

Lead News for Healthcare Providers: Volume 1, Issue 1

SPRING/SUMMER 2016

Western NY Lead Poisoning Resource Center, Rochester Office

FLINT, MI BRINGS LEAD TO NATIONAL ATTENTION

It's been all over the news lately...children in Flint, Michigan have elevated blood lead levels due to a change in water source. An emergency manager appointed by the Governor decided to save money for the fiscally challenged city by switching from Detroit's water to Flint River water. It took a year and a half for that decision to be reversed, after complaints by residents were ignored, a concerned mom brought in the EPA to test her home's water, a Virginia Tech research

team did independent testing for the whole city, and a pediatrician published research about elevated levels in kids after the change. Though there were other contaminants in the water, it was lead that brought the most attention because of all we know about its dangers for pregnant women and young children. Let's hope this attention results not only in discussion and understanding of lead exposure but also effective action to help the children affected and

prevent this from happening in other cities. Also let's be aware that more children are exposed from paint, dust and soil than from water. Rates of elevated blood lead levels for children in our region are much higher than in Flint.

See:

www.aappublications.org/news/2015/11/11/Water111115

www.health.ny.gov/statistics/chac/general/g28.htm



LEAD IN LOCAL TAP WATER

Could what happened in Flint happen here? Well, we have plenty of lead pipes delivering water to homes in Western NY. There are almost 40,000 lead service lines connecting water mains to houses in the City of Rochester alone. In addition, lead can come to the tap from lead pipes

within the home, lead solder connecting copper pipes, and from brass faucets and fixtures which contain lead. While kids are exposed to more lead from non-water sources, we now know that no amount of lead is safe for children. Prevention is needed wherever possible. The NYS Dept.

of Health and the Centers for Disease Control both have guidance on what people can do to reduce or eliminate lead exposure from tap water.

www.health.ny.gov/publications/2508/

www.cdc.gov/nceh/lead/tips/water.htm

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TESTING CHILDREN FOR LEAD

In New York State, the law states that every child **must** be tested for lead with a blood lead test at or around their 1st and 2nd birthdays and whenever a risk of lead exposure exists.

The CDC now uses 5 mcg/dL as the reference level for children, so providers need to educate families whose children have blood lead levels

(BLLs) of 5 mcg/dL or higher and they should also follow-up on BLLs over 5 mcg/dL.

While not required by law, it is a smart idea to also test children for lead at 18 months of age because of their increased mobility and hand-mouth activity and, for those with a winter birthday, increased exposure during the summer months.

On-site testing leads to significant improvement in childhood lead testing rates. Drawing blood during the child's visit for processing by a lab or a point-of-care machine reduces steps in the process. This makes life much easier for busy parents, who often cannot take time for a separate trip to a lab.



“Within two years our practice increased testing rates from 55% to 91%.”

The most important reason to increase rates of blood lead testing is to identify children who are being exposed to lead and prevent further exposure. Secondly, a medical practice can use childhood blood testing as one of their quality measures and may receive incentives from insurance com-

panies for attaining a high level of testing. The Gollisano Children's Hospital Pediatric Practice examined its rates a couple years ago and found a number of ways they could improve. “Within two years our practice increased the percentage of children with one test by the 2nd birthday from

55% to 91%,” Dr. Schaffer reports. One change was to hire a phlebotomist so parents don't have to make a separate visit to the lab. Testing at the 18 month visit in addition to 12 and 24 month visits also helped. Lastly, care coordinators provide testing reminders to medical staff and to parents.

HELPING KIDS WHO ARE EXPOSED

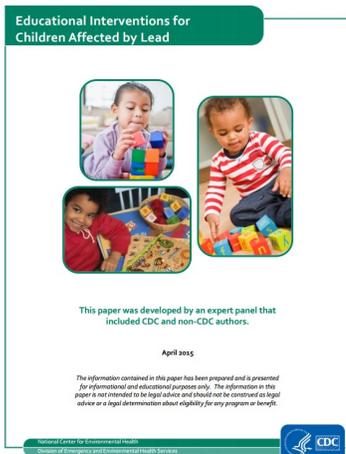
Once a child has been exposed to lead, they are at risk of developing life-long learning and behavior problems. These issues may be ameliorated by intervening as soon as possible when problems arise. Healthcare providers can help address these issues by referring children for Early Intervention assessment, making

parents aware of the need for ongoing developmental monitoring, and facilitating communication with the child's school.

A helpful new resource for educators is the April 2015 Centers for Disease Control paper developed by an expert panel, titled Educational Interventions for Children Affected by Lead.

