## **Summary and Action Items**

The Lead Exposure and Prevention Advisory Committee (LEPAC) convened on October 16 and 17, 2023. Hybrid participation through a virtual Zoom meeting was used to hold the meeting. On October 16, 2023, approximately 118 public participants attended the meeting or a portion of the meeting. Approximately 55 Federal employees attended the meeting or a portion of the meeting. The meeting was open to the public. On October 17, 2023, approximately 94 public participants attended day two of the meeting or a portion of the meeting. Approximately 41 Federal employees attended day two of the meeting or a portion of the meeting. The meeting was open to the public.

# Voting LEPAC Members Present 10/16 and 10/17 (in alphabetical order)

- Matthew Ammon, M.S., LEPAC Chair; Director, Office of Lead Hazard Control and Healthy Homes, U.S. Department of Housing and Urban Development
- Tammy Barnhill-Proctor, M.S., Supervisory Education Program Specialist, Office of Innovation and Early Learning, Office of Elementary and Secondary Education, U.S. Department of Education
- Wallace Chambers, Jr., Ph.D., M.A.S., M.H.A., R.E.H.S., Deputy Director, Environmental Public Health, Cuyahoga County Board of Health
- Rebecca Fry, Ph.D., M.S., Carol Remmer Angle Distinguished Professor in Children's Environmental Health, University of North Carolina-Chapel Hill, Department of Environmental Sciences and Engineering
- Nathan Graber, M.D., M.P.H., F.A.A.P., Clinical Associate Professor, Department of Pediatrics, Albany Medical Center
- Kristina M. Hatlelid, Ph.D., M.P.H., Toxicologist, Division of Health Sciences, U.S. Consumer Product Safety Commission
- Mary Elizabeth (Mary Beth) Hance, Senior Policy Advisor, Division of Quality and Health Outcomes, Children and Adults Health Program Group, Center for Medicaid and CHIP Services, CMS, Centers for Medicare and Medicaid Services
- Tina Helene Hanes, R.D.N., R.N., Senior Technical Advisor, Supplemental Nutrition and Safety Programs, United States Department of Agriculture
- Aaron M. Lopata, M.D., M.P.P., Chief Medical Officer, Maternal & Child Health Bureau, Health Resources and Services Administration
- Erika Marquez, Ph.D., M.P.H., Assistant Professor, School of Public Health, University of Nevada-Las Vegas
- Anshu Mohllajee, Sc.D., M.P.H., Research Scientist Supervisor I, Childhood Lead Poisoning Prevention Branch, California Department of Public Health
- Grace M. Robiou-Ramirez de Arellano, M.P.H., Director, Office of Children's Health Protection, U.S. Environmental Protection Agency, Office of the Administrator, United States Environmental Protection Agency

# Non-Voting LEPAC Liaison Members Present 10/16 and 10/17

- Ruth Ann Norton, President and CEO, Green & Healthy Homes Initiative (GHHI), liaison to GHHI
- Amanda Reddy, M.S., Executive Director, National Center for Healthy Housing (NCHH), liaison to NCHH
- Patrick Parsons, Ph.D., Director, Division of Environmental Health Sciences, Chief, Laboratory of Inorganic and Nuclear Chemistry, New York State Department of Health, liaison to Association of Public Health Laboratories

- Stephanie Yendell, D.V.M, M.P.H., Senior Epidemiology Supervisor, Minnesota Department of Health, liaison to Council for State and Territorial Epidemiologists
- Lauren Zajac, M.D., M.P.H, F.A.A.P, Assistant Professor, Icahn School of Medicine at Mount Sinai, liaison to American Academy of Pediatrics

# Non-Voting LEPAC Liaison Members Absent Only 10/17

• Abraham Kulungara, Senior Director, Environmental Health, Association of State and Territorial Health Officials (ASTHO), liaison to ASTHO

# **Absent Voting LEPAC Members**

• Karla Johnson, M.P.H., Administrator, Marion County Public Health Department

# Presenters 10/16 (in alphabetical order)

- Alexis Allen, M.P.H., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Claire Brisse, Environmental Protection Specialist, U.S. Environmental Protection Agency
- Quanza Brooks-Griffin, M.P.A., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Trina Evans-Williams, Ph.D., Public Health Advisor/Project Officer, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Warren Friedman, Ph.D., Senior Advisor, Office of Lead Hazard Control and Healthy Homes, U.S. Department of Housing and Urban Development
- Mary Beth Hance, Senior Policy Advisor, Children and Adult Health Program Group, Center for Medicaid and Medicare Services
- Qaiyim Harris, Project Manager, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Anshu Mohllajee, Sc.D., M.P.H., Research Scientist Supervisor I, California Department of Public Health, Childhood Lead Poisoning Prevention Branch
- Audrey Pennington, Ph.D., Epidemiologist, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Tara Radosevich, Assessment Manager, Real Estate Assessment Center, Office of the Deputy Assistant Secretary, U.S. Department of Housing and Urban Development
- Kira Smith, Lead and Copper Team Leader, Office of Ground Water and Drinking Water, EPA
- Lynn Thorp, National Campaigns Director, Clean Water Action/Clean Water Fund
- Steve Via, Director, Federal Relations, American Water Works Association

# Presenters 10/17 (in alphabetical order)

- Paul Allwood, Ph.D., M.P.H., RS, Branch Chief, LEPAC Designated Federal Officer (DFO), Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Trina Evans-Williams, Sc.D., M.P.H., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Mary Beth Hance, Senior Policy Advisor, Division of Quality and Health Outcomes, Children and Adults Health Program Group, Center for Medicaid and CHIP Services, CMS
- Wilma Jackson, M.P.A., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Grace M. Robiou-Ramirez de Arellano, M.P.H., Director, Office of Children's Health Protection, U.S. Environmental Protection Agency, Office of the Administrator, EPA

## CDC Attendees who participated in the LEPAC Meeting 10/16 (in alphabetical order)

- Alexis Allen, M.P.H., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Paul Allwood, Ph.D., M.P.H., R.S., Branch Chief, LEPAC Designated Federal Officer (DFO), Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Aaron Bernstein, M.D., M.P.H., Director, NCEH/ATSDR, CDC
- Quanza Brooks-Griffin, M.P.A., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Trina Evans- Williams, Sc.D., Public Health Advisor/ Project Officer, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Qaiyim Harris, Project Manager, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Nicholas Hatch, M.P.H., ORISE Fellow, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Audrey Pennington, Ph.D., Epidemiologist, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Perri Ruckart, Dr.P.H., M.P.H., Team Lead/Health Scientist, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

