



The Children's Trust

Oct 2007

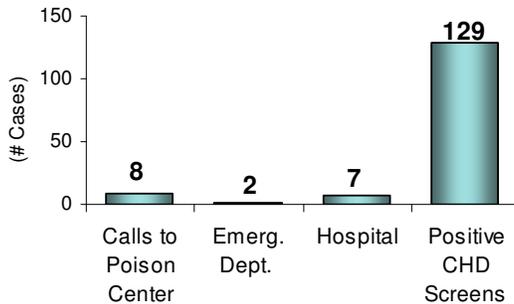
Lead Poisoning Exposure to Children Aged 0-6 Years Miami-Dade County, 2006

MIAMI-DADE COUNTY INJURY FACTS



Lead poisoning is a serious, but preventable, public health problem in children. Generally, lead poisoning occurs slowly, a result of the gradual accumulation of lead in bone and tissue after repeated exposure. Left untreated, lead poisoning can cause long-lasting neurological damage to young children and is most dangerous during the developmental periods of infants and young children under the age of 7 years. Blood lead levels as low as 10 µg/dL can adversely affect intelligence, learning, behavior, and development.

**Positive Lead Poisoning Cases
Source of Case Identification
Children Aged 0-6 Yrs.
Miami-Dade Co., 2006**

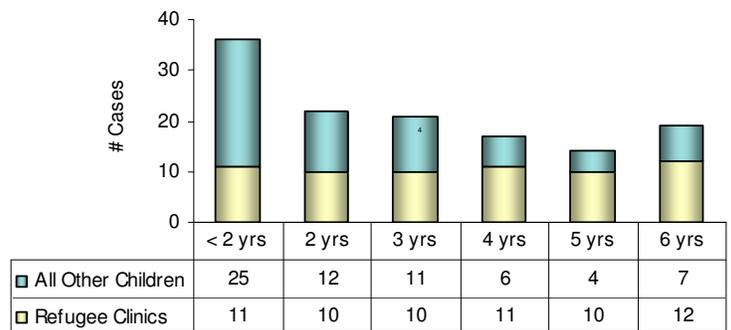


cases are not mutually exclusive to any one source

- Most cases remain undiagnosed because low blood lead levels are not often associated with symptoms. During 2006, only 8 cases of lead poisoning were identified from calls to the Poison Control Center and only 9 children were either treated in the ED or hospitalized with a lead poisoning diagnosis.
- The health department's Childhood Lead Poisoning Prevention Program identified 129 positive cases among children under 7 years old in 2006. This is considered to be far below the true incidence because lead poisoning screening is estimated to be reaching approximately 1/3 of the at-risk population.

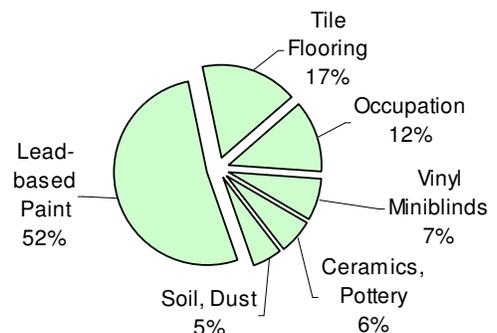
- Nearly 1/2 of the 129 positive lead screenings identified in children less than 7 years old involved children 2 years old or younger.
- 50% of the positive screens involved children who were screened at county refugee clinics, indicating that the child likely contracted the condition in another country. Approximately 5% of the >1,000 screened refugee children tested positive.

Positive Child Lead Screenings by Victim's Age and Residency Status, Miami-Dade Co., 2006



- Of the 82 cases in 2006 that could identify the source of the lead poisoning, more than one-half identified lead-based paint. Other sources of lead exposure included tile flooring, vinyl mini-blinds and ceramics found within the home. An occupational source represents an exposure from someone who lived in the home with the child and who worked in a high-risk occupation.

