

## **Ribordy, Michael**

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**From:** Johnson, Mark  
**Sent:** Monday, August 08, 2016 10:44 PM  
**To:** Ribordy, Michael  
**Cc:** Caudill, Motria  
**Subject:** Blood lead level summary for Action Memo  
**Attachments:** Action memo- BLL.docx

Mike

Here is a summary of the blood lead findings for children living in the West Calumet Housing Complex. See if this fits within the objectives of the Action Memo.

Motria can provide edits as needed.

Mark

Mark D. Johnson, PhD, DABT  
Regional Director/Toxicologist  
Agency for Toxic Substances and Disease Registry  
77 W. Jackson Blvd  
Chicago, IL 60604  
email: [mdjohnson@cdc.gov](mailto:mdjohnson@cdc.gov)  
phone: 312-353-3436  
cell: 312-307-7415

## Summary of Blood Level Findings in Young Children Residing in West Calumet Housing Complex

The CDC's reference blood lead level of 5 ug/dL represents the 97.5th percentile for US blood lead data (as of 2012), meaning that 2.5% of children had blood lead at 5 ug/dL or higher in random survey of children younger than 6 years of age. However, given the fact that community-based lead screening data is not necessarily a random selection of individuals for testing, the incidence rates of elevated blood lead (EBL) levels from non-random data to randomized national statistics can't be quantitatively compared. However, there are some comparisons that may be useful to provide some general context for the incidence rates for elevated blood level in the West Calumet Housing Complex (WCHC). Here is a summary of the findings from screening of residents of WCHD, both historical data and from an on-going blood lead testing campaign being conducted by the East Chicago Health Department (ECHD).

- From the most recent ECHD testing in summer 2016, 12 children below age 6 years from WCHC were identified with EBL levels (out of 54 tested to date; representing 22%), based on capillary (finger stick) measurements. [it should be noted that capillary measurements may be an overestimate of the more accurate measurement using venous sample measurements, which are being recommended to ECHD for follow-up]
- Over 2014-2015, 26% of the children from WCHC below age 6 years were identified with EBL levels, with the highest measurement at 33 ug/dL in a young child. Comparing census tracts within East Chicago over 2015, the census tract that includes all of the children from WCHC (Zone 1) and part of Zone 2 has an EBL incidence rate of 22%. By comparison, the EBL rates for the 2 adjacent census tracts were 9% and 11%.
- The ATSDR Exposure Investigation conducted in the West Calumet neighborhood in 1997 showed a 35% EBL incidence rate, which at that time was defined as exceeded 10ug/dL.

**Conclusion:** These observations across almost 20 years demonstrate a consistent pattern of elevated blood lead levels in young children living in the West Calumet Housing Complex. Given the recent verification by the Indiana State Department of Health Lead Inspectors that lead-based paint is not present in these units, it is likely that exposure to soil-based lead contamination in WCHC is the explanation for this consistent pattern of elevated blood lead levels.