## CDC Attendees who participated in the LEPAC Meeting 10/17 (in alphabetical order)

- Alexis Allen, M.P.H., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Paul Allwood, Ph.D., M.P.H., RS, Branch Chief, LEPAC Designated Federal Officer (DFO), Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Nicholas Hatch, M.P.H., ORISE Fellow, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Wilma Jackson, M.P.A., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Perri Ruckart, Dr.P.H., M.P.H., Team Lead/Health Scientist, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Trina Evans-Williams, Sc.D., M.P.H., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

## Public Commenters (in alphabetical order)

• Diana Zuckerman, Ph.D., National Center for Health Research

## Federal Attendees 10/16 (in alphabetical order)

- Tonia Allen†
- Hannah Bartling<sup>†</sup>
- Heidi Bethel<sup>+</sup>
- Dr. Sharunda Buchanan \*
- Larry Byrd<sup>+</sup>
- Yulia Carroll \*
- Stella Chuke\*
- Amy Cordero\*

- Cheryl Cornwell\*
- Joseph Courtney\*
- Jonquil Dent\*
- Kristin Dortch\*
- Audrey Dowling\*
- Sheryl Driskell\*
- Chloe Durand+
- Gabrielle Dys\*
- Marc Edmonds<sup>+</sup>

- Stiven Foster<sup>+</sup>
- Warren Friedman<sup>+</sup>
- Andrew Geller +
- Donata Green\*
- Arlisha Gray\*
- Glykeria Hadjisimos\*
- Robin L. Jacobs†
- Jeff Jarrett\*
- Adele Johnson\*

- Steve Jones\*
- Noelle Kachinsky\*
- Mateusz Karwowski\*
- Dr. Ghassan A.
  Khoury<sup>†</sup>
- Heather Klemick<sup>+</sup>
- Melissa Korniejczuk\*
- Tanya LeBlanc\*
- Chanya Liv†
- Michelle Medeiros+
- Juan Mendez<sup>+</sup>

- Johanna Miller†
- Valerie G. Zartarian Morrison<sup>+</sup>
- Mark Myer<sup>+</sup>
- Kim Nesbitt<sup>+</sup>
- Shannon Omisore\*
- Ayana N. Perkins\*
- Brenda M. Reyes<sup>+</sup>
- Tekerri Rivers \*
- Sukeshi Roberts\*
- Grace Robiou<sup>+</sup>

- Shayna Sellars<sup>+</sup>
- Ebony Section\*
- Madison Smith\*
- Rebecca Tsai \*
- Kristen Leigh Wallon\*
- Shannon Walsh<sup>+</sup>
- Cynthia Ward\*
- Lena Wynn\*
- Wyn Zenni†

- \*Attendees from CDC
- <sup>†</sup>Attendees from other Federal agencies

## Federal Attendees 10/17 (in alphabetical order)

- Sharunda Buchanan\*
- Larry Byrd+
- Yulia Carroll\*
- Stella Chuke\*
- Amy Cordero\*
- Cheryl Cornwell\*
- Joseph Courtney\*
- Jonquil Dent\*
- Sheryl Driskell\*
- Gabrielle Dys\*
- Stiven Foster+
- Warren Friedman<sup>+</sup>
- Andrew Geller +
- Quanza Brooks-Griffin\*

## \*Attendees from CDC

<sup>+</sup>Attendees from other Federal agencies

- Arlisha Gray\*
- Glykeria Hadjisimos\*
- Qaiyim Harris\*
- Nicholas Hatch\*
- Robin L. Jacobs<sup>+</sup>
- Jeff Jarrett\*
- Noelle Kachinsky\*
- Dr. Ghassan A.
  Khoury<sup>†</sup>
- Melissa Korniejczuk\*
- Tanya LeBlanc\*
- Chanya Liv†
- Amy McRae\*
- Juan Mendez<sup>+</sup>
- Johanna Miller<sup>+</sup>

- Shannon Omisore\*
- Audrey Pennington\*
- Ayana N. Perkins\*
- Tekerri Rivers \*
- Ebony Section\*
- Kira Smith<sup>+</sup>
- Madison Smith\*
- Rebecca Tsai \*
- Shannon Walsh<sup>+</sup>
- Cynthia Ward\*
- Trina Evans-Williams\*
- Lena Wynn\*

- Public Attendees 10/16 (in alphabetical order)
  - Farah Ahmed
  - Elysse Andrews
  - Remy Babich

- Jeremy Thomas Babin
- Frederick Banks

- Ryan Barker
- Rose Villardine Belony

- John Belt
- Kelly Berg
- Holly Bolstad
- Phillip Bouton
- Tammy Broadbent
- Alison Brower
- Marshea Browner
- Margaret Burns
- Venessa Cantu
- Robin Charles
- Maria Cisneros
- Iris Cooney
- Stacey Cooper
- James Cousett
- Brian Coyle
- Erica Cruz
- Dr. Andrew Cyr
- Jenna David
- Olubukolani David
- Krista Davis
- Collette Stewart
  Duhe
- Mary Dussol
- John D Evans
- Doug Farquhar
- Keri Fisher
- Alicia Fletcher
- Lauren Fogarty
- Wilmarie Muñiz
  Forestier
- Deana C Gantar
- Ashley Gent
- Darla Hamende
- Alaysa Harris
- Sonya Henson
- Taylor M. Herring

Public Attendees 10/17 (in alphabetical order)

Edward Hill

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- Michaela Horn
- Cori M. Ice

Elysse Andrews

- Melisa Illies
- David Jacobs
- Anneke Jansen
- Cynthia Johnston
- Mark E. Jones
- Paul Jones II
- Julia Kaya
- Janine Kerr
- Nida Khan
- Megan Knudsen
- Ashley Koski
- Ketki A. Kulkarni
- Christy Kuriatnyk
- Ginny De La Cruz
- Charles Letizia
- Jennifer Liebreich
- Brandy Litt
- Catherine Lufkin
- Zhen-qiang Ma
- Magaret Major
- Marisol Maldonado
- Jessica Maloney
- Morri Markowitz
- John C. Maxwell
- Shonda Mayo
- Taylor McCabe
- Camille McClellan
- Angela Medina
- Kristen Milbrath
- Jaime Aneta Moore
- Gredia Maria Huerta Montañez
- Michelle L. Myer
- Melanie Napier
- Julianne Nassif
- Allison Natcher
- Abby Nelson
- Chris Nelson
- Kevin Officer

