

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

This 2-part webinar series was presented by the Medical College of Wisconsin (MCW) Office of Community Engagement and the Clinical and Community Solutions to Lead-Free Children Project. The Clinical and Community Solutions to Lead-Free Children Project is funded by the Advancing a Healthier Wisconsin Endowment (AHW).

Session 1: Community Responses and Solutions to Lead

December 2, 12–1:30 pm via Zoom, view recording [HERE](#)

The first session explored the issues of lead within the community through information and personal experiences shared by a physician, experts in lead-related areas, and a parent. Attendees learned about the history of lead in Milwaukee, current data, common sources of lead, the impact of COVID-19 on the issue, and strategies for response.

INTRODUCTION TO COMMUNITY ENGAGEMENT AND RACISM AS A PUBLIC HEALTH CRISIS

Staci Young, PhD, Interim Senior Associate Dean for Community Engagement; Interim Director, Office of Community Engagement; Associate Professor, Dept of Family and Community Medicine; Director, Center for Healthy Communities and Research, MCW

Summary

The MCW Office of Community Engagement partnered with the Clinical and Community Solutions to Lead-Free Children Project to present this webinar series because we believe in the power of convening community and academic representatives to learn about, discuss, and take act on complex issues. Our definition of community engagement comes from the Carnegie Foundation and focuses on collaboration between academic institutions and their larger communities in a context of partnership and reciprocity.

- Community engagement can eliminate health disparities and advance health equity.
- Community engagement recognizes that community knowledge is as valuable as academic knowledge.
- Community engagement considers the context of communities.
- Community engagement recognizes that without community-relevant recommendations or research, there will be limited uptake of ideas.

Community engagement is critical as we seek to dismantle the root causes of health disparities in Milwaukee. In July 2019 Milwaukee County declared racism as a public health crisis, recognizing the detrimental health outcomes facing people of color. Since then, over 170 jurisdictions across the country followed suit. It is imperative that we invest in health equity and bridge the gaps in health care access to ensure everyone in our community has the opportunity to thrive.

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

LEAD 101

Heather Paradis, MD, MPH, Deputy Commissioner of Medical Services & Chief Medical Officer, Milwaukee Health Dept and Pediatric Specialist, Children's Wisconsin

Summary

While we have seen a great decline in lead poisoning, rates remain unacceptably high. Centers for Disease Control and Prevention (CDC) blood lead reference level has been declining and was recently lowered to 3.5 mcg/dL. Higher rates are associated with certain geographic areas, with high levels in Milwaukee and Racine. Deteriorating paint chips and dust remain the number one source of exposure. Contaminated water from lead laterals is another source. Impacts on children include lower IQ, learning disabilities, behavioral problems, anemia, and damage to many other systems. Racial and other disparities exist with Black children having 4 times greater likelihood of poisoning compared to white counterparts. Lead poisoning is 100% preventable: we need to focus on primary prevention.

RESOURCES PRESENTED BY DR. PARADIS

Centers for Disease Control and Prevention (CDC)

- [Childhood Lead Poisoning Prevention](#)
- [National Environmental Public Health Tracking](#)

United States Environmental Protection Agency (EPA)

- [Lead Renovation, Repair and Painting Program](#)

Wisconsin Department of Health Services (DHS)

- [Environmental Public Health Tracking: Lead Poisoning Data](#)
- [Childhood Lead Poisoning Prevention Program](#)
- [Lead-Safe Wisconsin](#)

City of Milwaukee Health Department (MHD)

- [Lead Dashboards](#)
- [Lead-Safe Milwaukee](#)

Books

- "Toxic Truth: A Scientist, a Doctor, and the Battle over Lead" by Lydia Denworth
- "What the Eyes Don't See: A Story of Crisis, Resistance, and Hope in an American City" by Mona Hanna-Attisha
- "Lead Wars: The Politics of Science and the Fate of America's Children" by Gerald Markowitz and David Rosner
- "Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility" by Dorceta Taylor
- "Clean and White: A History of Environmental Racism in the United States" by Carl A. Zimring

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

PARENT PERSPECTIVE

Shyquetta McElroy, parent advocate, Coalition on Lead Emergency (COLE)

Summary

Shy organizes to support parents like herself who have children suffering from the effects of lead poisoning. She has a goal to educate and help as many parents as possible get lead out of their lives, homes, and children as well as to continue to hold elected officials and government officials accountable. Many parents do not know about lead poisoning, its impact, and how to prevent it. This information needs to be made accessible to as many parents as possible, and we need to provide assistance with things like filters and abatement. Education to help parents protect their children is essential. For community workers, meeting parents where they are and relating to them is important. We must also consider the ongoing mental impact of lead poisoning.

