

**Report on**

**The feasibility of including blood lead level assessment  
information in the school records of enrolled children**

**Prepared in Response to the Maine State Legislature  
Resolve 2008 Chapter 186**

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**Prepared by**

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## Introduction

Resolve 2008, Chapter 186 of the 123<sup>rd</sup> Maine Legislature, Section 4, directed the Departments of Education and Health and Human Services (DHHS) to report by January 15, 2009, to the Joint Standing Committee of the Legislature having jurisdiction over health and human services matters on the feasibility of including blood lead level assessment information in the school records of enrolled children. The departments were instructed to consider using the record system in use for immunization information under MRSA, Title 20-A, section 6358.

Prior to discussing the feasibility of including blood lead level assessment information in the school records of enrolled children, we believe it is important to point out that there are important issues that need to be considered regarding the appropriateness of providing such data to schools. A case can be made that schools should be aware of entering students who have previously had blood lead levels of 20 micrograms lead per deciliter of blood (20 µg/dL) and greater, and possibly for students with levels somewhat lower (15 – 19 µg/dL), if other risk factors are present. For these cases, we can provide school nurses with national guidance on developmental assessment in investigations.<sup>1</sup> However, here we concern ourselves with less than 50 newly identified Maine children per year. For the vast majority of children with lower blood lead levels, we have no national guidance to offer schools. It is not obvious what blood lead level we would recommend to schools as being of concern, and there are virtually no data showing the effectiveness of interventions at any blood lead levels. For these lower blood lead levels it may well be that interventions for lead-exposed children should be administered largely as they are now for children with idiopathic learning disabilities - when there is evidence that a child is having difficulty in school - and the intervention should be specifically targeted for the presenting difficulties.

Any parent can request a copy of their child's blood lead testing data either from their primary health care provider or (due to recent changes in state law governing the confidentiality of blood lead data) from the Maine Childhood Lead Poisoning Prevention Program. We are aware of no barriers that would prevent a parent from requesting that these data be placed into the child's school record. This approach would place the burden on the parent or child's guardian to make a request that a copy of the child's blood lead data be provided to the school.

In order to develop an automated record system similar to what is in use for immunization information (most notably without having to first obtain prior consent of the parent), the following tasks would be required:

1. Amend 22 MRSA c. 252 §1317-C.3 to allow blood lead data to be shared with schools without prior authorization;

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<sup>1</sup> Managing Elevated Blood Lead Levels Among Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning and Prevention, U.S. Centers for Disease Control and Prevention, Atlanta, GA, March 2002.

2. Develop new data storage and reporting functionalities for Maine’s immunization information system (called ImmPact2) so that it can receive blood lead data and report out blood lead data to authorized users (e.g., school nurses); and]
3. Revise the school health manual to add a section on lead poisoning and appropriate interpretation of blood lead data.

Each of these tasks is discussed in the following pages.

**1. Need to amend State law to enable blood lead data to be shared with schools without prior authorization.**

22 MRSA c. 252 §1317-C.3 states:

“Unless otherwise authorized by section 42, subsection 5, the department may not release any information described in subsection 2 regarding the screening of children for lead poisoning or the source of any lead exposure if that information identifies children, families or other persons, directly or indirectly. The department may disclose information that relates to the address of a residential unit in which an environmental lead hazard or case of lead poisoning has been identified if the disclosure contains only the information necessary to advance the public health and does not directly identify an individual.”

Thus, under current state law, DHHS is not allowed to share any blood lead assessment information (other than address information) with schools (or anyone else) unless authorization is first obtained. In order for DHHS to share blood lead assessment information with schools without first obtaining authorization, it would be necessary to amend this law.

**2. Develop new data storage and reporting functionalities for Maine’s immunization information system (ImmPact2).**

Currently, the primary record system for immunization information on school age children is the Maine Immunization Information System (IIS). The IIS, now called ImmPact2, is managed and maintained by the Maine Immunization Program, a program of the Maine Centers for Disease Control and Prevention. ImmPact2 is a secure, confidential, Internet-based system that enables authorized users to access information related to a person’s immunization status and/or well child visits. Identifying information contained in the ImmPact2 System is deemed confidential. The Immunization Information System is intended to be a repository for accurate and up-to-date immunization records for all persons born, residing, or receiving vaccine in the State of Maine. ImmPact2 is able to perform a variety of functions for authorized users, including: a) Recording immunizations, contraindications, and reactions; b) Validating immunization history and providing immunization recommendations; c) Producing recall and reminder notices, vaccine usage and client reports, and Clinic Assessment Software Application (CASA) extracts; and, d) Managing vaccine inventory.

The majority of shot records are entered into ImmPact2 by private providers using a Web-based interface. ImmPact2 has grown over the years and holds thousands of shot records, but not all providers are participating. Other than an individual's medical chart, ImmPact2 is the only information system authorized by statute to collect, store and maintain immunization records for Maine citizens.

Authorized users of ImmPact2 are generally individuals or organizations that require regular access to immunization-related information on a specific individual to provide immunization and/or well child services or ensuring compliance with specific immunization requirements (i.e. school entry). Authorized users (including schools) must sign an annual agreement as provided by the Maine Immunization Program. The agreement documents knowledge of confidentiality and security requirements, penalties for violations and acceptance by the user of his or her responsibilities including their responsibility for subordinate staff.

School nurses who are authorized users are provided Internet access to ImmPact2, and can generate and review reports on the immunization status of children in their school district. ImmPact 2 thus provides schools a convenient way to check the immunization status of children in their schools.