**Remy Babich** 

- Rebecca M. O'Meara
- Tunga Otis
- Aurelia Payne
- David Perez
- Zoua Pha
- Renata Polk
- Sudha Rajagopalan
- Laurie Render
- Zaynab Rezania
- Megan Lynn
  Workman Rivera
- Michelle Rolfson
- Jeffrey Sanchez
- Kimberly Schneider
- Anne Semrau
- Christin Seo
- Forrest Sharp
- Cindy Singleton
- Samantha Kate Sites
- Darrin Sluga
- Shannon Soileau
- Kristina Somday
- Heather Sorge
- Vivienne Soria
- Mike Stobbe

Jim Teed

Vazquez

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Rachael Lee Stough

Alexander Tin

Crystal Veazey

**Brian Weaver** 

Jessica Willard

Romona Taylor

Williams

Tari York

Cathy Wood

**Renee Bailey** 

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Lindee L Tollefsen

**Yvette Marie Lopez** 

Jonathan Whipple

- Ryan Barker
- Rose Villardine Belony
- Kelly Berg
- Candice Briese
- Tammy Broadbent
- Brittney Bucko
- Margaret Burns
- Venessa Cantu
- Robin Charles
- Iris Cooney
- James Cousett
- Brian Coyle
- Dr. Andrew Cyr
- Jenna David
- Krista Davis
- Ginny De La Cruz
- Madeline Denlinger
- Collette Stewart Duhe
- John D Evans
- Doug Farquhar
- Keri Fisher
- Alicia Fletcher
- Wilmarie Muñiz
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- Deana C Gantar
- Rahel Gemmeda
- Ashley Gent
- Darla Hamende
- Sonya Henson
- Taylor M. Herring
- Edwards Hill

- Michaela Horn
- Cori M. Ice
- Melisa Illies
- David Jacobs
- Mark E. Jones
- Julia Kaya
- Janine Kerr
- Nida Khan
- Megan Knudsen
- Ashley Koski
- Ketki A. Kulkarni
- Christy Kuriatnyk
- Charles Letizia
- Jennifer Liebreich
- Brandy Litt
- Melinda Lozovoy
- Catherine Lufkin
- Zhen-giang Ma
- Magaret Major
- George Keith Maranger
- Morri Markowitz
- Shonda Mayo
- Taylor McCabe
- Camille McClellan
- Mary Kathryn McMahan
- Kristen Milbrath
- Colby Vonsha Murray
- Michelle L. Myer
- Melanie Napier
- Julianne Nassif

- Allison Natcher
- Abigail Nelson
- Kevin Officer
- David Olubukolani
- Rebecca M. O'Meara
- Tunga Otis
- David Perez
- Nicole Perez
- Zoua Pha
- Renata Polk
- Sudha Rajagopalan
- Laurie Render
- Anne Semrau
- Christin Seo
- Forrest Sharp
- Samantha Kate Sites
- Jasmine Smith
- Megan Snow
- Shannon Soileau
- Kristina Somday
- Heather Sorge
- Mike Stobbe
- Michele Sturgeon
- Lindee L Tollefsen
- Crystal Veazey
- Brian Weaver
- Jonathan Whipple
- Jessica Willard
- Jean Woo
- Cathy Wood
- Tari York

**Common Themes:** Federal activities to prevent, reduce, and eliminate childhood lead exposure; primary and secondary prevention; lead in drinking water; lead service line replacement (LSLR); funding opportunities; lead in soil; community partnerships; federal partnerships; lead in schools and childcare facilities; data and surveillance; adult and occupational lead exposure; outreach and communication; community education; social determinants of health

**Identified Research Gaps:** Communication and outreach strategies to increase blood lead testing; real estate abatement; adult lead exposure; impact of acute exposure on blood lead levels; lead exposure from contaminated products in schools; lead exposure from artificial turf; health and housing quality standards; coordination strategies between federal, state, local, and community-based lead prevention

initiatives; best practices for community education, engagement, and empowerment; impact of climate change on lead prevention and remediation

# Meeting Notes 10/16

### Remarks from Aaron Bernstein, M.D., M.P.H., Director, NCEH/ATSDR, CDC

- Dr. Bernstein, a pediatrician who has been the Center Director since May 2023, recognizes the importance of lead poisoning prevention and appreciates the dedication of this committee.
- He supports the work of this committee to address intergenerational lead exposures, health inequities, and the broader determinants of health that contribute to lead poisoning in children most at risk.

#### Vote on 2022 LEPAC Annual Report

Matthew Ammon, M.S., LEPAC Chair; Director, Office of Lead Hazard Control and Healthy Homes, U.S. Department of Housing and Urban Development (HUD)

- The 2022 LEPAC annual report was emailed to LEPAC members for their review in August 2023.
- LEPAC members unanimously voted to approve the report.

#### Lead Branch Updates

Paul Allwood, Ph.D., M.P.H., R.S., LEPAC DFO, Branch Chief, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

- CDC Lead Poisoning Prevention and Surveillance Branch is partnering with U.S. Environmental Protection Agency (EPA) and HUD for the 2023 National Lead Poisoning Prevention Week (NLPPW) activities on October 22 through October 28, 2023.
- The theme for NLPPW is "Together we can prevent lead exposure."
- Subject matter experts (SMEs) from the CDC Lead program will discuss lead poisoning prevention efforts, recent news stories regarding lead exposure, and information related to recent lead-related recalls.
- CDC is funding 11 new community-based organizations under a new notice of funding opportunity (NOFO) called Supporting Communities to Reduce Lead Poisoning.
- The NOFO is a 3-year commitment from September 2023 to September 2026.
- No safe level of lead exposure has been identified, and lead poisoning remains a significant public health issue across the United States.
- Lead poisoning disproportionately impacts children from families experiencing poverty.
- Effects of lead exposure can be subtle and may not be detectable by a clinical exam. The best way to determine if a person was exposed is to collect and test a blood sample. There is only one FDA approved point-of-care test for lead.
- CDC is partnering with National Aeronautics and Space Administration (NASA) and Food and Drug Administration (FDA) to accelerate the development of next-generation point-of-care blood lead testing technology.

- Luminary Labs is the vendor that was selected through a Request for Technical Proposals (RFTP).
- Luminary Lab is collaborating with staff from CDC, NASA, and FDA to design a challenge contest that will be publicly announced soon.
- The challenge will invite entrants to develop a new point-of-care instrument that is simple to use, highly effective, reliable, cost-effective, can detect low concentrations in blood, and is Clinical Laboratory Improvement Amendments (CLIA) waived.