COMMENTS SHARED FOR SHYQUETTA

“Thank you Shy to you and your son, for your witness and perseverance Thank you for giving back to others, Shy. From you and your son's struggle to build a village in Milwaukee. You are making such a difference in Milwaukee. Thank you for being a gift. You are an amazing Mom and advocate. Continued care to you and your family.”

“Simply amazing work!”

“This is such a powerful testimony Shy. Thank you for bringing attention to this through your personal story and educating others in the community.”

“Thank you so much Shy! This was amazing for you to share!”

“Education is a key. Thank you for sharing your story and being such a great example of a committed parent and being part of the solution.”

“We need more like you! Keep it up and never feel like you speak out too much!”

“Thank you for sharing your story and increasing awareness so that others don't have to suffer in the ways that so many children and families unfortunately have.”

“She's a real-life superhero”

Thank you, Shy, for your powerful testimony!

“Thank You So Much!”

PANEL – CREATING HEALTHY HOUSING

Facilitator: *Langston Verdin, MPH, Health Strategy Director - Policy, Innovation, and Engagement, Milwaukee Health Dept*

Panelists:

- *Franklin Cumberbatch, Civic Action Team, Vice President - Engagement, Bader Philanthropies, Inc.*
- *Richard Diaz, Chair, Coalition on Lead Emergency (COLE)*
- *Ofelia R. Mondragon, BA, Residential Services Project Manager, Social Development Commission*
- *Brian Weaver, MPH, Lead Policy Advisor; WI Division of Public Health*
- *Tyler Weber, MPH, Deputy Commissioner of Environmental Health, Milwaukee Health Dept*

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

Summary

We need robust and strong policy to address these issues. We need to think outside the box and create partnerships to address this problem. We have passionate individuals and organizations in this area: we need to start funding them.

QUESTIONS IN THE CHAT

Q: How is family history relevant in lead poisoning?

A: Family history is relevant to lead poisoning. Blood lead testing is recommended for all children who are identified as high risk based on results of a personal risk questionnaire (if any one of the following questions is answered “Yes” or “Don't know”):

- Does your child live in or regularly visit a house that was built before 1950 (this could apply to a home day care center or the home of a babysitter or relative)?
- Does your child live in or regularly visit a house built before 1978 with recent or ongoing renovations or remodeling (i.e., within the past six months)?
- Does your child have a sibling or playmate who has or has had lead poisoning?

Q: I have heard that imported turmeric has been found to contain lead. This spice has become popular lately, even in coffee drinks. Do you recommend avoiding turmeric or are there safeguards we can take if we'd like to use this spice?

A: Yes, turmeric is a spice that has been shown to be at risk for added lead, much of it imported from the Indian subcontinent due to growing conditions of the plant. I'd suggest buying domestic turmeric, as that is more likely to be FDA regulated.

Q: Can you help us understand the actual symptoms of lead poisoning and the challenges in dealing with them?

A: Initially, lead poisoning can be hard to detect—even people who seem healthy can have high blood levels of lead. Signs and symptoms usually don't appear until dangerous amounts have accumulated. The first step in treating lead poisoning is removing the source of contamination. Chelation treatments may be recommended for blood lead levels > 45 mcg/dL.

