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Report

Progress in Achieving Universal Blood Lead Screening in Designated High-Risk Areas of Childhood Lead Poisoning

Prepared in Response to the Maine State Legislature Resolve 2007 Chapter 186

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Executive Summary

The 123rd Maine Legislature enacted, Public Law Chapter 186, a Resolve "To Achieve Universal Blood Lead Level Screening in Maine Children." The Resolve directed the Department of Health and Human Services, Maine Center for Disease Control and Prevention (ME-CDC) to report to the Joint Standing Committee for Health and Human Services on the following: 1) identification of areas of the state of high-risk for childhood lead poisoning; 2) progress made in achieving universal blood lead screening in designated high-risk areas; and 3) lessons learned in attempting to achieve universal blood lead testing and recommendations.

The first report was delivered in January 2009. This document presents the third report. The major findings presented in this report are:

- Statewide, we continue to see an annual decline in the number of children newly identified with elevated blood lead levels.
- Four of the five designated high –risk communities (Bangor, Biddeford-Saco, Portland-Westbrook, and Sanford) have had significant decreases in rates of childhood lead poisoning and are approaching the state average rate. In contrast, the rate of childhood lead poisoning in the Lewiston-Auburn community remains relatively unchanged and almost three times the state average rate.
- General trends in blood lead screening rates appear fairly constant for most high-risk areas, though Lewiston-Auburn continues to shows signs of an increasing trend in screening rates. Sanford has experienced a notable drop in screening rates of 1-year-olds.
- Current surveillance data indicate that most children (66% to 79%) living in the five highrisk areas receive at least one blood lead test by age 3 years, but few children receive blood lead tests both as 1-year-olds and 2-year-olds, as required by law for children receiving MaineCare.
- Initiatives launched in 2009 and 2010 to increase blood lead screening statewide as well as targeted programs within the five high-risk areas have been continued. These initiatives include a targeted mailing campaign to all Maine families with children age 1 year, and contracts to organizations in the five high-risk areas to support local programs to promote blood lead screening along with primary prevention activities. Evaluation efforts are underway to determine whether or not these initiatives are producing the desired results.
- Activities to implement amendments to the Lead Poisoning Control Act to allow for in-office testing of blood lead are underway. Activities include: 1) initiating rule-making to define the "in-office" setting and specify the requirements for electronic reporting of test results; and 2) launching an information technology project to develop functionality to facilitate electronic reporting of results by health care providers.

Introduction

There is no safe amount of lead exposure for children. Changes in brain function related to low-level lead exposure have been shown to affect school performance, educational attainment, and IQ scores. The association between lead exposure and IQ and future income earnings is well established in the scientific literature.¹ Davis estimated that at current levels of lead exposure, each new cohort of 5-year-old children in Maine (approximately 13,000 children) will suffer on average a one-point loss in IQ score and as a result can expect to earn as an aggregate \$270 million less over their lifetimes.²

Current state and federal requirements require that children covered by MaineCare be screened for blood lead at 1 and 2 years of age. All other Maine children are required to be screened for blood lead at these same ages unless a risk assessment indicates the absence of lead hazards (22 MRSA §1317-D).

Screening for lead poisoning identifies children who have elevated blood lead levels. For every child identified with an elevated blood lead level, efforts are undertaken to reduce those blood lead levels and prevent them from worsening. Screening children for lead poisoning is also a way of identifying housing with lead hazards and/or risk behaviors (e.g., bringing lead home from a workplace or job). For every child identified with an elevated blood lead level, future poisonings are prevented by efforts to make housing lead-safe. For these reasons, screening is considered a method of secondary prevention of lead poisoning. In contrast, primary prevention seeks to identify, control, and eliminate lead hazards *before* children are exposed or poisoned.

The Lead Poisoning Prevention Fund was established by the Maine Legislature to support primary prevention efforts so that the state could meet its statutory goal to eliminate childhood lead poisoning (22 MRSA §1314-A and §1322-E). Much progress has been made toward the goal of eliminating lead poisoning. In 1997, more than 400 children were newly identified as having an elevated blood lead level (by convention, defined as 10 micrograms lead per deciliter of blood or higher, or 10 μ g/dL). In 2010, 106 Maine children were identified as having an elevated blood lead level. The trend is decidedly downward.

