



HEALTH
DEPARTMENT
Caring today for a healthy tomorrow



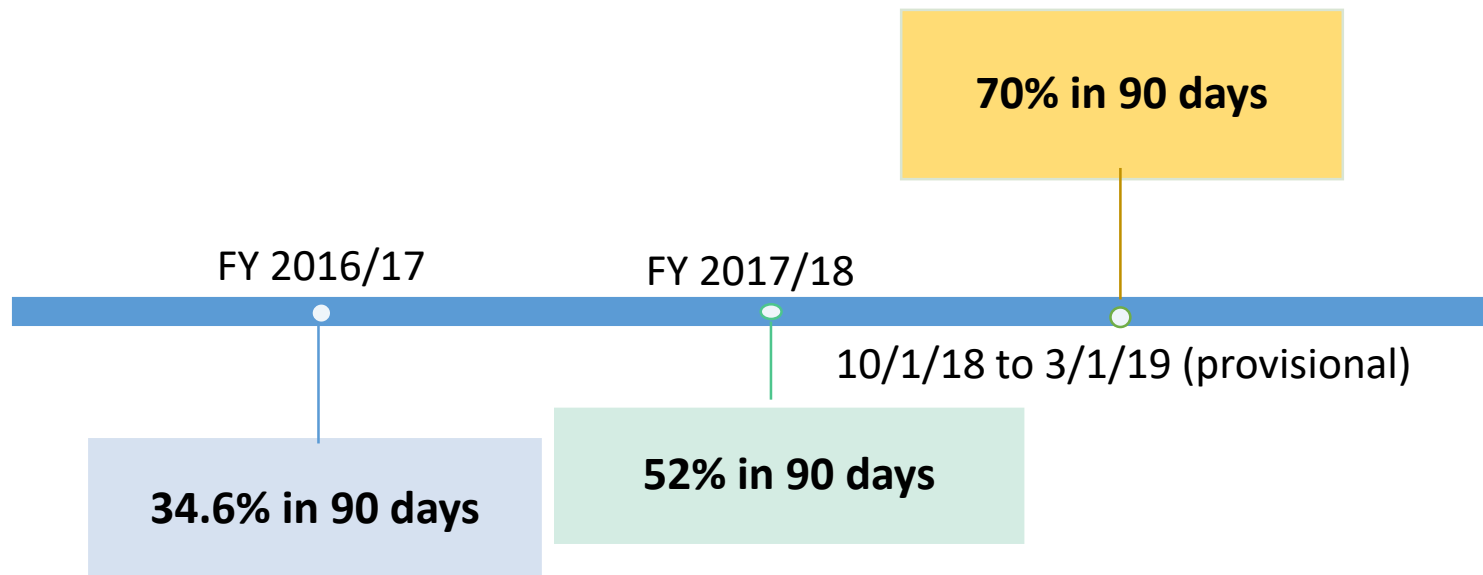
Kent County Health Department Capillary Lead Protocol

Kathy Zacharias RN, BSN
Public Health Nurse
Kent County Health Department
Lead Program