## Blood Lead Surveillance Update/Data Modernization Initiative

## Qaiyim Harris, Project Manager, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

Audrey Pennington, Ph.D., Epidemiologist, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

- CDC runs the childhood blood lead surveillance system (CBLS) which is a child-specific database of blood lead testing data. It includes data from all CDC-funded Children's Lead Poisoning Prevention Programs (CLPPPs), which includes 48 states, Washington D.C., and Puerto Rico.
- CBLS integrates clinical information, laboratory reporting, and data from environmental investigations to identify sources of lead exposure in children with exposure to lead.
- The Epidemiology and Surveillance Team is currently processing and analyzing recent years of submitted CBLS data. The lead program is in the process of resolving discrepancies to ensure that CDC and state data agree before CDC publishes the data.
- Several challenges delayed the final publication of the data:
  - o Complexities with datasets and data formatting in the submission process,
  - o Delays in states adapting and adopting new data elements and systems,
  - Differences between case definitions used by the states and the CDC surveillance system.
- During the COVID-19 pandemic, the test kits used by LeadCare II machines for point-of-care blood lead testing in children were recalled.
- Blood lead testing rates were evaluated from 2018 through the third quarter of 2022 for the 25 states that provided consistent blood lead testing data. There was a decrease in testing after the COVID-19 pandemic and again when the LeadCare II recall occurred in 2021. Testing increased in 2022 but did not return to pre-pandemic levels.
- The team is assessing new data sources for blood lead surveillance data to both complement and validate CBLS data.
- The team has access to a large clinical lab database that provides national near-real-time testing data from adults and children. The goal is to be able to use the data to identify trends faster than using the CLBS, only because the CBLS data are submitted quarterly.
- The team recently obtained data from CMS on blood lead testing in children enrolled in Medicaid. Currently, the team is identifying gaps in testing children enrolled through this program.
- CDC is finalizing the Lead Exposure Risk Index (LERI). The LERI is a new tool to map community level risk for lead exposure in children.

- The CBLS system provides the functionality to record and aggregate the data collected from state and local health departments and validate the data by applying a nationally consistent standard.
- The data can be used to support policy decisions that focus on eliminating childhood lead poisoning.
- Several issues have made data management complex:
  - The data models and the system were designed prior to the implementation of many cloud technologies.
  - There is an inability to track the resubmission of previous rejected records.
  - Manual data reviews are needed.
  - Manual generation of static excel reports are required for linkage with census data.
  - State partners have varying data capabilities.
- Steps have been taken to address and resolve some of these issues:
  - Leveraging CDC enterprise data analytics and visualization resources (EDAV) to facilitate standardized data collections
  - Reporting within our agency cloud infrastructure using agency standardized services and tools.
- These updates will assist CBLS and the Lead branch to take a leadership role in planning and developing the tools and data sets that will support partner programs in CDC's shared analytic zone.
- This analytic zone will provide state, tribal, territorial, and local partners access to data and analytical tool sets to improve public health
- Some of the challenges that were addressed:
  - Leveraging unified cloud storage which will provide scalable storage and computing resources that will increase the level of automation in data reporting and increase overall system and staff efficiency.
  - Using Power BI to create better data quality reports and reduce the amount of manual intervention necessary to create reports for publication.

## Discussion:

- CDC is undertaking a number of activities, including increased outreach, to increase testing after the pandemic and the recall of LeadCare II machines.
- CDC has recently began collecting the method used to measure blood lead levels in the surveillance system; analysis will begin once data are collected.
- Although CDC does not ask for laboratory methods in CBLS, laboratories use LONIC and SNOMED codes.
  - These codes do not align with the specific type of test being performed, so it is difficult to collect this information.
- The LERI is based on environmental and socio-demographic risk factors. Data from the National Health and Examination Survey (NHANES) are used to validate the model. A publication of this data is in process.

#### Lead-Free Communities Initiative

# Quanza Brooks-Griffin, M.P.A., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

- Lead-Free Communities (LFC) is a national initiative that offers a unique comprehensive, multisectoral approach for encouraging and supporting communities to develop and implement a customized plan to become lead-free. It focuses on eliminating exposure to lead among children who are at higher risk for adverse health effects.
- LFC has a focus on primary prevention.
- "Lead-free" is intended to mean limiting lead exposure from major sources of lead in the community by focusing intervention efforts where children live, play, and learn.
- There are four building blocks
  - LFC toolkit that was finalized in March 2023 and is being formatted for posting on the website
  - National Leadership Academy for the Public Health (NLAPH)
  - Two pilot sites (Washington, D.C. and Louisville, Kentucky)
  - Creation of National Network
- LFC Toolkit provides resources to addresses primary sources of childhood lead exposure, including lead water, paint, and soil.
- NLAPH is one-year leadership development program provided by the Public Health Institute (PHI) to certain jurisdictions to focus specifically on lead poisoning prevention.
- NLAPH program forms a collaborated, multisectoral team:
  - Four to six individuals including health departments would lead the group into their interventions. This also includes some small coaching and training.
- Each jurisdiction has access to a leadership coach who they can meet monthly.
- Puerto Rico is working on building a coalition.
- National Network is where community organizations can collaborate, discuss, and share their successes and challenges.

## Discussion:

- The tool kit will be helpful for partnership building for HUD grants.
- The toolkit is missing information for contractors. CDC hopes to fill this gap in the future.
- The LFC network should work with cities who receive Justice40 grant money to increase workforce and connections.
- It would be helpful to offer toolkit training at a national meeting or via webinars.
- There is a whole house approach element for HUD-assisted housing.
- HUD's grant programs can be used to build a contractor base and help with training and licensure.
- The toolkit could be useful for work being done with EPA funding under the Bilateral Infrastructure Law and the Inflation Reduction Act and their work on community engagement.
- The toolkit can be leveraged by the President's Task Force on Environmental Health Risks and Safety Risks to Children and the lead poisoning prevention subcommittee.
- The workforce development component of LFC includes working with rural and urban communities.

