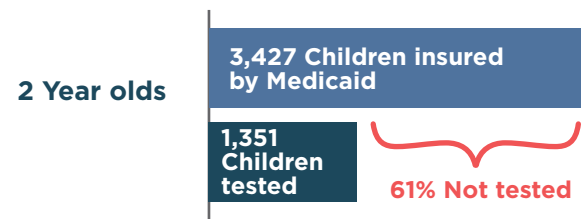
Children eligible for Medicaid have been identified as having an increased risk for lead exposure. All children enrolled in Medicaid are *required* by State and Federal law to have a blood lead level test at age 12 months and again, a second test, at age 24 months.

Figure 8: Number of NH one-year-olds enrolled in Medicaid tested for blood lead level, 2021.



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 50% were tested for blood lead levels in 2021.

Figure 9: Number of NH two-year-olds enrolled in Medicaid tested for blood lead level, 2021.



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 39% were tested for blood lead levels in 2021.

Table 1: NH Cities: 2021 Testing Data for Children Aged 72 Months and Younger.

| CITIES | AGE GROUP (IN MONTHS) | TOTAL NUMBER TESTED | POPULATION CENSUS 2020 | PERCENTAGE TESTED (%) ³ | TESTING RATES, (PERCENTAGE CHANGE FROM A YEAR EARLIER) | NUMBER OF CHILDREN WITH EBLI ($\geq 5 \mu\text{g/dL}$) |
|-----------|-----------------------|---------------------|------------------------|------------------------------------|--|--|
| BERLIN | 0 to 11 | 1-4 | 74 | * | ↓ -70.6 | 0 |
| | 12 to 23 | 62 | 74 | 83.8 | ↓ -20.5 | 0 |
| | 24 to 35 | 65 | 78 | 83.3 | ↑ 37.1 | < 5 |
| | 36 to 72 | 5 | 316 | 1.6 | ↓ -43.8 | < 5 |
| CLAREMONT | 0 to 11 | 1-4 | 116 | * | ↓ -44.8 | 0 |
| | 12 to 23 | 72 | 148 | 48.6 | ↓ -18.8 | 6 |
| | 24 to 35 | 57 | 137 | 41.6 | ↑ 15.1 | 5 |
| | 36 to 72 | 33 | 574 | 5.7 | ↓ -46.0 | < 5 |
| CONCORD | 0 to 11 | 5 | 407 | 1.2 | ↓ -22.8 | < 5 |
| | 12 to 23 | 305 | 438 | 69.6 | ↑ 14.5 | 11 |
| | 24 to 35 | 186 | 440 | 42.3 | ↓ -11.7 | < 5 |
| | 36 to 72 | 78 | 1,740 | 4.5 | ↓ -15.0 | < 5 |
| DOVER | 0 to 11 | 7 | 343 | 2.0 | ↑ 27.2 | 0 |
| | 12 to 23 | 150 | 313 | 47.9 | ↑ 25.4 | 7 |
| | 24 to 35 | 78 | 302 | 25.8 | ↓ -52.4 | < 5 |
| | 36 to 72 | 23 | 1,303 | 1.8 | ↓ -20.1 | < 5 |
| FRANKLIN | 0 to 11 | 1-4 | 95 | * | ↓ -30.5 | 0 |
| | 12 to 23 | 49 | 95 | 51.6 | ↓ -29.3 | < 5 |
| | 24 to 35 | 36 | 88 | 40.9 | ↓ -7.5 | < 5 |
| | 36 to 72 | 18 | 384 | 4.7 | ↓ -21.5 | < 5 |
| KEENE | 0 to 11 | 1-4 | 138 | * | ↓ -30.9 | 0 |
| | 12 to 23 | 143 | 161 | 88.8 | ↑ 13.0 | 14 |
| | 24 to 35 | 100 | 169 | 59.2 | ↓ -8.0 | < 5 |
| | 36 to 72 | 19 | 738 | 2.6 | ↓ -31.4 | < 5 |
| LACONIA | 0 to 11 | 5 | 152 | 3.3 | ↓ -34.9 | 0 |
| | 12 to 23 | 80 | 154 | 51.9 | ↓ -0.6 | < 5 |
| | 24 to 35 | 74 | 159 | 46.5 | ↓ -14.8 | < 5 |
| | 36 to 72 | 19 | 665 | 2.9 | ↓ -31.2 | < 5 |

*Exact numbers cannot be reported when there are 1-4 cases due to suppression guidelines to protect privacy.

³Population data used as denominators were obtained from 2020 New Hampshire Department of Health and Human Services, Bureau of Public Health