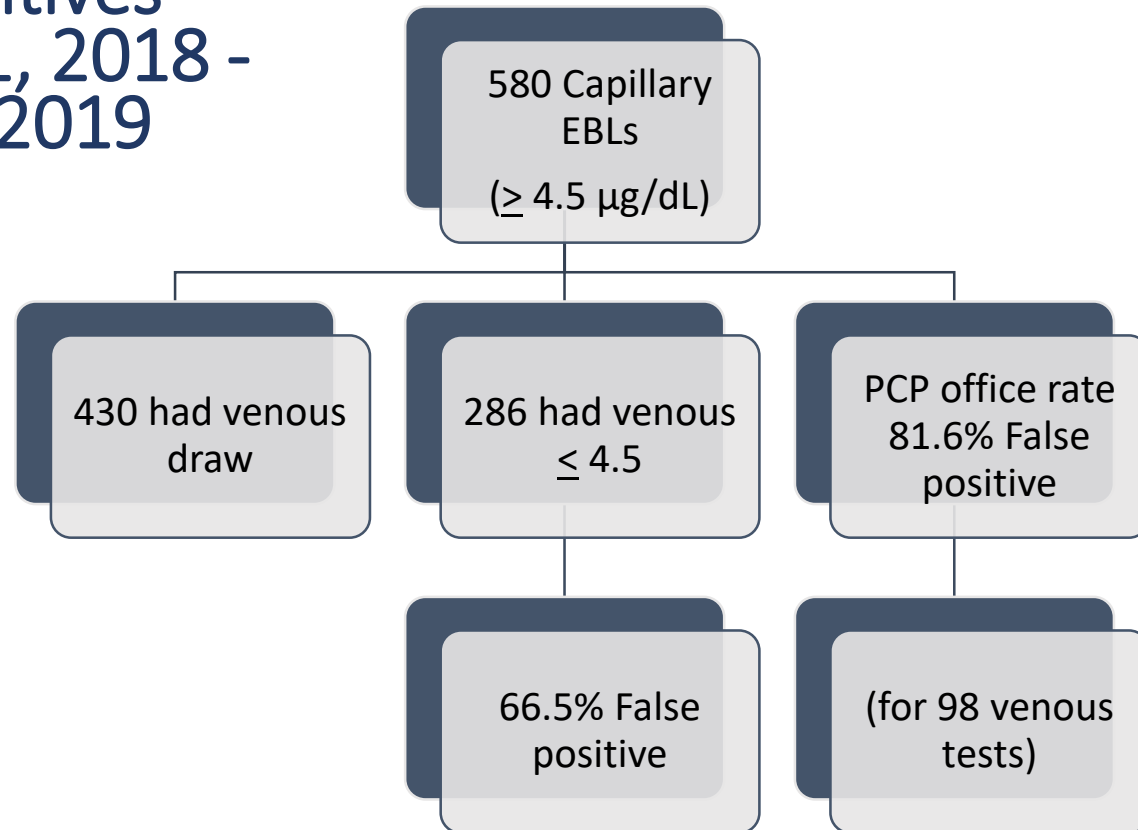
Number of
BLL >4.5
Kent County

- FY 2016/17: 617 Cases
- FY 2017/18: 424 Cases
 - 31% decrease in number of lead poisoned children (193 less kids)
- Some possible reasons?
 - Better capillary-venous conversion rate
 - More awareness

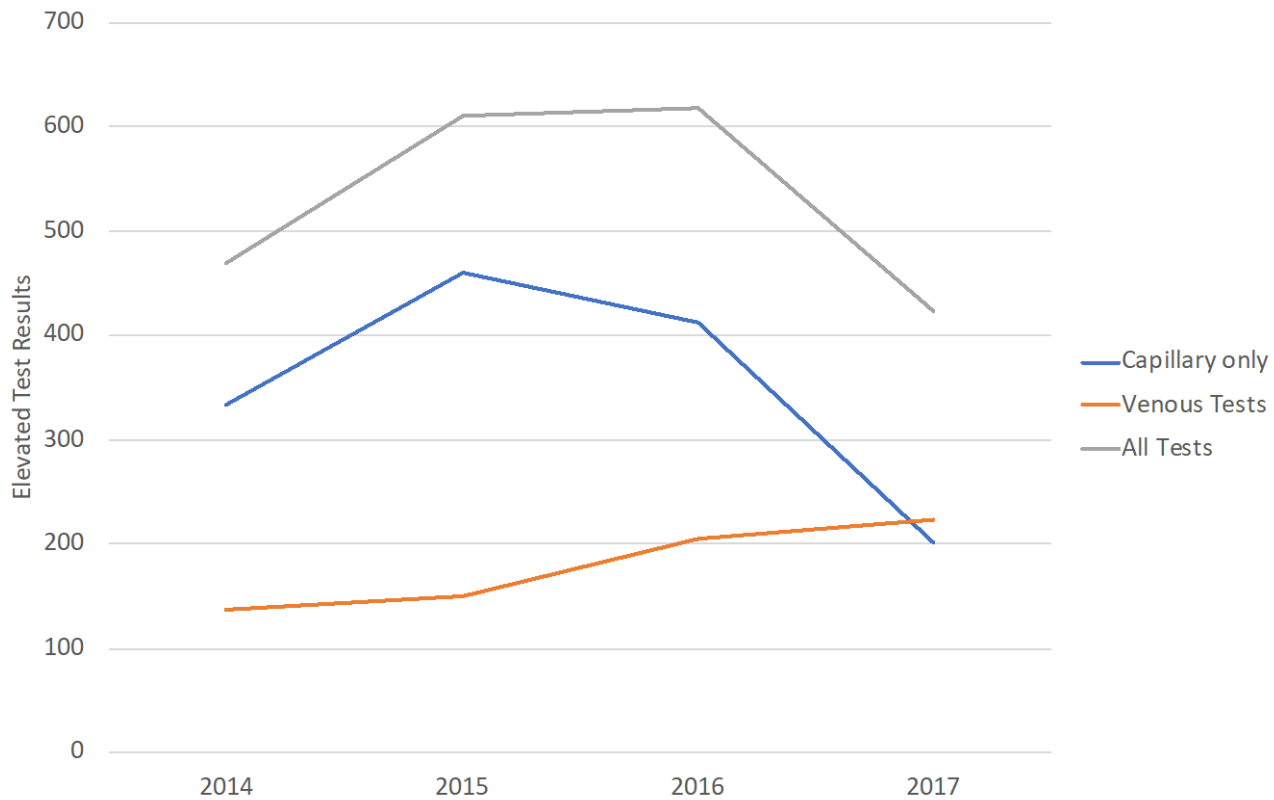
Kent County Capillary to Venous Conversion Rates



