Health Care Provider Newsletter

A Collaboration between the Alameda County Healthy Homes Department and the City of Berkeley Childhood Lead Poisoning Prevention Program

RECENT TRENDS IN LEAD CASES

Alameda County Healthy Homes Department has experienced an influx of immigrant children from the South Asian countries of Afghanistan, India, and Yemen with Elevated Blood Lead Levels (EBLL) – approximately 26 % of children with EBLLs in 2014 came from these countries. The Alameda County Healthy Homes Department & City of Berkeley Lead Poisoning Prevention Program response includes a home visit by a Public Health Nurse or Community Outreach Worker in order to discuss the EBLL, and to identify the source of the child's lead exposure. Sources often include cultural items, practices or products from their home country. Examples include cosmetic eyeliners (Kohl, Surma, Kajal); Sindoor or other bright powders applied on eyes, feet, forehead, or naval to promote health, beauty, and protection; brass vases/sculptures; ceremonial powders and incense used for altars/prayers, to name a few. Note that some of these products contain lead and others do not – Healthy Homes Department will test as many items as possible, as part of nursing case management protocol, to determine the child's source of lead exposure.

Please continue to obtain blood lead tests of newly arrived immigrant children so that we may help prevent ongoing lead exposures for these children.

Below are photos of some items that have tested positive for high lead content and determined to be probable sources of lead exposure for the child:

Eyeliners



Sindoor and turmeric painted on door threshold



Sindoor used for Bindi

Brass sculptures





Inside this issue:

Recent Trends in Lead	1
Cases	

Childhood Lead Poi-	2
soning and Education-	
al Impacte	

Working with Highly	2
Mobile Families:	

Recommendations from the Field

Berkeley "Lead Free	3
Me" Birthday Club	·

Local efforts in	4
Lead Poisoning	•

•

CHILDHOOD LEAD EXPOSURE AND EDUCATIONAL IMPACTS



"Lead poisoning prevention has been correctly characterized as a US public health success story...continued vigilance and collaboration are still necessary...research shows that no safe blood lead level has been identified..."

This quote is excerpted from the CDC publication issued in April 2015, titled "Educational Interventions for Children Affected by Lead", which focuses on interventions that help restore children to an optimal level of functioning after lead exposure. While primary prevention remains the

gold standard, the article examines the current knowledge of the early care and educational systems that support improved outcomes for lead-exposed children, outlined in the excerpted Table below:

Please continue to test children for lead exposure so that appropriate interventions can be provided.

Studies on Lead and Educational Outcomes

Blood Lead Levels	Educational Impact	Size of Study	Location of Study
≤ 3 µg/dL	Decreased end of	More than 57,000 chil-	North Carolina
	grade test scores	dren	(Miranda et al. 2009) ₁
4 μg/dL at 3 years of	Increased likelihood	More than 57,000 chil-	North Carolina
age	learning disabled clas- sification in elemen- tary school	dren	(Miranda et al. 2009)1
	Poorer performance on tests	35,000 children	Connecticut (Miranda et al. 2011)
5 μg/dL	30% more likely to fail	More than 48,000 children	Chicago (Evens et al.
	third grade reading and math tests	aren	unpublished data)
	More likely to be non- proficient in math, sci- ence, and reading	21,000 children	Detroit (Zhang et al. 2013)
5-9 μg/dL	Scored 4.5 points low- er on reading readi- ness tests	3,406 children	Rhode Island (McLaine et al. 2013)
≥10 µg/dL	Scored 10.1 points lower on reading readiness tests	3,406 children	Rhode Island (McLaine et al. 2013)
10 and 19 μg/dL	Significantly lower academic performance test scores in 4th grade	More than 3,000 children	Milwaukee (Amato et al. 2012)
≥ 25 µg/dL	\$0.5 million in excess annual special education and juvenile justice costs	279 children	Mahoning County, Ohio

WORKING WITH HIGHLY MOBILE FAMILIES: RECOMMENDATIONS FROM THE FIELD



It may come as no surprise that some of your patients move around quite a bit. Not only are there personal or quality of life reasons for moving but there are of course economical reasons tied to employment and housing. The Healthy Homes Department acknowledges that obtaining blood lead screenings for these highly mobile families can often be challenging, as illustrated in the following example of the "Smith" family.

The Smiths have 2 children, a 4 year old daughter and a 3 year old son. When their daughter was 1 and their son about to be born they moved to Alameda County. Within a few months they moved to San Mateo County where they lived for 2 years. They moved back to Alameda County last year where a Healthy Homes Department Promotora discovered that the children had had 4 different medical providers in about a 3 year span and that only the son had been screened for lead at his 1 year check-up. The children lacking mandatory lead screenings was due in large part to the families moving from place to place.

Below are some recommendations to assist you in working with highly mobile families:

- Continue to provide anticipatory guidance on lead poisoning at well child checks to children from 6 months to 6 years of age as per California Standard of Care Regulations. (CCR, Title 17, Division 1, Chapter 9, Section 317000, et seq.)
- Remember to lead screen children in publicly supported programs (Medi-Cal, WIC, CHDP, etc.) at 12 *AND* 24 months. According to the National Health and Nutrition Examination Survey only 43% of children aged >1 year, who were enrolled in Medicaid and who had elevated blood lead levels, had previously been tested for lead exposure.
- Blood lead test a child if they are a recent immigrant or refugee.
- Blood lead test any child that you think is at risk for lead poisoning.
- New patient? Ask if they have been lead screened by their previous provider. Catch up testing between 2 and 6 years of age on children who receive services from publicly supported programs.

For many of these highly mobile families the ability to attend a well child check is not easy, but when they do it is an opportunity that should not be missed to catch up on much needed health guidance.

YMCA OF THE CENTRAL BAY AREA HEAD START "LEAD FREE ME!" BIRTHDAY CLUB IS BACK!



The City of Berkeley Childhood Lead Poisoning Prevention Program (COB CLPPP) is collaborating with Head Start/Early Head Start locations in Berkeley on a project called the "Lead-Free Me" Birthday Club. The first iteration of this program was active from 2010-2012. The focus of this project is to educate parents and guardians on the

importance of screening and to encourage them to have their children tested for lead. Members of the birthday club are sent a birthday card near their child's birthday with a reminder to have their child screened for lead. The parents then request that the doctor send a copy of the lab results to their home; which they bring to Head Start/Early Head Start to receive a birthday club gift bag. The bag includes a certificate of congratulations, a book, family friendly cookbooks or physical activity guide, and a gift certificate to a local grocery store. "Lead-Free Me" is adapted from a similar project that was done by the Contra Costa County Lead Poisoning Prevention Program and the Contra Costa Head Starts. The Lead Program is very excited about this collaboration with Head Start/Early Head Start and commend them for the commitment to helping children stay lead-free! For more information, contact the COB CLPPP at **510-981-5289**.

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The Alameda County Healthy Homes Department and City of Berkeley Childhood Lead Poisoning Prevention provide services to Alameda County and Berkeley residents as they relate to reducing lead exposure in children. Services range from nursing case management for children with blood lead levels above $15 \mu g/dL$ to health education for children with levels between 5-14 $\mu g/dL$.

We also provide resources to property owners on lead-safe practices, such as lead-safe painting and remodeling classes, In-Home Consultations, and more! For more information about our case management services and programs, or to refer a client to our services, please feel free to contact us at the information listed above.