¹ Landrigan, Phillip J., Clyde B. Schechter, Jeffrey M. Lipton, Marianne C. Fahs and Joel Schwartz. 2002. "Environmental Pollutants and Disease in American Children: Estimates of Morbidity, Mortality, and Costs for Lead Poisoning, Asthma, Cancer, and Developmental Disabilities." Environmental Health Perspectives 110(7): 721– 728. <u>http://dx.doi.org/10.1289/ehp.02110721</u>

² Davis, Mary E. 2010. "Economic Assessment of Children's Health and the Environment in Maine." Maine Policy Review 19(1): 34-45. <u>http://mcspolicycenter.umaine.edu/files/pdf_mpr/V19N1_DavisFIN.pdf</u>



Figure 1. Number of newly identified children under 6 years of age with an elevated blood lead level, by year for the period 2003- 2010.

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1) Identification of High-Risk Areas of Childhood Lead Poisoning

The ME-CDC's Environmental Occupational Health Program completed a major twoyear effort to compile, perform data quality checks, and geocode childhood blood lead surveillance data for the years 2003 through 2007. These data were analyzed and mapped to identify communities of the state that have "high counts" of cases of newly identified children with an elevated blood lead level. Counts of children with elevated blood lead level (i.e., a confirmed blood lead level equal to or above 10 micrograms lead per deciliter blood, or 10 ug/dL) for the years 2003 - 2007 were mapped to the town level (see Figure 1).

This mapping identified five areas of the state that collectively represented 40% of all identified cases of children with an elevated blood lead level (eBLL). These five areas are: Bangor, Biddeford-Saco, Lewiston-Auburn, Portland-Westbrook, and Sanford.

FIGURE 1. Number of newly identified children under 6 years of age with an elevated blood lead level, by town for the years 2003- 2007. ME-CDC further determined that between 80% and 95%, depending on the community, of these

cases of children with eBLLs were living in rental housing. Higher counts of children with



eBLLs are to be expected for towns with higher populations. To determine whether these five communities represent areas of "high risk" for children with eBLLs, ME-CDC computed a measure of the rate of lead poisoning, specifically, the percent of children with eBLLs relative to the total number of children screened for blood lead. Using this "rate" measure, we determined that the rates for these five communities were significantly above the rest of the state (i.e., statewide excluding these five communities) – see Table 1 in addendum.

ME-CDC has focused efforts to promote screening of children for eBLLs, as well as efforts to reduce rates of eBBLs, on these five

communities. The following sections present summaries of the latest outreach and prevention efforts, the latest data on screening rates for these five communities, and signs of progress in reducing rates of eBLLs.

2) Progress toward universal blood lead screening in designated high-risk areas.

A. New Initiatives Launched

The ME-CDC is continuing several initiatives described in the last legislative report that are intended to promote increased blood lead screening statewide as well as in high-risk areas. These initiatives were largely made possible by the Lead Poisoning Prevention Fund, established by the Legislature in 2005 (22 MRSA §1322-E).³ One initiative is an annual, statewide, targeted mailing to all families with children between the ages of 1 and 2 years. The mailing consists of a brochure that includes information for families about lead paint hazards, an offer of free lead dust test kit, and a postage-paid return card to request more information, including how to get a child's blood tested for lead. A second initiative was the establishment of contracts to community groups called Healthy Maine Partnerships, located in each of the five high-risk areas. These contracts provided local communities support for targeted outreach efforts to tenants living in neighborhoods identified as having the highest burden of lead poisoning. With the passage of "An Act to Increase the Availability of Lead Testing for Children,"⁴ ME-CDC is moving forward to implement this legislation which is aimed at reducing a known barrier to blood lead testing – the need for patients to travel to an off-site location to have their blood tested. Each of these initiatives is discussed in more detail in the following pages.

<u>Targeted Mailing Campaign</u>: The Lead Poisoning Prevention Fund enabling legislation requires that targeted educational mailings be sent to families with children that occupy dwellings built prior to 1978 with information on the health hazards of lead, the identification of lead sources, actions to take to prevent lead exposure, and the importance of screening children for lead poisoning. This effort was launched in 2009 and has been continuing since.

³ The Lead Poisoning Prevention Fund is a nonlapsing fund established for the following purposes: a) Contracts for funding community and worker educational outreach programs to enable the public to identify lead hazards and take precautionary actions to prevent exposure to lead; b) An ongoing major media campaign to fulfill the purposes of the educational and publicity program required by section 1317-B; c) Measures to prevent children's exposure to lead, including targeted educational mailings to families with children that occupy dwellings built prior to 1978; d) Measures to prevent occupational exposures to lead for private and public employees; e) Funding an assessment of current uses of lead and the availability, effectiveness and affordability of lead-free alternatives; f) Funding for educational programs and information for owners of rental property used for residential purposes; and g) Implementation of the lead-safe housing registry by the Department of Environmental Protection pursuant to Title 38, chapter 12-B. The Fund is supported by a 25 cent per gallon annual fee imposed on manufactures and wholesalers of paint sold in the State of Maine. http://www.mainelegislature.org/legis/statutes/22/title22sec1322-E.html.