False Positives January 1, 2018 - June 12, 2019



Kent County Children <72 months with Elevated Blood Lead Levels $\geq 5.0\mu\text{g}/\text{dL}$



Background

- Previously no written protocol for following up with capillary EBLs
- CLPPP goal: increase capillary to venous conversion rate by 2.5% each year
- January 2018: Implemented new Capillary Lead Protocol

Fun Fact:

Research shows that it takes
EIGHT “touches”
to get an initial meeting with a
new prospect.

BLL 4.5 µg/dL-9 µg/dL

Week 1

- Letter to legal guardian

Week 2

- Phone call to legal guardian

Week
3 or 4

- Phone call to legal guardian

Week 5

- Final letter
- Case closure letter to PCP

BLL 10 µg/dL-19 µg/dL

Week 1

- Letter AND phone call to legal guardian

Week 2

- Phone call to legal guardian
- Drop-in HV

Week
3 & 4

- Phone call to legal guardian

Week 5

- Final letter
- Case closure letter to PCP

KENT COUNTY HEALTH DEPARTMENT

COMMUNITY WELLNESS DIVISION



Adam London, RS, MPA
Administrative Health Officer

700 FULLER N.E.
GRAND RAPIDS, MICHIGAN 49503-1918
PH: 616-632-7083
FAX: 616-632-7015

«GFIRST_NA» «GLAST_NA»
«HOUSE_NBR» «STREET» «APT_NBR»
«CITY», MI «ZIP»

Dear «GFIRST_NA» «GLAST_NA»:

Your child «FIRST_NA» «LAST_NA» was tested for lead poisoning on «SPEC_DT».

The result was «PB_RESULT» «SAM_TYP» micrograms per deciliter, which is above the current reference level recommended by the Center for Disease Control (CDC). This means that your child has been exposed to lead.

The C or V after the result means it was reported as a capillary (finger-stick) or a venous (blood from the vein). The capillary is a screening test.

- In the case of a capillary draw (C), the CDC recommends that a venous draw be done in the next month. Please contact your child's Primary Care Physician or pediatrician and request a lab order for a venous draw for lead.
- A nurse from the Childhood Lead Poisoning Prevention Program will be calling you in the next few days to explain the result, the possible need for the venous draw, provide additional information and answer any questions.

If you have questions before the nurse calls, please call the number below.

Please read enclosed information about childhood lead poisoning prevention and the resources currently available in Kent County and Michigan.

Please help us meet our goal to *Get the Lead Out!* of all Kent County children. Thank you.

Sincerely,

Amy Trick RN, BSN, 616-632-7087

Childhood Lead Poisoning Prevention Program
Kent County Health Department

cc 03/17

KENT COUNTY HEALTH DEPARTMENT

COMMUNITY WELLNESS DIVISION



700 FULLER AVENUE
GRAND RAPIDS, MICHIGAN 49503-1918
PH: 616-632-7063
FAX: 616-632-7015

Adam London, RS, MPA
Administrative Health Officer

Date: _____

Attention: _____

Re: _____ DOB: _____

Parent/Guardian: _____

This child has a history of **actual** or **suspected** lead poisoning. The most recent lead level on record is _____ mcg/dL. ___ Venous ___ Capillary, collected on ___/___/___.

Unfortunately, I have not been able to resolve this case due to:

- Our inability to locate the family.
- Lack of family cooperation with follow-up lead testing and/or home visits.
- Other _____

I now need to close this case to further follow-up by our Childhood Lead Poisoning Prevention Team.

On this child's next office visit, please order a new blood lead level. For your convenience, I am enclosing a printout of the child's lead level history as we currently have it in our Department.

Please place this letter and lead level history in the child's medical file folder or place an alert on the child's electronic medical record.