A similar approach could be developed to make blood lead assessment information available to school nurses. ImmPact2 cannot currently store or report out blood lead data. However, based on several meetings with the ME-CDC staff involved with the operation and maintenance of ImmPact2, we believe it is feasible to develop this functionality. The first step would be to engage the various stakeholders to develop the business use requirements (i.e., what the users of the system would like the system to do). Information Technology staff would then use these business use requirements to develop System Requirements (i.e., a translation of the business use requirements into a description of the informatics requirements). The System Requirements are used, in turn, by Programmer Analysts to develop a Technical Work Plan that would be used to build the added functionality (i.e., the plan for how to actually build the new functionality). Accurate costs of developing this enhanced functionality of ImmPact2 can only be made after the Technical Work Plan has been developed, but we have made a rough estimate of \$50,000 (range \$30,000 - \$100,000) by analogy to past efforts. Additionally, there would be ongoing costs for operation and maintenance of the enhanced functionality for ImmPact2. These costs have yet to be estimated.

If this work was completed, school nurses and others (including primary care providers) would have comprehensive access to blood lead testing information, and would be able to run reports to identify children in need of follow-up testing as well as children who have yet to be screened for blood lead<sup>2</sup> Indeed, because virtually all childhood blood lead

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<sup>2</sup> Under current law (22 MRSA §1317-D) the program must require the testing of blood lead levels of all children covered by the MaineCare program at one year of age and 2 years of age. The program must require the testing of blood lead levels of all children not covered by the MaineCare program at one year of age and 2 years of age unless, in the professional judgment of the provider of primary health care, in

testing in Maine is performed by the State Health and Environmental Testing Laboratory (HETL), it would be feasible to automate the uploading of these data directly into ImmPact2. This functionality would likely be welcomed by health care providers who must now manually enter blood lead test data obtained from the HETL into their medical charts and electronic medical records. Adding a blood lead data tracking and reporting system to ImmPact2 would therefore be of most benefit and use to primary health care providers rather than school nurses; the primary use being to identify patients that are in need of follow-up blood lead testing, those who have yet to be screened for blood lead, and tracking results over time (in much the way ImmPact2 can now be used to identify patients in need of immunizations).

ME-CDC has yet to identify a source of funding for developing such enhanced functionality to ImmPact2. The Maine Childhood Lead Poisoning Prevention Program is specifically precluded from using its federal funds for the development of any data information management systems as a condition of its current federal award, though this is a subject of continued discussion with our federal partners. It is not clear if the Lead Poisoning Prevention Fund (LPPF) can be used to support this work. One of the designated purposes for allocations from the LPPF includes “Measures to prevent children’s exposure to lead,” which notes efforts to promote screening children for lead as an allowable expense (see 22 MRSA §1322-E.3). This would need to be a topic of discussion with the LPPF Advisory Board charged with providing advice on expenditures from the Fund.

### **3. Revise the school health manual by adding a section on lead poisoning and appropriate interpretation of blood lead data.**

The School Health Manual is intended to provide guidance to school nurses for school nursing practice. The Manual is designed for school health services to include: a) Current Laws And Rules; b) Policies; c) Best Practice Procedures; and d) Information and Resources to Enhance School Nurse Practice. The manual has a section on Environmental Health, but this section does not include any information about childhood lead poisoning or elevated blood lead levels. If school nurses are going to be expected to add blood lead assessment into the school record, it will be necessary to provide guidance and training on the appropriate interpretation of blood lead assessment information and the appropriate response by the school. This could be accomplished, in part, by including a section including childhood lead poisoning in the School Health Manual. This section would be largely based on the recommendations from the national Advisory Committee on Childhood Lead Poisoning.<sup>3</sup>

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conjunction with the use of the lead poisoning risk assessment tool, the child's level of risk does not warrant a blood lead level test.

<sup>3</sup> Managing Elevated Blood Lead Levels Among Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning and Prevention, U.S. Centers for Disease Control and Prevention, Atlanta, GA, March 2002.

## SUMMARY

It is currently possible to include blood lead assessment information into the school record. However, to do so would place a burden on the parents/guardians of the child to request that a copy of the blood lead assessment information be provided to the schools for inclusion in the student's school health record. This burden has been lessened with recent changes to the confidentiality provisions for blood lead assessment information, in that parents/guardians could not make a request to ME-CDC for these data, which currently has the only comprehensive record of such information. However, responding to such requests could potentially become a challenge with existing staff.

An automated system for providing access to blood lead assessment information, similar to that which currently exists for immunization information, is feasible. It would be necessary to amend state law to allow these data to be shared with authorized users such as a school nurse without prior authorization. It would also be necessary to expend approximately \$50,000 to develop added functionality in the Maine Immunization Information System (ImmPact2). It is worth noting that developing this functionality may actually be of far greater benefit to health care providers for use in tracking blood lead testing of their patients and for improving screening of children for blood lead. A source of the necessary funds to build this added functionality has yet to be identified.

The departments have prepared this feasibility assessment in response to Resolve 2008 Chapter 186. This feasibility assessment should not be construed as indicating any support by the departments for a requirement that proof of blood lead assessment information be established as a condition for school enrollment. The departments would not support such a requirement.

Furthermore, the departments believe that it necessary to more fully consider the appropriateness of routinely sharing blood lead assessment information with schools before any action is taken to require this practice.