| CITIES | AGE GROUP (IN MONTHS) | TOTAL NUMBER TESTED | POPULATION CENSUS 2020 | PERCENTAGE TESTED (%) ³ | TESTING RATES (PERCENTAGE CHANGE FROM A YEAR EARLIER) | NUMBER OF CHILDREN WITH EBLL (≥ 5 µg/dL) |
|------------------------|-----------------------|---------------------|------------------------|------------------------------------|---|--|
| LEBANON | 0 to 11 | 5 | 180 | 2.8 | ↑ 411.1 | 0 |
| | 12 to 23 | 129 | 158 | 81.6 | ↑ 23.5 | < 5 |
| | 24 to 35 | 84 | 147 | 57.1 | ↓ -5.7 | < 5 |
| | 36 to 72 | 28 | 540 | 5.2 | ↓ -57.5 | 0 |
| MANCHESTER | 0 to 11 | 38 | 1,401 | 2.7 | ↑ 53.2 | < 5 |
| | 12 to 23 | 937 | 1,419 | 66.0 | ↑ 0.6 | 32 |
| | 24 to 35 | 748 | 1,344 | 55.7 | ↓ -4.7 | 40 |
| | 36 to 72 | 146 | 4,762 | 3.1 | ↓ -30.6 | 14 |
| NASHUA | 0 to 11 | 34 | 997 | 3.4 | ↓ -10.5 | 0 |
| | 12 to 23 | 697 | 1,030 | 67.7 | ↓ -0.1 | 16 |
| | 24 to 35 | 648 | 976 | 66.4 | ↑ 20.3 | 10 |
| | 36 to 72 | 209 | 3,839 | 5.4 | ↑ 7.4 | 7 |
| PORTSMOUTH | 0 to 11 | 6 | 193 | 3.1 | — 0.0 | 0 |
| | 12 to 23 | 88 | 214 | 41.1 | ↓ -30.7 | 0 |
| | 24 to 35 | 63 | 173 | 36.4 | ↓ -37.6 | < 5 |
| | 36 to 72 | 15 | 728 | 2.1 | ↓ -50.0 | < 5 |
| ROCHESTER | 0 to 11 | 9 | 193 | 4.7 | ↑ 72.5 | 0 |
| | 12 to 23 | 145 | 214 | 67.8 | ↑ 16.7 | 5 |
| | 24 to 35 | 114 | 173 | 65.9 | ↑ 29.7 | < 5 |
| | 36 to 72 | 23 | 728 | 3.2 | ↑ 17.7 | 5 |
| SOMERSWORTH | 0 to 11 | 1-4 | 151 | * | ↓ -83.9 | 0 |
| | 12 to 23 | 56 | 139 | 40.3 | ↓ -20.9 | 5 |
| | 24 to 35 | 43 | 135 | 31.9 | ↓ -13.8 | < 5 |
| | 36 to 72 | 15 | 560 | 2.7 | ↑ 7.1 | < 5 |
| 13 NH CITIES | 0 to 11 | 117 | 4,440 | 2.6 | ↓ -6.4 | < 5 |
| | 12 to 23 | 2,913 | 4,557 | 63.9 | ↓ -8.3 | 102 |
| | 24 to 35 | 2,296 | 4,321 | 53.1 | ↓ -15.4 | 71 |
| | 36 to 72 | 631 | 16,877 | 3.7 | ↓ -9.5 | 45 |
| TOTAL | 0 - 72 | 5,957 | 30,195 | 19.7 | ↓ -11.4 | 221 |
| STATE OF NEW HAMPSHIRE | 0 to 11 | 462 | 12,144 | 3.8 | ↓ -5.1 | 13 |
| | 12 to 23 | 7,583 | 12,615 | 60.1 | ↓ -4.9 | 196 |
| | 24 to 35 | 6,399 | 12,594 | 50.8 | ↓ -4.0 | 141 |
| | 36 to 72 | 1,680 | 53,795 | 3.1 | ↓ -29.0 | 80 |
| TOTAL | 0 - 72 | 16,124 | 91,148 | 17.7 | ↓ -18.5 | 430 |

*Exact numbers cannot be reported when there are 1–4 cases due to suppression guidelines to protect privacy.

³Population data used as denominators were obtained from 2020 New Hampshire Department of Health and Human Services, Bureau of Public Health Statistics and Informatics population estimates.

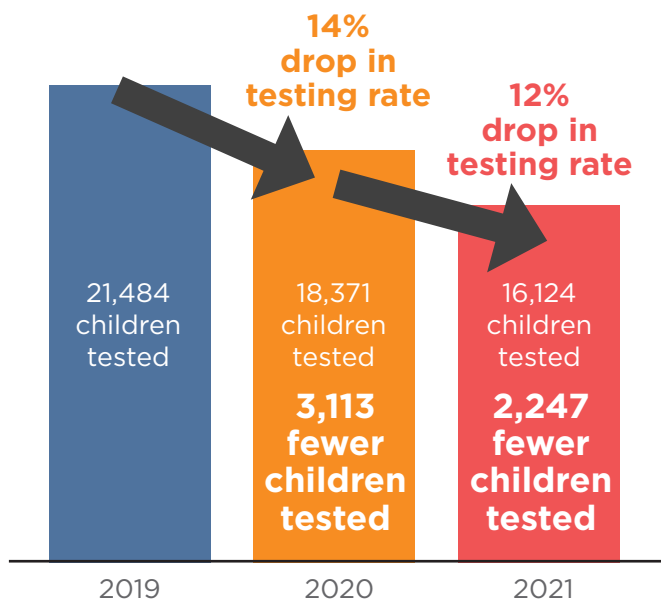
YOUR ACTION IS REQUIRED!

ACTION NEEDED

- Test *every* child at age one, and again, at two.
- Catch-up test any child ages three to six who hasn't had a second test.
- Refer any child with an EBLL 5 ug/dL or higher to early support services.
- Identify the sources of lead in the child's environment.

25% DROP

in the number of children tested over two years from 2019 to 2021. 5,360 fewer children were tested.



There were 5,360 fewer children, 72 months and younger, tested in 2021 for blood lead levels as compared to 2019, which represents a **25% drop in the number of children tested over the two-year period.**

Decreases in the number and testing rate of children, 72 months and younger, in recent years have been associated with the COVID-19 pandemic and nationwide recall of point-of-care (in-office) blood lead testing supplies. This has caused **NH pediatric blood lead level testing numbers to drop to the lowest level they have been since 2017.**

This dramatic drop in testing rates is alarming, as routine testing of children at age one and again, a second test, at age two, is **critical to identifying those with elevated blood lead levels, connecting them with key services to mitigate lead's harmful effects on their developing brains.**

Even low levels of lead in blood have been shown to negatively affect a child's ability to think, learn and behave. While the effects of lead poisoning may be permanent, if caught early, there are things parents can do to prevent further exposure and reduce damage to their child's health.