## State Policy Action Related to the Blood Lead Reference Value (BLRV)

# Alexis Allen, M.P.H., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

- CDC evaluated states' progress on implementing CDC's updated BLRV which was lowered to 3.5  $\mu$ g/dL in October 2021.
- Information from all 50 states, Washington D.C., and Puerto Rico regarding implementation status, mechanism of implementation, and date of implementation was obtained by visiting their websites.
- BLRV implementation status was categorized as updated, unknown or no change.
- The mechanism of implementation was categorized as automatic, law or guidance:
  - Automatic–state laws and policies are automatically updated when CDC changes the BLRV
  - Law-the state changed their laws to reflect the updated BLRV
  - Guidance-the state changed their policies or practices to reflect the updated BLRV
- Information on the following population-level risk factors related to lead poisoning were evaluated to examine if they influenced whether states were more likely to implement the updated BLRV:
  - Black race, foreign born, children under six on Medicaid, and persons under 25 with less than a high school diploma
  - Distribution of those known risk factors of lead poisoning did not appear to influence states' decisions on implementing the new updated BLRV
- As of March 2023, 37 had updated their BLRV, 11 states did not change their BLRV, and the status of 4 states were unknown.
- Of the 37 states that updated their BLRV:
  - o 2 automatically updated their laws or policies when CDC lowered the BLRV,
  - o 11 changed their state laws,
  - And 24 updated their guidance.
- Information on the month and year of implementation for states who updated their BLRV were available for 32 of the 37 states. Most states updated their action levels between January and June 2022.
- Limitations of this analysis included missing information and that progress was only tracked through March 2023

## Discussion:

• LEPAC members discussed the impact on states and their capacity to conduct investigations related to the updated BLRV. While CDC did not formally collect this information, we have heard informally that some states need more resources to implement the lower BLRV. We will have more information once we analyze the results of the 2023 Awardee Lead Profile Assessment (ALPA) that collects information on what blood lead levels (BLL) states use to trigger various public health actions.

- While the updated BLRV focuses on secondary prevention, CDC is working on strengthening community capacity for primary prevention.
- Updating the BLRV has implications for laboratories, including an impact on test reports and reference intervals and the need to improve the reliability of blood lead measurements at 3.5 μg/dL.

# HUD: Alignment of inspection protocol for assisted housing for the last 20 years

Tara Radosevich, Assessment Manager, Real Estate Assessment Center, Office of the Deputy Assistant Secretary, U.S. Department of Housing and Urban Development

- HUD for many years had two different standards for public housing stock:
  - Housing Quality Standards (HQS)
  - Uniform Physical Condition Standards (UPCS)
- National Standards for the Physical Inspection of Real Estate (NSPIRE) were proposed in January 2021 to require the same standards for all HUD assisted rental housing. They were finalized in Summer 2023. All of the standards can be found on the HUD Real Estate Assessment Center (REAC) website.
- There was a need for realigning and updating the standards across all HUD rental assistance programs for two reasons:
  - The standard for indoor air quality at the local level was vague and could be interpreted in many ways by local housing authorities,
  - There was a huge gap in the Housing Choice Voucher Program in that the standard didn't mention mold.
- Clarity was added for more emphasis on health and safety conditions and less on curb appeal and cosmetic fixes.
- HUD added more expectations for public housing authorities and project-based owners to do annual self-inspection via a new law called the Housing Opportunity through Modernization Act (HOTMA).
- HUD added more information on the appeals process and enhanced enforcement mechanisms.
- NSPIRE will change how Asset Management project (AMP) scores are done.
- Housing inspection criteria will now be reviewed every three years and be open for public comment.
- For housing voucher programs, habitability standards were improved.
- There are still challenges with residents being able to find landlords who will take their vouchers. In tenant-based voucher programs, landlords do not get any money from HUD to improve their units.
- A new nomenclature was added for how HUD refers to health and safety deficiencies: life threatening, severe, moderate, and low.
  - Life-threatening or severe conditions require a response by the owner of the housing unit within 24 hours, which includes addressing the hazard and providing a plan to permanently correct it.
- The Lead Safe Housing Rule requirements were added to NSPIRE, including a visual assessment.

- Previously, inspectors were not looking for peeling paint during their physical inspection.
- Inspectors will be required to take the Lead Healthy Homes Visual Assessment course.
- If a child under the age of six lives in a housing unit with a lead hazard, the landlord has 90 days to correct the hazard.
- NSPIRE provides a better regulatory framework for states to follow to ensure safe water for those living in HUD-assisted housing. Inspectors will have to check for lead service lines. EPA still needs to clarify how housing authorities can address this.
- NSPIRE will collect lead inspection reports for every property built before 1978.
- Requirements were added for Public and Indian Housing.
- HUD is training their field staff on these changes, enforcement, qualifications, and certifications.

## Discussion:

- HUD inspectors are focused on health, which is part of their strategic planning.
- HUD is enhancing notification so that once an inspection is completed, residents should be made aware of the findings.
- If landlords fail to comply and are repeated violators, HUD will stop paying rent on units, which unfortunately means that families will have to move. If landlord refuses to fix any of the violations, they can leave the voucher program.

#### Updates from the Preventing Lead Exposure in Adults (PLEA) Workgroup

# Anshu Mohllajee, Sc.D., M.P.H., Chair, Research Scientist Supervisor I, California Department of Public Health, Childhood Lead Poisoning Prevention Branch

- In May 2022, LEPAC members suggested that a workgroup be created to focus on occupational lead exposures in adults which fits with the charge of the LEPAC.
- The main goal is to review the literature on lead exposures, identify gaps in knowledge, and provide recommendations to public health agencies to take action to prevent exposures and mitigate lead-related adverse effects in adults.
- Topics to consider included
  - epidemiology of adult lead exposures,
  - o take-home lead exposures from jobs and hobbies,
  - effects of long-term exposures including exposures during childhood and cardiovascular and other diseases,
  - best practices for preventing lead exposure in adults,
  - o social justice and health equity implications of lead exposure in adults, and
  - o communication strategies regarding adult lead exposure and long-term health effects.
- The workgroup has been meeting regularly and hopes to generate a report in 2024 for LEPAC for consideration and deliberation.

Discussion:

- Recommendations will be made for a mix of groups such as federal and state agencies, industries, and clinicians.
- The report will include a communication strategy.
- There is a need to update industrial regulations, as they have not been updated in quite a while.
- PLEA is thinking about how to integrate adult and childhood lead surveillance.
- Adult blood lead surveillance should include questions about where a person works.
- PLEA should consider that laboratories have been using a different blood lead reference value for adults compared to children.