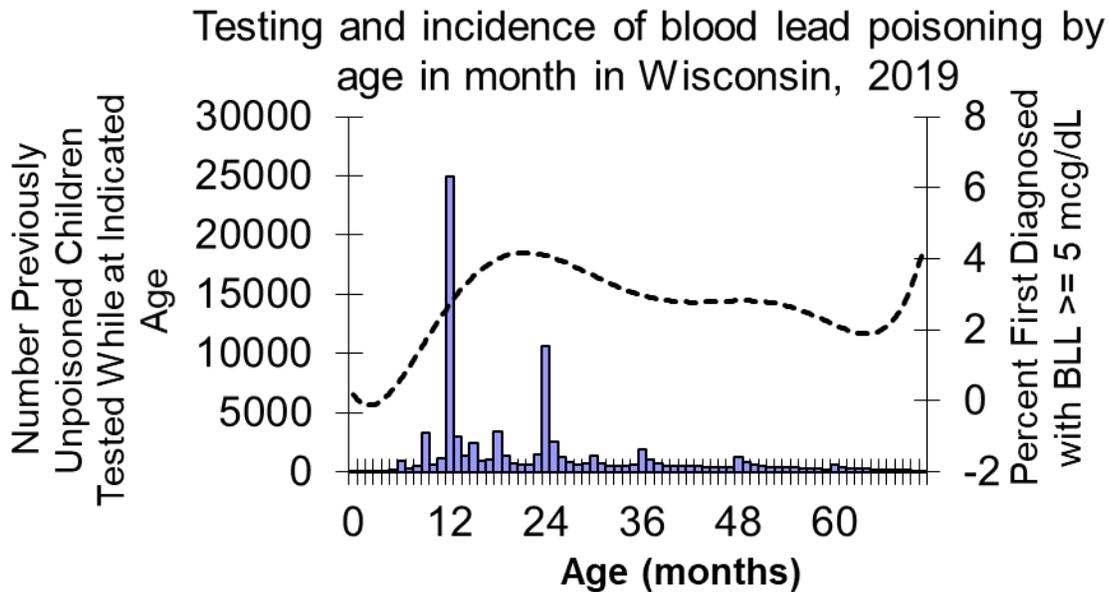
Signs and symptoms of lead poisoning in children include: developmental delay; learning difficulties; irritability; loss of appetite; weight loss; sluggishness and fatigue; abdominal pain; vomiting; constipation; hearing loss; seizures; and eating things, such as paint chips, that aren't food (pica).

Babies exposed to lead before birth might be born prematurely, have lower birth weight, and have slowed growth.

Although children are primarily at risk, lead poisoning is also dangerous for adults. Signs and symptoms in adults might include: high blood pressure; joint and muscle pain; difficulties with memory or concentration; headache; abdominal pain; mood disorders; reduced sperm count and abnormal sperm; and miscarriage, stillbirth or premature birth in pregnant women.

Q: What is the spike?/Did the graph show a high incidence of diagnosis at not just age 2 but also at 6 and above? (This question refers to the slide below)

Please see 17:00 of the video recording when Dr. Paradis reviews this slide.



A: The dotted line uses the right vertical axis—% first diagnosed. Since the denominator of kids tested at ages 5+ is so small (and first diagnoses occurring at these ages very rare), thus the higher % first diagnosed. Note, % not # kids diagnosed. The clinical significance is not missing the 2-year-old potential rise (even if age 1 test was normal/low).

Q: Have electronic records been consolidated now to have the expected dates for lead poisoning testing pop up during wellness visits of children?

A: Electronic health record systems vary by health care system and clinic. Standardized processes during well child visits include looking up past blood lead tests and repeat testing as needed. The Wisconsin Blood Lead Screening Recommendations include universal testing of all children living in the cities of Milwaukee and Racine. Because the high proportion of old housing in these communities creates a much higher risk of lead poisoning, each child should have a blood lead test three times before the age of 3 years: at around 12 months, 18 months, and 24 months.

Q: What priority needs to be given to Lead Service Line replacement as part of the lead abatement/lead hazard reduction work?

A: One of the main priorities would be the cost and who would be paying for that. Here is a good site to utilize for discussion on how the City of Milwaukee is addressing that:

<https://city.milwaukee.gov/water/WaterQuality/LeadandWater>

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

Q: Would paint abatement be a top priority since it's the #1 source for poisoning?

A: It definitely is one of the best ways we can proceed in quickly addressing this health crisis.

Q: In Milwaukee, what advocacy and policies are being implemented in housing so that landowners/rental property owners are sharing the costs of lead abatement with the renters? And with the city, county, state, and federal government for sharing the burden with homeowners when lead is identified? Especially in the many older homes/rental properties in Milwaukee. What resources are available for modest and low-income homeowners and renters for lead abatement in their homes, most of which were constructed prior to 1978?

A: The Lead Safe Homes Program is funded through a grant from the Department of Health Services and administered by the Social Development Commission. The purpose of the program is to protect children and families from the hazards of lead-based paint in their homes. Under this program, eligible homeowners and owners of rental properties can obtain grants to assist with eliminating lead-based paint hazards and creating lead-safe housing units. The grants can be used for Lead Inspections/Risk Assessments to identify lead hazards and for the necessary housing rehabilitation to control or eliminate the identified lead hazards. Only lead-based paint can be remediated with this grant. Find more details [HERE](#).

Q: How/when/what do physicians and other healthcare professionals learn about the hazards of lead exposure and treatment of it?

A: Medical curricula vary greatly. Many trainees may be exposed to lead education during medical school. Lead is certainly a part of the residency curriculum for those choosing primary care specialties.