⁴ Public Law 2011 Chapter 183.

Approximately 11,000 brochures were sent out statewide in October 2011 to all Maine families with 1-year-old children as identified through the Maine Birth Certificate Registry. This mailing was supported by a more targeted distribution of the same brochure by the Healthy Maine Partners under contract in the high-risk areas. The brochure promotes screening and provides a way to request a tipsheet specifically about screening. For the five high-risk areas, 233 recipients of the direct mailing requested the tipsheet about screening. The Healthy Maine Partners in the five high-risk areas distributed an additional 1,000 copies of the tipsheet encouraging blood lead screening through multiple channels and interactions in their communities.

<u>Contracts to High-Risk Areas</u>: Funds from the Lead Poisoning Prevention Fund are used to provide contracts to community coalitions (Healthy Maine Partnerships) in the five high-risk areas to promote identification of lead hazards, and to support landlord and tenant education and outreach. Approximately \$30,000 is being allocated to each high-risk area annually. The first funds were provided to communities in the summer of 2009. While the major focus of the Lead Poisoning Prevention Fund is primary prevention (i.e., preventing children from being exposed to lead, rather than identifying children who have been poisoned through screening) many of the activities in the high-risk areas also promote screening. Following are just a few examples of community-level efforts in the high-risk areas to promote screening.

Bangor: The Healthy Maine Partner in Bangor determined that the Community Connector, the public transportation system operated by the city to serve the Greater Bangor Region, could be a highly effective way to reach the population of concern with lead poisoning prevention messages. Populations with lower incomes are more likely to use the bus, and the bus makes regular trips through areas of the city known to have lead problems. The Healthy Maine Partner placed three public service advertisements inside and a larger version on the outside of a Community Connector bus. The advertisements are aimed at parents of young children and encourage them to check with their child's doctor about a blood lead test. Unveiled during National Lead Poisoning Prevention Week, the ad campaign received coverage from the local television news station. Photographs of the bus advertisement can be found in an addendum to this report.

Biddeford-Saco: In Biddeford-Saco, our funded partner distributed materials to parents for distribution through schools (grades K-6). Through this effort, the Healthy Maine Partner was able to reach approximately 1,500 children and parents. In addition, several hundred pieces of

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educational material were distributed to WIC clients and HeadStart clients in Biddeford-Saco. The brochure used in the targeted mailing campaign (see "Targeted Mailing Campaign" above) offering information about blood lead screening and a free home lead dust test kit has been offered to Section 8 tenants with children under age 6 years. Lead poisoning prevention messages are played before movies at the Saco Cinemagic theater.

Portland-Westbrook: In partnership with Catholic Charities, the Healthy Maine Partner in Portland is conducting free classes for recent immigrants, providing lead poisoning prevention and screening education in their native language with translated materials. Section 8 tenants with children under age 6 years receive the brochure used in the targeted mailing campaign with information about screening and offering a free lead dust test kit. In addition, the Healthy Maine Partner conducted a direct mailing to over 2,000 businesses and individuals within Cumberland County who are at risk for exposure to "take home lead" (i.e., lead that is transferred to the home from the body or clothing of someone that works with lead). This messaging also included information about blood lead screening. The Healthy Maine Partner in Portland also placed advertisements in publications such as the *Falmouth Forecaster* and *Raising Maine* (a newspaper directed to Maine moms).

Lewiston-Auburn: The partner in Lewiston-Auburn modified their Healthy Homes classes for New Mainers, creating a "Neighbor to Neighbor" outreach program. In the Neighbor to Neighbor program, 26 Somali and Somali Bantu women received training about lead poisoning prevention so that they could, in turn, educate their neighbors about lead poisoning. Participants appreciated the approach to the topic and the emphasis on educating their neighbors and others within the community. The 26 women were able to meet with a total of 109 of their neighbors. In addition, the partner in Lewiston-Auburn has distributed over 500 copies of lead poisoning prevention and screening materials to HeadStart families. In the spring if 2011, community partners in Lewiston-Auburn worked with the ME-CDC to hold a focus group with Somali and Somali Bantu residents to discuss issues around lead poisoning in the Somali community and how to reduce risk and increase screening within this community.