# Public Comment

# Diana Zuckerman, Ph.D., National Center for Health Research

- The National Center for Health Research is a nonprofit research center staffed by scientists, medical professionals, and public health experts. They conduct and explain research that can improve the health and safety of adults and children, and they do not accept funding from companies whose products they evaluate.
- New sources of lead that can harm the health of children and adults include artificial turf and school playground surfaces with spongy surfaces. Artificial turf and fields have infill made of rubber or crumb rubber that can contain lead.
- Playgrounds surfaces are often made of recycled tire crumb which young children can put in their mouth.
- A majority of high school fields and many community fields across the country have astroturf fields.
- Recently, most of the attention on the health effects of artificial turf materials has been on endocrine-disrupting chemicals.
- Artificial turf presents a lead hazard because it releases lead into the air. Additionally, the rubber deteriorates, and children sometimes eat the particles that line the base layer of the playground surface.
- There are no tests required to check if these materials contain lead.
- The government does not restrict lead in playgrounds or artificial turf because the companies claim they are not children's products.
- There is a misperception that artificial turf does not need to be watered or use pesticides. On the contrary, it needs to be watered regularly. Lead from the artificial turf can get into the water.
- A safer, lead-free alternative is engineered wood fiber, which costs the same amount as synthetic rubber.
- Additionally, playground equipment sometimes contains lead paint.

# EPA Dust Lead Hazard Standards and Dust Lead Clearance Levels Update

Claire Brisse, Environmental Protection Specialist, U.S. Environmental Protection Agency

• EPA's proposal to revise the dust lead hazard standard (DLHS) and dust lead clearance level (DLCL) was published on August 1, 2023, and underwent a 60-day public comment period.

- The rule decouples the DLHS and DLCL.
- EPA considered practicality and laboratory capacity when setting these levels.
- EPA is proposing a Greater than Zero (GTZ), which is any reportable level, for the DLHS, partnered with a clearance level of 3, 20, and 25 micrograms per square foot for floors, windowsills, and troughs.
  - The rationale is that there is no threshold for lead exposure below which there are no harmful effects on cognition.
- EPA requested comments on two other approaches:
  - Numeric approach which uses the modeling results and deciding what decrement of I.Q. or blood lead level is acceptable.
  - Post-77 Background approach which is discussed at length in the Federal Register Notice.
- The proposed rule also includes changes to the definition of abatement which would be based off the DLCL instead of the DLHS.
- The statutory authority for this rulemaking is the Toxic Substance Control Act, Title 4 sections 401, 402, and 403:
  - 401 defines what is a lead-based paint hazard and conditions that cause exposure to lead from lead contaminated dust, soil or paint that would have an adverse human health affect.
  - 402 directs EPA to regulate lead-based paint activities, and those regulations must consider reliability, effectiveness, and safety.
  - 403 directs EPA to identify dangerous levels of lead.
- EPA revised the standards in 2019 and 2021, and the clearance levels mirrored the hazard levels.
- In 2019, about one month after EPA finalized the hazard standard revisions, a lawsuit was filed by public health advocates in the Ninth Circuit Court of Appeals, and they sought judicial review of that 2019 final rule. About two years later, the court remanded that 2019 rule back to EPA and stated that the hazard standards were not lowered to a level sufficient to protect health and affirmed that EPA could consider other factors for liability, effectiveness, and safety when setting the clearance levels.
- The DLHS addresses what level of dust exposure is expected to result in human health effects.
- The clearance values indicate the amount of leaded dust left on a surface following the completion of abatement and can consider the non-health factors of reliability, effectiveness, and safety.
- When a child with a higher BLL is identified, EPA recommends an inspection to determine if lead-based paint and other lead hazards are present.
  - For levels between the hazard and clearance levels, EPA recommends best practices and cleaning but not abatement.
  - For levels are at or above the clearance levels, EPA recommends abating or removing the hazard. Levels must be below the clearance level for abatement to be considered complete.
- EPA did a cost-benefit analysis and concluded that quantified benefits from higher lifetime earnings due to avoided neurocognitive effects are approximately \$1–4.7 billion per year.

#### Lead Service Line Replacement Discussion

## Lynn Thorp, National Campaigns Director, Clean Water Action/Clean Water Fund

#### Steve Via, Director, Federal Relations, American Water Works Association

- Presenters are here on behalf of the Lead Service Line Replacement (LSLR) Collaborative, which is a group of 28 organization that includes environmental and health nonprofit organizations, drinking water associations, and others.
- These organization joined together in 2016 because they recognized the need to accelerate replacing lead service lines (LSLs).
- LSLR provides resources and tools (including technical and financial) on their website about how to get LSLs replaced.
- Lead and Copper Rule revisions require water systems to replace LSLs.
- LSLs encompass the pipeline from the distribution system to the property threshold and crossing the property threshold in most cases; this can include going through the wall or floor if it is coming up through a slab.
- The water system has historically focused on maintaining the public portion and the owner of the property has maintained the service line on their side of the property.
- Replacing LSLs involves the entire line regardless of ownership.
- Information can be lacking on the pipe material.
- EPA is estimating over 9 million LSLs the United States.
- The Bipartisan Infrastructure Law includes \$15 billion in funding over the next 5 years to support LSLR; 49% of those funds are required to go to communities at greater disadvantage.
- The Drinking Water State Revolving Fund Program offers loan forgiveness.
- Initial inventory of service lines and their materials due October 2024. There are two groups of pipes that are going to be identified as lead service lines:
  - o frank lead (true LSLs)
  - o galvanized service lines that were preceded or potentially preceded by lead pipe
- Water utilities will have to notify customers before replacing service lines and engage them in risk reduction, which providing them with filters.
- Information on LSLs also needs to be shared with schools and childcare facilities.

## Kira Smith, Lead and Copper Team Leader, Office of Ground Water and Drinking Water, EPA

- In 2023, EPA released small entity guidance and best practices for developing and maintaining an LSL inventory and compliance. It also includes case studies, examples, and an inventory template.
- The purpose of the guidance is to provide support for service line inventory requirements according to the 2021 Lead and Copper Rule Revisions (LCRR).
- It is intended for states and other primary agencies as well as water systems.
- These inventories are the foundation from which water systems can take action to address what LCRR have identified as the most significant source of lead in drinking water.
- An additional \$11.7 billion was added to the general drinking water fund for LSLs and other infrastructure projects.
- The mission is to replace the full LSL, not just the public portion.