**Source of Lead Exposure for
Positive Lead Poisoning Cases
Children Aged 0-6 Yrs, Miami-Dade Co., 2006**



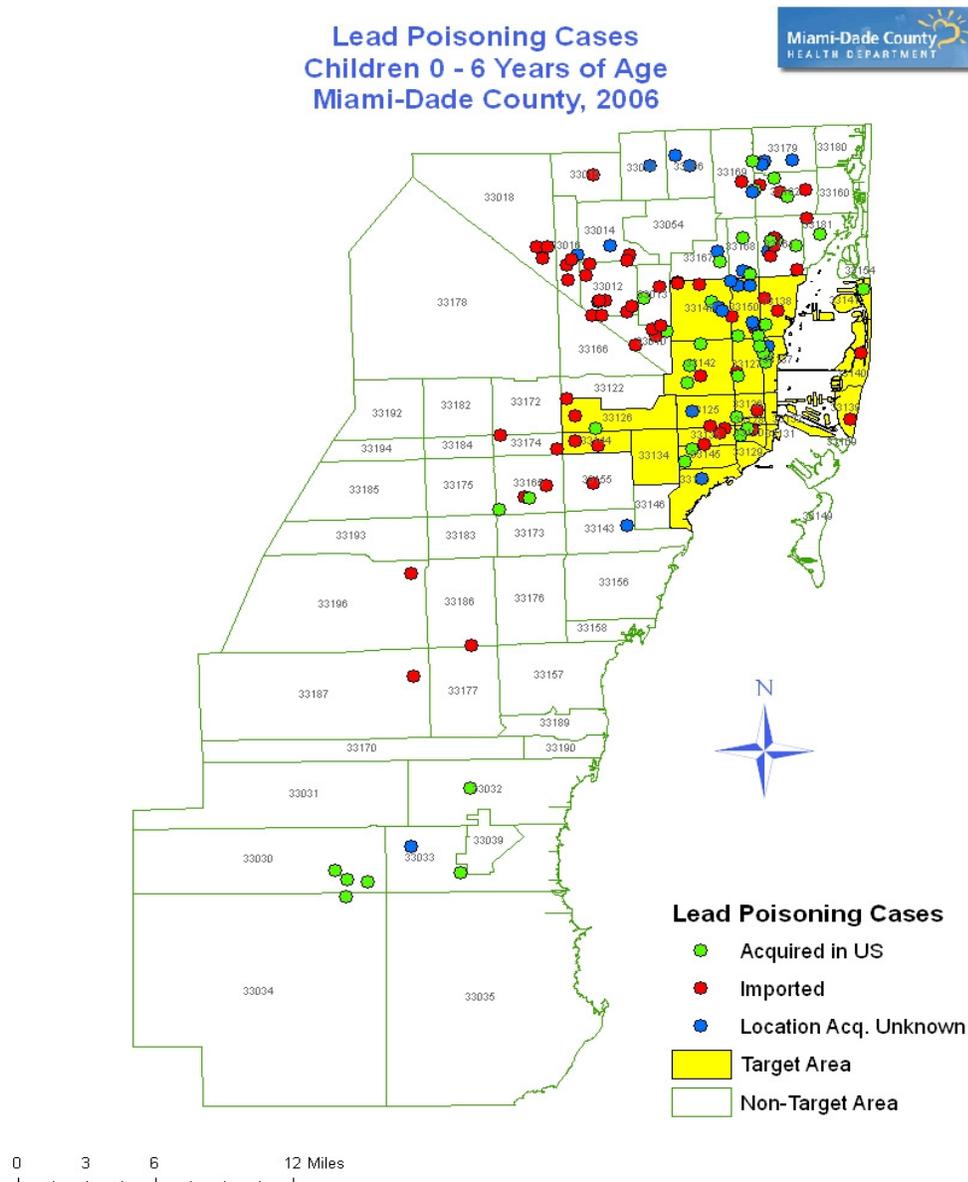
Childhood Lead Poisoning Screening

The map below shows the distribution of the 129 positive lead screenings identified in 2006 to children age 0-6 years throughout the county. Positive cases are shown as either county residents (green dots), imported children identified from refugee clinics (red dots) or unknown residency (blue dots).

Also highlighted on the map are the 22 zip codes that have at least 20% of their residential homes built before 1950 and are most likely to contain lead-based paint (shaded in yellow). These represent target areas for the county lead poisoning prevention program.

Several areas demonstrated clustering of positive cases:

- zip codes in the Hialeah area (33010, 33012, 33013, 33014, 33016, 33018: 28 cases of mostly imported children);
- zip codes in the N. Miami and N. Miami Beach areas (33161, 33162: 15 cases equally split between imported and local children);
- zip codes in the Little Haiti and Model City areas (33150, 33127, 33137: 16 cases of mostly local children or children of unknown residency);



Lead Poisoning Prevention



Common sources of lead exposure in children

- Lead-based paint chips (before 1977)
- Tile and ceramic ware
- Soil, especially in dense urban areas
- Dust and debris from older building renovation
- Lead may be found in the paint or plastics on toys

Common symptoms of lead poisoning in children

- Decreased appetite
- Sleeplessness
- Learning problems, lowered I.Q.
- Constipation, vomiting, diarrhea
- Anemia

Who is at risk for lead poisoning?

- Living in a home built before 1950
- Living in a recently remodeled home built before 1978
- Living in central urban area or close to major highways
- Having a sibling or playmate with lead poisoning
- Having been exposed to lead poisoning in another country
- Children under the age of 3 are especially at risk because they crawl or play at ground level. They often place toys, fingers, and other objects in their mouth, exposing themselves to lead paint or dust.

Who should be tested for possible lead poisoning?

- Children who are anemic
- Children with learning or behavioral problems
- Children who have been treated with foreign folk-medicines that contain high lead content
- Children who have a sibling or playmate being followed or treated for an elevated lead level.
- Children who live in or regularly visit a house with peeling or chipping paint built before 1960. This also includes day-care, pre-school or the babysitter's house.
- Children living near environmental sources of lead, such as battery manufacturing plants, lead smelters, battery recycling plants or other lead industries

What should I do if I suspect there is lead in my home?

Have your home checked by a qualified inspector. The Miami-Dade County Health Department can offer recommendations or additional information. Lead paint removal should be done only by trained, certified professionals who are experienced in working with hazardous materials and special equipment.

How do I get my children tested for lead?

Contact your physician to request a blood test specifically for lead levels. Call the Miami-Dade County Health Department's Childhood Lead Poisoning Prevention Program to see if your child is eligible for free testing at (305) 470-6877.

Produced by the Miami-Dade County Injury Surveillance System

Data Source: Miami-Dade CHD Childhood Lead Poisoning Prevention Program

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<http://dadehealth.org/injury/INJURYintro.asp>