Sanford: The partner in Sanford has trained approximately 35 staff of the York County Child Development Services on lead poisoning prevention. They continue outreach to health care providers through bi-monthly meetings with office staff, providing tipsheets to provider offices. They also distribute tipsheets about lead poisoning prevention and screening to Section 8 recipients, WIC, HeadStart, and the Council of Early Childhood Providers.

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ME-CDC Outreach to Providers Servicing High-Risk Areas. ME-CDC's Childhood Lead Poisoning Prevention Program has undertaken several initiatives to promote blood lead screening by health care providers servicing high-risk areas. ME-CDC has been working closely with Lewiston-Auburn community partners in their efforts to reach the Somali and Somali/Bantu communities. ME-CDC presented screening information to HeadStart home visiting staff, health coordinators and other staff associated with early and regular HeadStart. ME-CDC is continuing to collaborate with the York County HeadStart to provide guidance around blood lead screening and local data. ME-CDC provided a series of webinars to community partners, four of which addressed methods to increase screening rates in the high density areas. Finally, as MaineCare clients continue to produce the majority of lead poisoning cases, ME-CDC is collaborating with MaineCare to provide direct mailings to parents of MaineCare recipients at ages 1 and 2 years, identify methods for determining provider level screening rates, and identify high volume MaineCare practices.

Implementation of "An Act to Increase the Availability of Lead Testing for Children." Public Law 2011 Chapter 183 amended the Lead Poisoning Control Act (22 MRSA § 1319) in an effort to address a known barrier to blood lead testing: the need for a patient to leave the doctors office to have blood drawn. To address this barrier, the Maine Legislature broadened the number and types of facilities who can perform blood lead analysis, allowing health care providers, facilities or clinics that dispense benefits of the Women, Infants and Children Special Supplemental Food Program of the federal Child Nutrition Act of 1966 (WIC) and HeadStart facilities to perform in-office blood lead analyses as long as they have been approved by the department and can report results electronically. The current device on the market used to perform in-office blood lead analysis of a capillary blood sample for lead. This allows a health care provider to provide results to the patient at the time of an office or clinic visit, and if the levels are high, immediately provide the patient with a referral to a laboratory for a confirmatory venous test as well as connect them with services to reduce exposure to lead hazards.

The legislation requires the department to develop rules for implementing this law. These rules will further define those settings where in-office testing can occur, will establish the requirements for electronic reporting of test results to the ME-CDC, and will establish a process

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for granting approval for in-office testing. Pre-rulemaking contacts with health care providers did not identify any significant concern about ME-CDC's proposed approach. Draft rules are nearly complete. An information technology (IT) project has been initiated to build functionality within an existing IT system to facilitate electronic reporting of test results. The existing IT system, ImmPact2, is already present in many pediatric offices for reporting data to the Maine Immunization Registry.

B. Progress toward decreasing rates of elevated blood lead levels among children living in the high-risk areas.

Before discussing progress toward increasing screening rates among children living in high-risk areas, it is appropriate to first focus on the underlying goal – reducing the occurrence of children with elevated blood lead levels. Figure 2 compares the percent of screened children with an elevated blood lead level among each high-risk community and for two time periods: a period prior to efforts to target new programs and resources to these areas (2003-2007), and a period after the first initiation of these efforts (2008-2010).

There was a substantial decrease in the percent of screened children with an eBLL (referred to as the rate) for each of the five high-risk areas over the two time periods. For some communities, the rate has been halved (e.g., Portland going from just over 2% to 1%). While these comparisons appear quite striking, it should be noted that only the difference for Portland-Westbrook is a highly statistically significant finding; the differences for Bangor and for Sanford are of borderline statistical significance.⁵ The 30% reduction in rates for Biddeford-Saco does not reach statistical significance. Rates for Lewiston-Auburn are relatively unchanged.

⁵ In statistics, a result (e.g., the difference between two observations) is called "statistically significant" if it is unlikely to have occurred by chance.



FIGURE 2. Percent of screened children with an elevated blood lead level (i.e., $\geq 10 \text{ ug/dL}$) for high-risk areas aggregated into the 5-year period 2003-2007 as compared to the 3-year period 2008-2010. **Rest of State* means statewide rates excluding the five high-risk areas.