- Replacing LSLs in historically underserved communities is a priority.
- Complete inventories help with communication, education, and asset management.
- All service lines must be classified as either lead, galvanized requiring replacement, unknown, or nonlead. Other potential sources such as goosenecks, pigtails, and connectors also need to be categorized.
- Inventories must include both public and private LSLs.
- Water systems will have to comply with LCRR and submit their initial inventory to their state starting in October 2024.
- The Biden-Harris Pipe and Paint Action Plan has a goal of removing all lead pipes in the next decade.
- LCRR requires a historical record review, including plumbing codes, construction codes, and water system records, to develop the initial inventory.
- Field investigation methods include visual inspection, EPA's "protect your tap" tool, tracking repairs and excavations, and water sampling.
- Strategies for developing the initial inventory include screening records to identify which LSLs are nonlead since the Safe Drinking Water Act essentially banned the use of lead in potable applications in 1986.
- EPA is working on developing templates to notify people about their service lines which would include an explanation of health effects related to lead, steps they can take to reduce exposure, and blood lead testing recommendations.
- EPA has a requirement for water systems to make inventories publicly accessible; information would include the locations of their lead service lines and galvanized required replacement service line with a location indicator.
- EPA also wants to do outreach about measuring optimization of corrosion control.

## Warren Friedman, Ph.D., Senior Advisor, Office of Lead Hazard Control and Healthy Homes, HUD

- HUD is also interested in LSLR in assisted housing stock.
- HUD provides funding for LSLR though the Community Development Block Grant program which are primarily for local governments but also some state governments can use them for rural areas.
- These communities use the funds develop plans for how they want to improve their infrastructure, housing, and businesses.
- The grant is specifically targeted towards addressing the needs and concerns of low to moderate income areas.
- The Office of Community Planning and Development has determined that LSLR and replacement with nonlead service lines is an eligible activity.
- The Office of Lead Hazard Control and Healthy Homes has numerous grant programs for which lead service line replacement is an eligible activity including.
  - The Healthy Home Protection Grant for state and local government and nonprofits.
  - The Lead Hazard Reduction grant program
- Title X does not mention "water." Therefore, dealing with water is not an authorized activity, and funding cannot be spent on water such as LSLR under Title X.

- Under the Bipartisan Infrastructure Law, HUD has prioritized three groups for removing lead service lines: focusing on communities experiencing disadvantages, households with incomes below the federal poverty level, and properties rented by landlords catering to families experiencing poverty.
- HUD is continuing conversations with EPA to encourage LSLR and to conduct pilots with communities.

# Discussion:

- When agencies and organizations are replacing LSLs, hopefully they are considering ways to mitigate the potential for increased exposure to lead, including increases in blood lead testing and surveillance in those areas.
  - LCRR revisions in 2021 include requirements for short-term mitigation when replacing or disturbing a service line such as extra education to customers or providing certified pitcher filters or point-of-use device with 6-month cartridges.
  - It is important to balance short-term mitigation of risks with the long-term benefits of LSLR. Lead levels are expected to decrease within 6 months after LSLR.
  - Having a planning committee with a variety of partners can help with having a comprehensive approach and evaluation plan to mitigate the risks of LSLR.
- Water systems provide their customers annually with the Consumer Confidence Report, but unfortunately, most people do not read them. Additionally, renters may not get these.
- A big challenge is if a property owner refuses access.
- Because of public concern and revisions to regulations, water systems are preparing for compliance with LSLR requirements.
- Infrastructure planning and projects are done at the water system level.
- EPA awards capitalization grants based on information from Drinking Water Infrastructure Needs surveys.
- State Revolving Fund authorities who run the LSLR program are being asked to do more outreach and more transparency and accountability.
- Properties with LSLs are more likely have lead paint or lead based dust particles. LSLR provides an opportunity to discuss blood lead testing and other sources of lead with parents. Communication about risk management is needed.
- There is a need to develop strategies for working with families experiencing poverty and individuals with unknown documented status because of hesitancy and distrust of government agencies coming into their homes. One strategy is to use block captains.
- Getting support from and working with community organizations is crucial.
- There is a concern that LSLR will increase property values, which will be transferred to renters who are experiencing poverty.
- EPA was recognized for acknowledging the complications and barriers related to LSL inventories and replacement
- There are issues with removing LSLs through trenching versus leaving them in place.
- More effort is needed to develop the workforce since there are not enough certified water operators.
- LSLRs can be complicated and time consuming if easements are needed for each property.

- For the State Drinking Water Revolving Fund, 49% can be given as a grant and 51% as a zerointerest loan. Some municipalities do not want to take on more debt.
- Water systems across the United States are varied in their size and in the density of LSLs, so flexible solutions are needed.

### Adjourn 16:02

#### Meeting Notes 10/17

#### **Reflection on Yesterday's Topics from LEPAC Members**

- Partnerships between the water department, public health department, and community organizations are important for lead service line replacement (LSLR). EPA and CDC could collaborate to gain information about LSLR at the state and local level.
- LEPAC members suggested adding questions about LSLR to the CDC Awardee Lead Profile Assessment (ALPA) questionnaire that is sent to funded recipients.
- Additional support is needed to build capacity for state and local governments to leverage funding for LSLR and lead poisoning prevention around the Justice40 and Environmental Justice framework.
- Further discussion is needed on data modernization and coordination with existing standards.

#### **Making Federal Grants Work for Communities**

Paul Allwood, Ph.D., M.P.H., R.S., LEPAC DFO, Branch Chief, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

Wilma Jackson, M.P.A., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

- Communities must be a key part of action against childhood lead poisoning because they are the experts at their community's structure and know how to provoke action.
- CDC is pursuing a funding strategy that provides federal funding directly to community organizations at a grassroots level.
- Organizations must demonstrate that they operate and live within the community they serve in order to ensure grant money is staying within the community.
- A limit was placed on how much money these organizations could receive from the federal government to ensure that small organizations could be reached.
- Other federal partners such as Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), Department of Health and Human Services (HHS), and Department of Housing and Urban Development (HUD) helped to spread awareness about this notice of funding opportunity (NOFO).
- 42 organizations applied for this NOFO, and 11 were selected for a three-year grant September 30, 2023, to September 29, 2026.

*Grace M. Robiou-Ramirez de Arellano, M.P.H., Director, Office of Children's Health Protection, U.S. Environmental Protection Agency, Office of the Administrator, EPA* 

- EPA has selected 16 Environmental Justice Thriving Community Technical Assistance Centers (TCTACs) in partnership with the Department of Energy.
  - TCTACs are providing training, capacity building, grant writing, and grant fund management for community-based organizations to apply to grants.
  - This can help benefit the entire federal family as a novel approach to strengthening community-based organizations.