See:

<http://www.cdc.gov/nceh/lead/publications/EducationalInterventionsChildrenAffectedbyLead.pdf>.



NEED CME CREDIT?

Dr. Schaffer's Pediatric Grand Rounds presentation on lead continues to be available for 1 hour of continuing medical education credit.

www.urmc.rochester.edu/pediatrics/grand-rounds/presentations-available-for-cme-credit.aspx.

In addition, a lead case study is featured in the online training module that

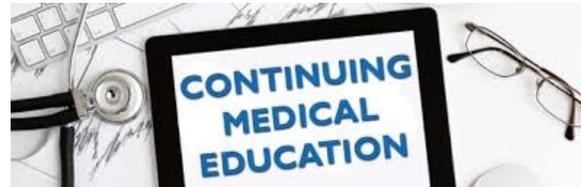
accompanies the Pediatric Environmental Health Toolkits. This module is worth 1.5 hours of CME or CNE. It is a good general introduction to environmental health. Pediatric or Family Medicine providers become more: aware of environmental exposures, comfortable with taking environmental history, able to provide anti-

patory guidance. Check it out! www.atsdr.cdc.gov/emes/health_professionals/pediatrics.html

Also, contact Jennifer Becker at 585-276-3105 if you would

like a Pediatric Environmental Health Toolkit for your office:

www.psr.org/resources/pediatric-toolkit.html.



RESEARCH ON LEAD

A research article recently published in Psychological Science demonstrated a causal link between lead exposure and ADHD. The study looked at genetic differences in a population of over 350 children. Ten percent had a version of the HFE gene which increases gut iron uptake and lead too, since it is a

similar divalent metal. Though lead levels were the same as those with a normal HFE gene, children with the variant were more likely to have ADHD. "Because the C282Y gene helps to control the effects of lead in the body and the mutation was spread randomly in the children, the findings of our study

are difficult to explain unless lead is, in fact, part of the cause of ADHD, not just an association," said Joel Nigg, Ph.D., the PI. The article's title is "Variation in an Iron Metabolism Gene Moderates the Association Between Blood Lead Levels and Attention-Deficit/Hyperactivity Disorder in Children."

www.ohsu.edu/xd/about/news_events/news/2015/1-7-study-first-to-confirm-cau.cfm

"The findings of our study are difficult to explain unless lead is, in fact, part of the cause of ADHD, not just an association,"

WE ARE . . . AT YOUR SERVICE!

Need an update about lead poisoning and its management for your staff?

Have a question about a patient with lead poisoning?

The Western NY Lead Poisoning Resource Center's Rochester Office provides:

- * Education and support to medical providers and local health departments within the region. Our center works to improve lead testing and provide education and prevention activities
- * Consultation with medical providers on the medical management of children and pregnant women with lead poisoning
- * Lead poisoning prevention information and materials



Serving 9 counties in the Flinger Lakes Region

Contact us at 585-276-3105 or toll free: 877-352-5775

Stanley Schaffer MD, Director • James Campbell MD, Assoc. Director • Jennifer Becker, Coordinator

COALITION NEWS

Our region is fortunate to have two active coalitions addressing the problem of childhood lead poisoning. These groups work on ways to prevent lead exposure from the policy level down to the individual level. Though healthcare providers can test children for lead exposure, the solution is usually non-medical. Providers must work with local

health departments, schools and other community agencies to prevent or reduce lead exposure and help families get the support they need. What can a coalition do for you and your patients?

- Educate about lead hazards and how to avoid them.
- Help you understand local housing resources and laws
- Share education mate-

rial specific to your needs

- Alert you to local agencies that can assist

What can you do for a coalition?

These coalitions need healthcare providers and medical professional groups to join in efforts to increase families, caregivers, homeowners, landlords, and the general public's practice of basic lead poisoning prevention, hazard identification and hazard reduction.



Coalition to Prevent Lead Poisoning

www.letsmakeleadhistory.org/
(585) 224-3125

Covers Monroe County primarily

Finger Lakes Coalition to Prevent Lead Poisoning

(585) 396-4343

Covers 8 counties:
Chemung, Livingston,
Ontario, Schuyler, Seneca,
Steuben, Wayne, and Yates

No level is safe . . . prevent lead exposure in children!

To receive this newsletter by e-mail, contact jenniferd_becker@urmc.rochester.edu

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www.Golisano.URMC.edu/lead-poisoning

supported by the NYS Department of Health
www.health.ny.gov/environmental/lead/

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