

# LEAD HAZARD AWARENESS IN LEWISTON, ME

## *Findings and Recommendations*

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### Lead Hazard Awareness Survey

*Objective.* The Auburn/Lewiston Lead Hazard Control Program (ALLHCP) has established free screening clinics for residents of the Lewiston/Auburn area, and has distributed educational materials documenting the hazards of lead. Within downtown Lewiston, ALLHCP has identified Census Tracts 201 and 204 as "designated target areas" due to the large number of residential structures that may contain lead paint. In most cases, individuals residing in these target areas do not have the economic resources to adequately address the hazards of lead. This survey was conducted to determine to what extent children, age 6 and under, are being tested for elevated blood lead levels and to assess lead hazard awareness in Census Tracts 201 and 204.

*Method.* Randomized block survey of Census Tracts 201 and 204 in downtown Lewiston using a brief questionnaire developed by Professor Heather Lindkvist and Bates student Aron Bell. Three (3) teams of two (2) students went from door-to-door asking residents to participate in the survey. The team recorded responses to the survey and any additional comments made by the respondent. Upon completion of a survey, the team reviewed the ALLHCP *Lead Poisoning* brochure with the respondent and then gave him/her a copy of the brochure.

#### *Findings:*

**75 households** surveyed out of an attempted 163, primarily in Census Tract 204. **55 respondents rented** their residence.

- Of the **households who have children under the age of 6, more than half** have had their **children tested** for elevated blood lead levels (13/22).
- **Two (2) of the households** who have children under the age of 6 **mistakenly reported** that their children have been tested for elevated blood lead levels **by WIC**. The survey team immediately informed them that WIC only tests for anemia or low iron levels, and suggested that they take their kids to a free screening clinic.
- Of the households who have had children screened, **almost all** indicate that their **family doctor referred their child for a blood lead screening** (11/13). Only **one respondent** indicated that she had used the **free screening clinic** at the Multipurpose Center.
- Of those **parents who have children under the age of 6, the majority is well-informed** about the hazards of lead (14/17). Grandparents who have children under the age of 6 visiting for more than 10 hours per week appear to be less informed about the hazard of lead poisoning (3/5).
- When asked what would help residents get their children tested for lead levels, **less than half** suggested "**better information about the free screening clinics**" (24/59); followed by "all of the above" (16/59); "transportation to and from the free testing site" (9/59); and "increase the number of free clinics" (7/59). Other responses included "as part of a regular check-up" and "clinics at the schools".
- When asked what is the **best way to inform residents about free screening clinics**, most suggested **posting or distributing information via a health care provider** or in **the schools**. Other vehicles for distribution included newspapers, TV, landlords, radio, and the internet.
- Individuals who have **recently moved to Lewiston are unaware** of the potential hazards of lead in their residence.

- Several respondents indicated that their **landlord had not informed** them of the hazards of lead poisoning. One landlord surveyed did not realize he was required to tell tenants about lead paint in his building.
- **Respondents expressed concern** that if they point out the potential lead hazards in their apartment, the **landlord will evict** them rather than perform a lead abatement. A respondent reported that she had been evicted from another apartment because she requested that her landlord remove the lead paint from her apartment. When the landlord did nothing, she threatened to report him to the City of Lewiston. The landlord evicted her.

*Overall the Lead Hazard Awareness Survey indicates that children are being tested for elevated blood lead levels and that residents who have children under the age of 6 are informed about the hazards of lead poisoning. However, due to the small sample size this result cannot be generalized to all residents within the target areas, especially the immigrant populations. The following recommendations may help guide the ALLHCP's strategic planning for the next year. Understandably, several of these recommendations may not be feasible at the current time; however, they are suggestions for future work.*

*Recommendations:*

1. **Require blood lead level screenings for all entering kindergarten and first grade students in Lewiston/Auburn.**  
*Use Head Start as a model.* All children enrolled in Head Start must receive a blood lead screening test. While many children within Lewiston's designated target areas may attend Head Start and, hence, receive a blood lead level screening, ALLHCP must reach out to those children who do not.
2. **Establish a Public Health Department in Lewiston.**  
Since 2001, the City of Lewiston has not had a Public Health Nurse. Without a local Public Health program, other public and private agencies must manage public health issues, often independently. A Public Health program and dedicated nurse would provide a centralized location for all public health information, ensure accurate and timely dissemination of important educational materials, and coordinate screening clinics for all potential public health issues.  
  
