"A Full Picture Of Lead Case Management Efforts In Los Angeles County"

Los Angeles County –Department of Public Health
Maternal, Child & Adolescent Health Programs
Childhood Lead Poisoning Prevention Program (CLPPP)

Established in 1991

Objectives

- At the end of this presentation, the participant will be able to:
- Describe the role of the Public Health Nurse (PHN) and the Registered Environmental Health Specialist (REHS) in providing case management services and activities
- Discuss the major goals of case management
- Describe the primary role of the Primary Care Provider
- List two core PHN interventions.

Childhood Lead Poisoning Prevention Program

Vision Statement

"Healthy, lead-free environments for children".

Why Is Lead Poisoning Still An Issue?

- Lead poisoning for the most part is asymptomatic. Therefore, the vast majority of those exposed may go undiagnosed and untreated
- Even at lower levels, lead can negatively impact health and productivity throughout the life span
- We know much more about the association between lead poisoning and the deficits in cognitive functioning, academic achievement and poor pregnancy outcomes.

Why Is Lead Poisoning Still An Issue In Los Angeles County?

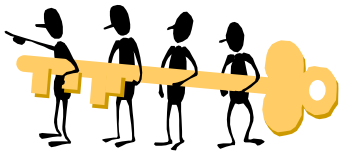
- In 2008, four/1000 (0.4%) children tested were found to have elevated blood lead levels (EBLLs)
- Between 2004 and 2008 there were 3,560 children (Ages <21) in Los Angeles County with reported EBLLs
- The majority of cases identified since 2004 had blood lead levels between 20-24 µg/dL
- Over half of the cases identified were children under the age of three.

Program Goals for 2010

The Healthy People 2010 goal is to eliminate elevated blood lead levels* in children under the age of six years.

***Elevated Blood Lead Level ≥10 µg/dL**

The Public Health Team



Case Management Unit (Public Health Nurse)
Environmental Health (EH) Unit (EH Inspector)
Epidemiology Unit (Epidemiologist)
Health Education Unit (Health Educator & Assistant)

Case Definition

One venous BLL greater than or equal to 20 µg/dL

OR

Two blood lead levels greater than or equal to 15 µg/dL drawn at least 30 days and no more than 600 calendar days apart. The first specimen may be a capillary specimen.

References: Childhood Lead Poisoning Prevention Branch. *Matrix: Management Guidelines for Children by Blood Lead Level (BLL)*. PHN Case Management Guidance Manual (2002).

Core PHN Interventions

- Case Management
- Collaboration and Coordination
- Outreach
- Disease Investigation
- Health Teaching
- Referral and Follow-up

Case Management

Evaluate and coordinate case management services and interventions between the provider, the patient, and parents until case meets closure definition.

Major Goals of Case Management

- Identify sources of lead exposure
- Interrupt the pathways of lead exposure
- Ensure a reduction in elevated blood lead levels
- Reduce the effects of lead exposure
- Increase public awareness of lead exposure and lead hazards.

Collaboration and Coordination

- Contact the laboratory and the doctor to confirm blood lead level results
- Provide information and guidance on case management services and activities to the primary care provider and the family
- Refer case for EH investigation
- Collaborate with the EH Inspector and the health care provider on EH findings.

Environmental Health Inspector

- Primarily responsible for the environmental investigation of lead hazards
- The REHS visits patient's primary residence to identify sources of lead exposure
- Issues and oversees appropriate corrective actions.

Outreach

- Review blood lead screening requirements, retesting schedules, and medical guidelines with the primary care provider (PCP)
- Inform the PCP of the available trainings and lead awareness materials
- Provide technical support as needed.

Disease Investigation

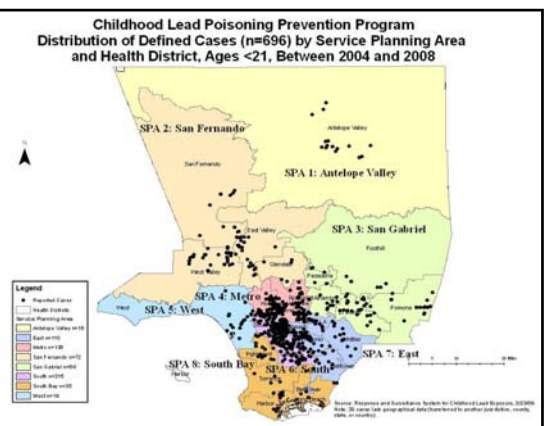
- Conduct a home visit
- Interview family to gather information
- Assess patient's health status and needs
- Identify household members at risk and connect them to health services and resources.