It is also of interest to contrast the rates for the five high-risk communities to the rate for the rest of the state within each time period. Looking at the 2003-2007 time period, it is readily apparent that rates for the five high-risk communities are generally twice the rate for the rest of the state. But by 2008-2010, the differences (with the exception of Lewiston-Auburn) were no longer so large. Indeed, some communities had rates close to those of the rest of the state, calling into question their continued designation as a high-risk area. Attached to this report as an addendum are a closer examination of the data behind Figure 2, tables presenting aggregate counts of children screened, counts of children with elevated blood lead levels, the percent of children with elevated blood lead levels and associated statistical confidence interval.

C. Progress toward increasing screening rates in high-risk areas.

The major objective of Resolve 2007 Chapter 186 was to promote universal screening of children for blood lead in the designated high-risk areas. In this section we review recent trends in screening children for blood lead, first statewide and then in the five high-risk areas. Statewide, screening rates for 1- and 2-year-old children have generally remained relatively

stable since 2003; around 47% for 1-year-olds (children between 12 and 23 months) and about 23% for 2-year-olds (children between 24 and 35 months).

Figure 3 displays the yearly screening rates for 1-year-olds within the five high-risk areas. Screening rates for these communities are higher than the state average of 47%, most notably for Portland-Westbrook and Bangor with rates of 65 to 70%. Screening rates for Lewiston-Auburn have been steadily increasing since 2006, whereas Sanford has shown substantial drop in screening rates for this age group. Screening rates elsewhere have remained generally stable. The Healthy Maine Partnership for the Sanford area believes that their drop in screening rates may be due to the loss of a practicing pediatrician within Sanford.

Figure 4 displays the same information for children 2 years old (24 to 35 months). Note that the overall screening rates are much lower than screening rates for 1-year-olds (as seen statewide), though all five communities have screening rates higher than the state average of 23%. In general, screening rates for this age group have remained fairly stable, with some evidence of a slow upward trend.



Figure 3: Percent of children with a blood lead screening test by High-Risk Area, Maine 2003-2010. Age 12 to 23 months.



Figure 4: Percent of children with a blood lead screening test by High-Risk Area, Maine 2003-2010, age 24 to 35 months.

Collectively, figures 4 and 5 indicate that while screening rates for the high-risk areas are higher than the rates for the rest of the state, they continue to fall short of approaching the goal of universal screening in these communities.

3) Lessons learned and challenges and barriers to improving screening in high-risk areas.

As we have learned more about our high-risk communities, we have been able to identify neighborhoods where lead poisoning is far more common than in others. Lewiston-Auburn is perhaps one of the best examples of this spatial variation in lead poisoning within a community (see Figure 5). Such variation raises an interesting question regarding the appropriate designation of an area for achieving universal lead screening: Should we continue to focus on the town boundary or selected neighborhoods? Health care providers may appropriately determine that a child living in certain neighborhoods of the Lewiston-Auburn area is at low risk of lead poisoning due to housing characteristics (e.g., living in a building built after 1978), and screening for blood lead may be of little value. Consequently, when we view statistics indicating that 60% of children in a particular community have had at least one blood lead test before age 3 years, it is difficult to determine the degree to which this indicates success (or lack of success) in reaching the children most at risk. Over the coming year, ME-CDC will investigate alternative ways to define and delineate high-risk areas.



Figure 5. This map of Lewiston-Auburn shows the approximate location of children with elevated blood lead levels by census block for the years 2003 – 2007. The larger the orange circle the greater the number of children.

In addition, as we learn more about our high-risk communities, we also improve our ability to identify barriers and challenges to increasing screening rates, and more importantly, to reducing lead poisoning rates. Once again, Lewiston-Auburn is a case in point. We have yet to see decreasing lead poisoning rates for this community. Over the past decade there has been an increase in Somali immigrants who have resettled there. Children of African descent now represent 50% of cases of lead poisoned children in Lewiston-Auburn; there were no cases of lead poisoned children of African descent during the 2003–2004 period. So although this is a geographical high-risk area for lead poisoning, it also is a very specific high-risk population. There are characteristics to this population that make increasing screening rates a challenge – which are not found in our other high-risk areas and may account for the lack of decrease of lead poisoning rates in Lewiston-Auburn. Barriers to screening within this ethnic community are many, and some examples include the following.