The City of Auburn's Health and Social Service department effectively distributes information regarding the hazards of lead poisoning. When a student researcher called the department for information about screening clinics and educational materials, the department returned her call immediately. She never reached anyone at the City of Lewiston and, instead, was directed to the Maine Childhood Lead Poisoning Prevention Program.
3. **Provide additional education and training for landlords** in the targeted areas
4. **Plan a lead hazard education program to coincide with National Lead Poisoning Prevention week (October 20-24, 2003)**  
In 2002 Governor King signed a proclamation declaring October as Lead Poisoning Prevention month. The ALLHCP can capitalize on this proclamation by hosting educational activities and programs throughout the month of October. The program would increase awareness about the ALLHCP, and provide an opportunity to hold free screening clinics, to distribute educational brochures, and to facilitate training about lead abatement.
5. **Collaborate with Lewiston and Auburn school districts** to disseminate information about the hazards of lead poisoning. E.g., distribute brochures to kindergarten and first grade classes; post educational posters in the school nurse's office; use an elementary school as a site for the free screening clinic. The long-term costs of elevated blood lead levels in children residing in Lewiston/Auburn do not rest on the families alone. The schools must contribute additional social and economic resources to children who have been exposed to lead. Research indicates that even *small* amounts of lead in a child's blood impact cognitive functioning. Children with lead poisoning suffer from numerous neurological and physical health problems, including developmental delays, hyperactivity, and cognitive disabilities. Clearly the schools are left to deal with these issues (Schwartz 1994).

ALLHCP must collaborate with the school districts, in particular the elementary schools, to **disseminate educational materials to all parents** residing in Lewiston/Auburn.

At the **secondary level**, there is **an opportunity to incorporate a module on lead hazard prevention into all Wellness and/or Health classes**.

6. **Conduct Lead Hazard Awareness Survey in Census Tract 201**

Work with the Center of Service Learning at Bates College and Professor Heidi Chirayath in Sociology to ensure that the survey is completed this year.

7. **Persuade local hospitals to develop educational programs** similar to Maine Medical Center's "Kids Run Better Unleaded" program, which encourages primary care physicians to undertake to appropriate lead screening and assessment of patients under the age of 6.

While St. Mary's has been very involved with the ALLHCP, CMMC has been less so. Many individuals residing in the designated target areas go to CMMC for health care services. CMMC must become more committed to the ALLHCP.

*In addition to the above, the Auburn/Lewiston Lead Hazard Control Program must address the following issue in order to effectively deal with the hazards of lead poisoning in the Auburn/Lewiston community.*

### **Immigrant Populations**

**If the State of Maine and the cities of Auburn/Lewiston want to end childhood lead poisoning by 2010, state and local programs must recognize the increased risk for elevated blood lead levels among the children of immigrant and refugee populations.**

Research indicates that immigrant and refugee populations may be at greater risk for lead poisoning due to exposure to lead in the home country (Geltman, et.al. 2001). According to this research, **refugee status** should be considered a risk factor for lead poisoning.

The Auburn/Lewiston Lead Hazard Control Program must be aware of this increased risk among the immigrant populations, even if they do not reside in the target location (Census Tracts 201 and 204).

The immigrant population in Lewiston/Auburn must be educated about the hazards of lead poisoning. Refugees from Somalia and the Horn of Africa may have a greater risk for a *pre-existing lead burden* due to environmental lead hazards in the home country (e.g., leaded gasoline). Latino immigrants (esp. from Mexico) may treat ailments using folk remedies, which include lead tetraoxide as an ingredient (Trotter 1987).

- In April 2000, a Sudanese refugee girl in New Hampshire died due to lead poisoning. The initial exposure to lead occurred prior to her arrival in the United States; however, her life-threatening exposure was due to peeling lead paint in her NH home. She became the first reported death due to lead poisoning in 10 years.

Professor Heather Lindkvist surveyed ten (10) Somali families regarding the hazards of lead.

- **None** recognized lead poisoning as a problem.
- Several families had children under 6. Those children who were enrolled in HeadStart had been tested for elevated blood levels, though their mother/parents did not realize this test had been done.
- While the United Somali Women of Maine's center has a document translated into Somali about the hazards of environmental lead exposure – "Reerkaga ka nabad geli sunta-Lead" – many Somali women are illiterate in their own language.

*Recommendations:*

1. **Survey immigrant populations** in the Auburn/Lewiston area regarding lead hazard awareness and whether children are being screened for elevated blood lead levels  
The Lead Hazard Awareness Survey Group did not survey the limited English proficiency populations within Census Tracts 201 and 204 due to an inability to accurately translate the survey. The group encountered numerous Spanish speakers and several Somali speakers during data collection.
2. **Use existing city agencies**, such as General Assistance, and **mutual assistance organizations**, such as United Somali Women of Maine, to educate incoming immigrants about the hazards of environmental lead.
3. **Partner with Adult Education** ELL programs to educate individuals with limited English proficiency about the dangers of lead poisoning. For example, the U.S. Environmental Protection Agency publishes "Healthy Beginnings: An English as a Second Language Curriculum on Lead Poisoning Prevention." (See Appendix B).
4. Train **Peer Educators** from the immigrant communities to disseminate public health information.

*References Cited:*

- Geltman, Paul L., Brown, Mary Jean + Cochran, Jennifer. 2001. Lead Poisoning Among Refugee Children Resettled in Massachusetts, 1995 to 1999. *Pediatrics* 108: 158-162.
- Schwartz, J. 1994. Social benefits of reducing lead exposure. *Environmental Research*, 66: 105-124.
- Trotter II, Robert T. 1987. A Case of Lead Poisoning from Folk Remedies. In *Anthropological Praxis: Translating Knowledge into Action*, edited by Robert M. Wulff. Greenwich, CT: Westview Press.