Q: What policy initiatives have worked elsewhere in the country?

A: There are successful policy initiatives in Rochester, NY ([Coalition to Prevent Lead Poisoning](#)) and Cleveland, OH ([Lead Safe Cleveland Coalition](#)). The Clinical and Community Solutions to Lead-Free Children Project is also partnering with University of Notre Dame researchers and their lead screening kit ([Lead Screening Kit](#)).

Q: Can you provide information about the Coalition on Lead Emergency (COLE)?

A: <http://coalitiononleademergency.org/>

Q: What resources if any are available to homeowners who do not meet the income guidelines associated with SDC and other programs?

A: The Clinical and Community Solutions to Lead-Free Children Project's Lead Messaging Team is putting together a list of resources that will be available to the community in 2022. Until then, here is a resource for homeowners: <https://county.milwaukee.gov/EN/DHHS/Housing>

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

Q: How can we change the dynamic of acceptance of legislative constraints that make our children canaries in the coal mine?

A: Continue to advocate for change and host webinars to educate those in government and in the community on the importance of the change that is needed!

Q: Richard, how will the dollars going to Environmental Collaboration Office (ECO) help with lead poisoning?

A: ECO will bring on the Green & Healthy Homes Initiative (GHHI) to help combine lead abatement and weatherization work.

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

Session 2: Clinical Responses and Solutions to Lead

December 9, 12– 1:30 pm via Zoom, view recording [HERE](#)

The second session focused on the role of the health system in testing, response, surveillance, and prevention. Attendees heard from a parent, medical professionals, and other health-focused experts about lead processes in the clinical setting, the impact of COVID-19 on this issue, and opportunities for improvement.

INTRODUCTION TO COMMUNITY ENGAGEMENT AND RACISM AS A PUBLIC HEALTH CRISIS

Staci Young, PhD, Interim Senior Associate Dean for Community Engagement; Interim Director, Office of Community Engagement; Associate Professor, Dept of Family and Community Medicine; Director, Center for Healthy Communities and Research, MCW

Community engagement is critical as we seek to dismantle the root causes of health disparities in Milwaukee. In July 2019 Milwaukee County declared racism as a public health crisis, recognizing the detrimental health outcomes facing people of color.

INTRO TO HEALTH SYSTEM AND TESTING

Robert Rohloff, MD, Associate Clinical Professor of Pediatrics, MCW; fellow, American Academy of Pediatrics; and board-certified pediatrician, Children's Wisconsin

Screening through testing is essential to identifying kids at risk and intervening. We must remember that every lab number is a human life. Abnormal blood lead levels require follow up and care coordination. We need support and collaboration with community members, and we need to be able to set parents up with appropriate resources, not just testing.

COMMUNITY PERSPECTIVE

Deanna Branch, parent advocate; Coalition on Lead Emergency (COLE) and Aidan Branch, Deanna's son

Education for parents should be more robust—parents are still learning about lead poisoning after the fact. We need more education and awareness, not just a pamphlet at the hospital. Parents of kids with lead poisoning are stepping up to advocate for their children, other children, and their community, while navigating additional care and resource needs for their own children. Deanna and her son Aidan wrote and illustrated a book about their lead experience.

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

COMMENTS SHARED FOR DEANNA

“Aidan, so glad you are on here joining your mom! :)”

“Deanna, would love the info on the book you wrote, and Aidan illustrated!”

“Amazing! Would love to see the book!”

“What a spectacular project, Deanna & Aidan! It’s important and impactful work you are doing.”

“Thank you for joining us today, Ms. Branch and Aidan!!!! We value your insight.”

“I love Aidan's spirit - he's definitely a highlight of my Zoom meetings today! I appreciate you both for your advocacy and how you've used your voices to help others!”

“You're an amazing Mom and I hope you're finding a village of support and not letting those who don't understand to affect your love and healing.”

“It must end. We are poisoning our children.”

“Congratulations Aiden!! Recovery and healing aren’t easy and you're doing it!!”

“I would love to have Aiden at all my zoom meetings! :)”

“I love that message Ms. Branch, that people are doing the best they can, and we should help and support.”

“Inspiring message!”

“Deanna, you are such a powerful voice.”

“Thank you, Ms. Branch!”

“Sending much love and care to Miss Branch and Aiden!!!!”