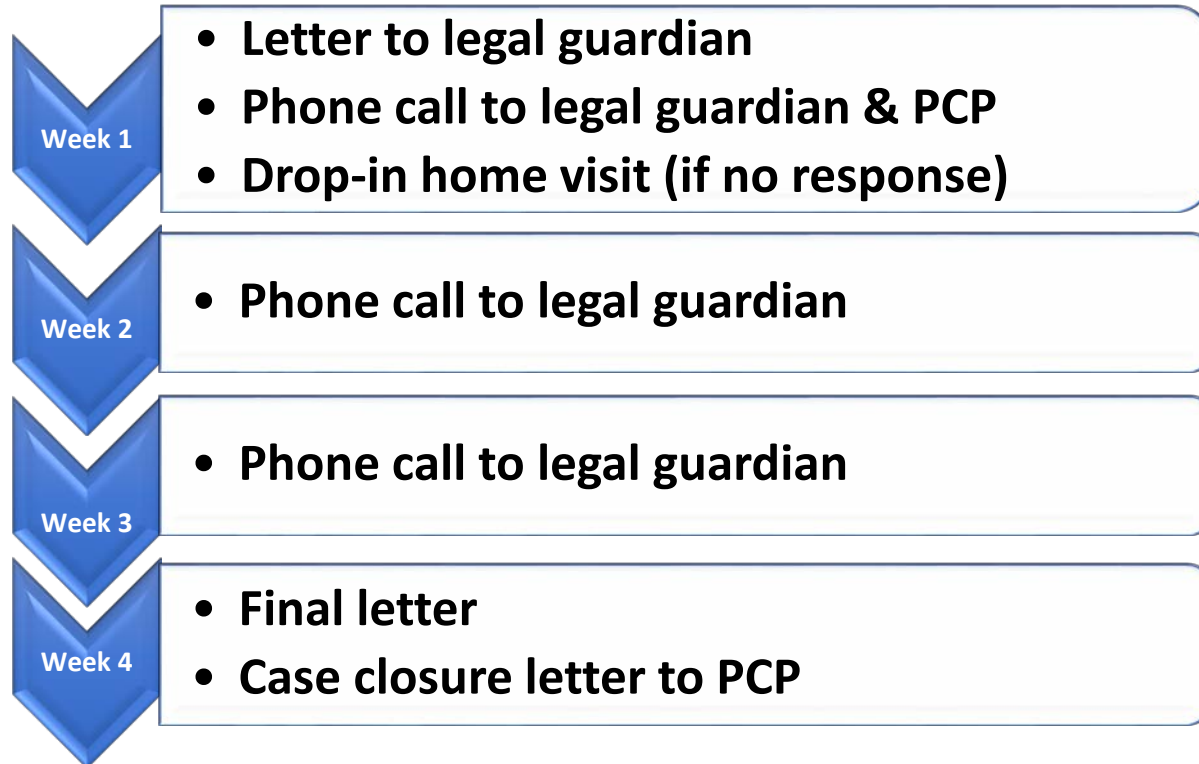
Thank you for your time. If you have any questions, you can contact us at 616-632-7063.

Sincerely,

KCHD Lead Poisoning Prevention Worker

Encl: Blood Lead Level History

BLL 20+ $\mu\text{g}/\text{dL}$



BLL 45+ $\mu\text{g}/\text{dL}$

Day 1

- Letter & call to legal guardian
 - **Refer for same day venous test**
- Notify: Supervisor, PCP, MDHHS CLPPP Nurse Consultant

Day 2

- Phone call to legal guardian
- Drop-in home visit (if no response)

Day 3

- Phone call to PCP
 - **If no contact, refer to CPS**

Week
1-2

- Continue to attempt contact
- Follow up with CPS

Week 3

- If CPS unable to contact, final letter to legal guardian & case closure letter to PCP

Other Considerations

- New WIC protocol at KCHD
- Lab slips given (for KCHD or outside lab)
- Working with partners (PCP, Medicaid)
- Protocol is a minimum standard

What Have We Learned?

- More aggressive protocol increased capillary to venous conversion rates
- More venous testing gives us more accurate lead data
 - How many children have *true* EBLs?



Questions?

Kathy Zacharias

LeadProgram@kentcountymi.gov

616-632-7063

References

1. www.accesskent.org/Health - Kent County Health Dept., 616-632-7100
2. www.cdc.gov/lead - Center for Disease Control
3. www.epa.gov/lead - Environmental Protection Agency
4. www.healthyhomescoalition.org – Healthy Homes Coalition, 616-241-3300
5. Lead Care II Package Insert
6. www.Michigan.gov/lead - State of Michigan-Childhood Lead Poisoning Prevention Program, 517-335-8885
7. www.Michigan.gov/MDHHS - Michigan Department of Health and Human Services
8. Schultz, Mike (2019). How Many Touches Does It Take To Make A Sale?
<https://www.rainsalestraining.com/blog/how-many-touches-does-it-take-to-make-a-sale>