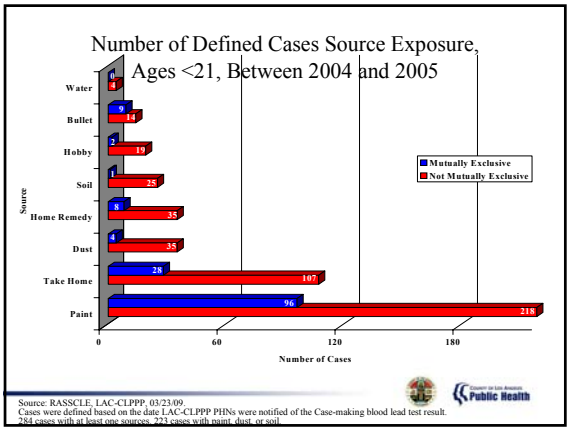
Health Teaching, Referral, and Follow-up

Educate the family on facts, ideas and skills that will increase knowledge and change behaviors and cultural practices that are associated with lead poisoning.

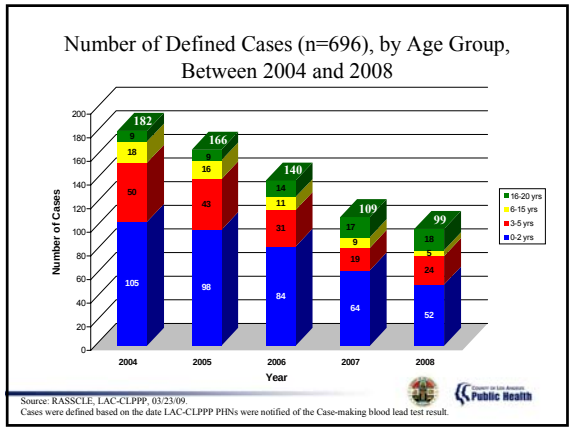
Surveillance

- Conduct ongoing collection of geographical and patient health information through PHN interview and assessment
- Document findings on the Lead Poisoning Follow-Up Form and update medical record
- Share the data, develop laws, policies and power structure that will positively impact childhood lead poisoning.





Source: RASSCLE, LAC-CLPPP, 03/23/09.
Cases were defined based on the date LAC-CLPPP PHNs were notified of the Case-making blood lead test result.
284 cases with at least one sources, 223 cases with paint, dust, or soil.



Source: RASSCLE, LAC-CLPPP, 03/23/09.
Cases were defined based on the date LAC-CLPPP PHNs were notified of the Case-making blood lead test result.

The Primary Care Provider's Role

- Screen at 12 months and again at 24 months
- Instruct parent/guardian to decrease children's exposure to all lead sources
- Recommend a balanced diet that is rich in iron, calcium, vitamin C, and low in fat
- Schedule and re-test according to the Matrix
- Monitor care until patient meets closure criteria
- Screen for anemia

Reference: Matrix: Management Guidelines for Children by Blood Lead Level (BLL)

Case Closure Criteria

Two consecutive venous BLLs below

15 µg/dL measured at least six months apart.

Reference: Matrix: Management Guidelines for Children by Blood Lead Level (BLL)

The Family's Role In Preventing "Take Home Exposure"

- Change work clothes at work
- Shower before interacting with child
- Launder work clothes separately
- Remove work shoes before entering the home

The Family's Role in Minimizing Lead Exposure

- Remove the source of exposure
- Screen all children for lead poisoning
- Seek pre-conception assessment and prenatal screening
- Discourage the use of traditional remedies, medicines, candy and/or consumer products that contain lead
- Discourage children from eating non-food items
- Prepare a well-balanced diet that may lessen the effects of lead absorption (high in iron, calcium, and vitamin C and low in fat)

Strategies for the Future

- Develop risk assessment forms that better identify and health and housing needs that impact health
- Incorporate lead poisoning prevention activities into health, school and community services that reach high-risk children/families
- Notify local, state and federal agencies of new sources that contain lead
- Conduct on-going and systematic data collection that support program planning and case management interventions.

Website Information

- California Department of Public Health (2007). *Frequent asked questions*. Retrieved March 16, 2009, from http://www.cdph.ca.gov/programs/CLPPB/Pages/FAQ-CLPPB.aspx.
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- California Department of Public Health (2007). *Lead poisoning overview*. Retrieved March 16, 2009, from http://www.cdph.ca.gov/programs/CLPPB/Pages/LeadPoisoningOverview.aspx.
- California Department of Public Health (2007). *Management guidelines on childhood lead poisoning for health care providers*. Retrieved March 16, 2009, from http://www.cdph.ca.gov/programs/CLPPB/Documents/Provider%20mgmt%20guides.pdf.
- LA County Department of Public Health- LEAD (2009). *Childhood lead poisoning prevention program*. Retrieved March 16, 2009, from http://lapublichealth.org/lead/index.htm.

Childhood Lead Poisoning Prevention Program
Contact Telephone Numbers

Program General Office: 800-524-5323

Case Management Unit: 323-869-7195