- Awareness of lead poisoning. Use of lead paint in Somalia was rare many immigrants have not heard of lead paint and the two Somali languages do not have a direct translation of the word "lead."
- Cultural barriers to blood testing. Some Somalis have been resistant to the idea of removing blood from their children. Traditionally, seeking health care services was for acute, severe disease. The concept of preventive health care is a new one for this population.
- Physical barriers to screening. Often a blood lead test would be ordered at a physician's office, but the actual blood draw would occur at a hospital laboratory. In these cases the family often needs to get transportation from the physician's office to the hospital lab for both themselves as well as an interpreter. It is hoped that use of the LeadCare II portable lead testing device will address this barrier.
- Language barriers. Because many Somalis have limited English language skills and some are not literate in their native language, it is often difficult to communicate the need for blood lead testing to parents.
- Magnitude of the problem: There is no accurate data on the number of Somali children in these locales at any given time. Additionally, recording of ethnicity from the lead results is often incomplete or misleading. For that reason it is not possible to calculate screening rates within this community to identify the magnitude of the problem or to evaluate efforts to improve screening.

Attempts to address these barriers have begun, as noted in discussion above on new initiatives launched in Lewiston-Auburn. It may be too soon to see the benefit of these new initiatives on reducing rates of lead poisoning.

This examination of lead poisoning and blood lead screening in Lewiston-Auburn shows that risk has both a geographic and population component. In addition to the Somali and Somali Bantu populations in Lewiston-Auburn, another population at increased risk for lead poisoning is children enrolled in MaineCare. In 2003 and 2004 the percent of lead poisoned children who were on MaineCare ranged from 25 % to 45 % statewide. That percentage has steadily increased to a recent high of between 65% and 90%. These dramatic changes among children of African descent and children on MaineCare raise an important question about our definition of risk and

whether efforts to increase screening and prevent lead poisoned are best targeted by geography or by population characteristics.

Priorities for 2012

Our findings in this report suggest that we focus on certain priorities in 2012 to continue to improve screening for blood lead and continue progress toward the elimination of lead poisoning in Maine. As resources allow, in 2012 ME-CDC will focus on the following.

- Continue initiatives to promote screening for blood lead testing in high risk areas, including implementing legislation to allow for 'in-office' testing;
- Explore alternative ways to define and delineate high-risk areas of lead poisoning;
- Continue efforts to identify high-risk populations and the most effective way to target screening of these populations.

ADDENUM #1

Blood Lead Surveillance Data for the Five High-Risk Areas

Table 1. Percent of newly identified children under 6 years of age with an elevated blood lead level fo	r
identified "high-risk" communities for the period of 2003-2007.	

Selected Area	Number Screened (5 year total)	Number eBLL ^(a) (5 year total)	Percent ^(b)	95% Cl ^(c)
Bangor	2,098	41	2.0	(1.4 – 2.6)
Biddeford/Saco	2,227	44	2.0	(1.4 – 2.6)
Lewiston/Auburn	4,161	119	2.9	(2.4 - 3.4)
Portland/Westbrook	5,135	110	2.1	(1.7 – 2.5)
Sanford	1,659	34	2.0	(1.3 – 2.7)
Rest of State*	54,366	563	1.0	(0.9 – 1.1)

^(a) eBLL = elevated blood lead level;

^(b) Percent = number of eBLL per 100 children screened.

(c) 95% CI = the statistical range of values where there is 95% confidence the true value lies within this range

* Statewide rates excluding the five high risk areas.

Table 2. Percent of newly identified children under 6 years of age with an elevated blood lead level for
identified "high-risk" communities for the period of 2008-2010.

Selected Area	Number Screened (3 year total)	Number EBLL ^(a) (3 year total)	Percent ^(b)	95% CI ^(c)
Bangor	1292	16	1.2	(0.6-1.8)
Biddeford/Saco	1328	1 9	1.4	(0.8-2.0)
Lewiston/Auburn	2406	62	2.6	(2.0-3.2)
Portland/Westbrook	2950	30	1.0	(0.6-1.4)
Sanford	873	9	1.0	(0.3-1.7)
Rest of State*	31341	215	0.7	(0.6-0.8)

^(a) eBLL = elevated blood lead level;
^(b) Percent = number of eBLL divided by number screened.

^(c) 95% CI = the statistical range of values by there is 95% confidence the true value lies within this range * Statewide rates excluding the five high-risk areas.

NOTE: To view these and other lead poisoning related data, visit the Maine Tracking Network at: https://tracking.publichealth maine.gov/ephtn/index html

ADDENUM #2



Pictures of advertisements on the Bangor Community Connector buses