PANEL –ENHANCING CLINICAL SYSTEMS TO ADDRESS LEAD RESPONSE, SURVEILLANCE AND PREVENTION

Facilitator: David Nelson, PhD, MS, Associate Professor, Dept of Family & Community Medicine; Faculty, Office of Community Engagement, MCW

Panelists:

- Franklin Cumberbatch, Civic Action Team, Vice President - Engagement, Bader Philanthropies, Inc.
- Chris Keim, RN, Coalition on Lead Emergency (COLE)
- Mike Larson, Manager of Environmental Health Dept, Sixteenth Street Community Health Center
- Holly Nannis, RN, Public Health Nurse Supervisor, Milwaukee Health Dept

Summary

Testing needs to be institutionalized, and widely done. Health agencies, primary care, and WIC (the Supplemental Nutrition Program for Women, Infants, and Children) all need to coordinate so that children are not slipping between the cracks. We can’t rely on one agency to do all follow up and care; providers and other organizations need to share the load. Community partnerships are essential to this work. Parent advocates are powerful and important to this work. More awareness on this issue is needed: we need a robust campaign so that no parent is unaware of this risk and there is appropriate funding to abate it. The time is now to fix this: this is about children’s lives. It is urgent, and we need to step up.

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

QUESTIONS IN THE CHAT

Q: Can you share a link to purchase Deanna's book?

A: The link to purchase is still forthcoming, but if you are interested please reach out to Deanna Branch via email: deannabbranch26@gmail.com

Q : How can the community do a better job of informing all families of young children on how to prevent lead exposure?

A: Having there be a consistent message among those who they are going to for the information (doctors, school, health officials, etc.). The Clinical and Community Solutions to Lead-Free Children Project's Lead Messaging Team is working to have a consistent and cohesive message be available in 2022 that will go out to the community.

Q : Is the Children's decision support in Epic being used by other health systems?

A: I'm not aware of what decision support is being used at other systems. We are very open to learning what tools others may be using and sharing ours. Likely decision support is used at other organizations. There is always an opportunity to optimize the tools.

Q : To what extent is lead screening (and subsequent testing dates if needed) an electronic prompt for EVERY child's wellness visit, inside and outside of the Children's Hospital network?

A: All children under age six receive a lead test during their wellness visits at Sixteenth Street Community Health Centers (SSCHC). Pregnant women receive a test as well during their prenatal appointments.

Electronic health record systems vary by health care system and clinic. Standardized processes during well child visits include looking up past blood lead tests and repeat testing as needed. The Wisconsin Blood Lead Screening Recommendations include universal testing of all children living in the cities of Milwaukee and Racine. Because the high proportion of old housing in these communities creates a much higher risk of lead poisoning, each child should have a blood lead test three times before the age of 3 years: at around 12 months, 18 months, and 24 months.

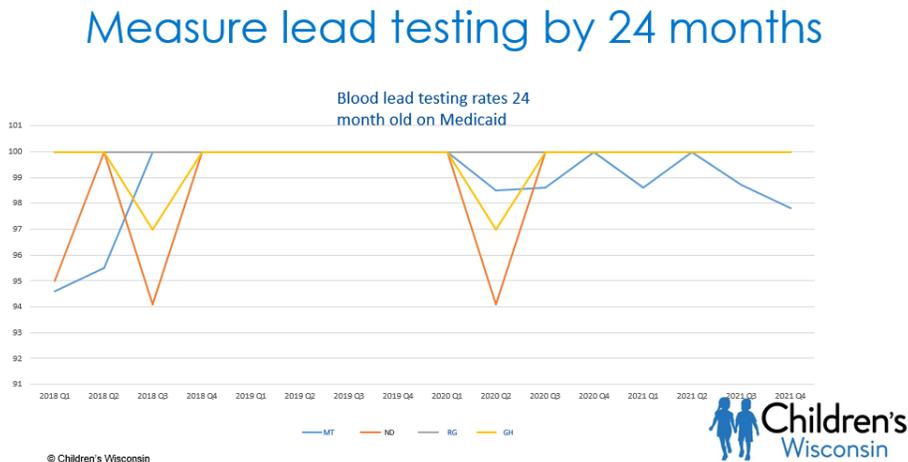
Q : Is there a need for increasing lead testing options outside of primary care or WIC? What might that look like?

A: At SSCHC, we recruit families for our lead outreach program which includes testing, home education, and ongoing monitoring/support at a variety of health fairs, community events, schools, public gatherings, and even through door-to-door outreach throughout the neighborhoods we serve on Milwaukee's south side. We are not the only ones doing this work, but more public outreach like this can certainly be replicated throughout the city.

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

Q : Dr. Rohloff, if my impression is correct, only about 250 children/yr were found lead poisoned by Children's Hospital and its outreach community in the previous slide?? But close to 1800 children are found poisoned in Milwaukee in 2019. What clinics are available in the most affected north side communities to test children? (This question refers to the slide below)

Please see 10:56 of the recording when Dr. Rohloff reviews this slide.



A: Great question. I gave the 2021 data. I did not show data from 2019 where we had 1229 abnormal blood lead levels! It demonstrates the effect of COVID-19 on ability to screen as well as the Magellan crisis (recall of Magellan Diagnostics' blood lead tests).

Q : Mr. Cumberbatch, can you speak with the Greater Milwaukee Realtors Association to create support for your proposals? Legislation at the state level, supported by realtors, ties the hands of local municipalities to do what you have suggested—policies with teeth that test homes and condemn properties.

A: I will certainly have a conversation with them.

Q : Is there movement to lower the threshold for blood lead level down to 5? My understanding is that health issues (some permanent) begin at 5 blood lead level. 10, 15, and 20 are very late.

A: It is a continued movement to have the blood lead level move down to *any measurable detection*. There has been progress made, especially in Milwaukee, but the more we continue to educate ourselves and the community, the better chance we have at lowering this threshold!

Q : Has there been any discussion or consideration of developing mobile units for lead education and testing in communities?

A: This is a great idea and those on the panel and with the Clinical and Community Solutions to Lead-Free Children Project would be interested in discussing more about it. Please reach out to Kairee at khamelin@mcw.edu.

Recap of Community and Clinical Solutions to Lead Virtual Webinar Series

Q : Chris, will you talk about the "educate the educators" PowerPoint program that COLE has developed around lead?

A: Origin and information about COLE's Training PowerPoint: In 2016, Milwaukee's Hunger Task Force put together a comprehensive team of community organizations and governmental agencies to create a PowerPoint and collateral to help disseminate information within the community about lead. This opportunity came out of a USDA grant created after research from Flint, Michigan suggested that children who were hungry absorbed five times more lead than children who were exposed to lead but were well nourished. In 2018, Richard Diaz and the Dominican Center for Women, which is located in the Amani Community and in the 53206 zip code, partnered with Hunger Task Force and used the PowerPoint to train a group of individuals from the community to go door to door to create awareness amongst people in the neighborhood about: lead, where it is found, how to identify lead based paint and some basics on how to prevent lead poisoning. The Amani project, which was called *Well Fed Means Less Lead*, was successful, as shown by data from a pre and post test, showing an overall 40% increase in knowledge and awareness with a 200% increase in ability to identify lead paint and knowledge of where lead is found.

The grant from the USDA ended in 2018 and there was no funding to expand *Well Fed Means Less Lead*. This is when Richard Diaz, the Dominican Center and a number of organizations in the community began the Coalition on Lead Emergency (COLE). The PowerPoint has been given some updates from the Medical College of Wisconsin and has been utilized in trainings of people from the community by COLE. The original form of the PowerPoint can be found [on the COLE website, under resources](#). The COLE Work Force Development Committee has a plan to work with the COLE Education Committee and community partners to utilize the PowerPoint to train a paid workforce of Community Lead Educators to go into the community in a way similar to the Amani Project. COVID 19 has slowed the progress of this plan, but it is hoped that it can be started sometime in 2022.

Q : Are there any efforts to directly address the structures that allow grinding poverty to thrive in our community? It's my understanding that poverty is highly correlated with lead poisoning, as well as numerous other adverse health outcomes. That seems like it should be a key aspect of any primary prevention strategy. I know it's not that straightforward, but I feel like it should always be in the back of our minds (if not the front) when considering broad solutions to our very narrow issue. I'm glad the 53211 zip code has found continued success at keeping their kids' lead levels down; wonder how we can bring those parents in to the effort to do the same for 53206. It would be great if we could act as one community.

A: Lead poisoning is strongly linked to low socioeconomic status (SES) in WI. 85% of lead-poisoned children are enrolled in Medicaid. The Clinical and Community Solutions to Lead-Free Children Project is working to increase the connectedness between the clinical enterprise, the City of Milwaukee Health Department, community response, and parental engagement to mitigate ongoing lead exposures and decrease lead poisoning. Convenings such as this webinar series that bring together people from different SES, sectors, and geographic backgrounds, can increase awareness about how to get involved in the effort, for example by working closely with and supporting the Coalition on Lead Emergency (COLE).