## Discussion

- The goals of the newly funded community organizations are to provide support and resources within their community, develop coalitions, enhance access of people with lead exposure to protective resources, enhance knowledge and skills around lead poisoning, and strengthen lead poisoning prevention policies.
- Short-term outcome example: increase lead poisoning prevention capacity in underserved communities
- Intermediate outcome examples: Increase availability and accessibility of lead hazard assessments and blood lead screening and testing
- Long term outcome examples: Reduce or eliminate risk of lead exposures in underserved communities and disparities in blood lead levels by race, ethnicity, and socioeconomic status
- This funding is intended to complement and enhance existing strategies and align recipient's work to the NOFO.
- To collaborate with existing federal programs that are already functioning in these communities, grantees need to work closely with other community partners such as the school board, a local health department, HUD, etc.
- Organizations must serve the intended population, as well as advocate for and engage inlead poisoning prevention work.
- Other resources available to these organizations include attending CDC's Annual Recipients Meeting so they can network with local health departments and state agencies and the Lead-Free Communities Initiative toolkit.
- In addition to following standard announcement protocol, CDC Lead Poisoning Prevention Branch reached out to WIC, the policy and partnerships office, and other various organizations that were considered most eligible and likely to apply.
  - People who face the brunt of lead poisoning are typically hard to reach populations.

# Strategies to increase testing in children enrolled in Medicaid

Mary Beth Hance, Senior Policy Advisor, Division of Quality and Health Outcomes, Children and Adults Health Program Group, Center for Medicaid and CHIP Services, CMS

• The blood lead screening requirements in the Children's Health Insurance Program (CHIP) help state health plans and other stakeholders improve blood lead testing rates among children focusing on both managed-care and fee-for-service and also coordination between Medicaid CHIP and other public health agencies.

- All children in Medicaid and Medicaid-expanded CHIP programs are required to receive blood lead tests at 12 and 24 months or between 24 and 72 months old if no record of a previous test exists (universal testing).
  - Completion of a risk assessment questionnaire does not satisfy this requirement.
  - A referral to a separate laboratory facility is not required.
- No states currently implement a targeted lead testing policy.
- All blood lead testing results should be reported to state health departments.
- In 2020, 43% of children ages one and two enrolled in Medicaid received blood lead tests which is down from 48% in 2019.
- CMS is further investigating 2021 and 2022 rates.
- It is possible that some children on Medicaid were tested, but the testing was paid by another source.
- CMS will add the Healthcare Effectiveness Data and Information Set (HEDIS) blood lead test measure to Medicaid's 2023 Health Home Core Sets.
- Children in separate CHIP programs should have blood lead tests conducted according to state guidelines.
  - The majority of states use 12 month and 24 months testing with the Bright Futures periodicity schedule.
- Children that are in separate CHIP programs that did not adopt the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit do not have the universal screening requirement that Medicaid has.
  - States are encouraged to align their CHIP screening requirements with Medicaid.
- CMS encourages states to
  - review language explaining blood lead testing requirements and to ensure consistency in all coverage materials, manuals, periodicity schedules, and websites,
  - and use Health Services Initiatives (HSI) through CHIP to improve lead testing, education, and abatement.
    - These initiatives are considered an administrative expense and must directly improve the health of households with incomes below the federal poverty level, but it may service other children as well.
    - Currently, six states have an HSI that can provide lead abatement services.
- CMS also strongly encourages their Medicaid agency partners to interact with other state agencies, particularly state health departments, lead poisoning prevention programs, and WIC programs and to leverage arrangements with pediatric providers, local AAP chapters, local health clinics, and federally qualified health centers (FQHCs).
- Although not required by CMS, states can meet with managed-care plans to design and implement performance-based incentive payments to improve blood lead testing rates. States can create a pay-for-performance arrangement to set performance-based blood lead testing targets and thresholds for Medicaid managed-care plans.
- State-directed payments (contracts and payment strategies such as incentives) are another lever for managed-care to improve testing rates.
  - Federal match is available for state Medicaid programs to assist with payments.
- States providing coverage through fee-for-service can establish value-based payment arrangements such as enhanced rates or supplemental payments to improve quality and access to care.
- Medicaid is in the process of updating guidance issued in 2016 and promoting their Connecting Kids to Coverage campaign.

# *Trina Evans-Williams, ScD, MPH, Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC*

- One of CDC's CORE health equity goals is to increase blood lead testing in children enrolled in Medicaid. The "C" is to cultivate comprehensive health equity science; "O" is to optimize interventions; "R" is to reinforce and expand robust partnerships, and "E" is to enhance capacity and workforce engagement.
  - CDC's Division of Environmental Health Science and Practice (DEHSP) is focusing on optimizing interventions to ensure populations that are high risk and/or historically underserved are included.
  - The 2024 goal for lead is to increase blood lead testing rates up to 50% for children ages 0–3 who are Medicaid eligible.
- Milestones include collecting baseline data from select CLPPP recipients, implementing blood lead level testing interventions and strategies, and engaging and educating local communities on the best practices for increasing blood lead testing among children who are Medicaid enrolled based on evaluation findings.
- Nine recipients (California, Indiana, Maine, Michigan, Ohio, Oregon, West Virginia, and Wisconsin, and the District of Columbia) reported 39 strategies.
- Education and training included
  - Webinars, emails, events, and meetings for healthcare providers
  - Provider report cards
  - Focused studies with Medicaid health plans
  - PDSA (plan, do, study, act) model interventions piloted in ZIP codes at higher risk for lead poisoning
  - Outreach to parents of children enrolled in Medicaid in certain counties
- Another strategy is expanding partnerships to increase capacity and resources for blood lead testing, including:
  - Strengthening the partnership between CDC and CMS
  - Working with WIC programs, the American Academy of Pediatrics (AAP) database, and a national committee for quality assurance
  - Pursuing partnerships with managed care organizations and community-based organizations
- A community of practice was created for these 9 recipients to collaborate and learn from each other.
- Next steps are evaluating recipients' CORE strategies.
  - Recipients submit quarterly data and lessons learned at the midpoint and end of their projects.
  - A final report of recipient strategies will be distributed by September 2024 to all CLPPP recipients so they can benefit from this information.

Discussion:

- LEPAC members suggested new or expanded collaboration with CMS, WIC, state Medicaid directors, and other subject matter experts to further assess predictors for blood lead testing among children enrolled in Medicaid.
- The community of practice and other collaborative efforts are continuously being analyzed for areas of improvement.

- LEPAC members asked about the directionality of data matching between Medicaid and the states.
  - As of 2024, Medicaid has mandated reporting of blood lead testing in both the 416 form and the Child Core Set, as well as in the Adult Core Set behavioral measures, which will result in data-sharing that can be initiated by the state Medicaid agency.
    - Medicaid is in the process of putting out additional information for states.
    - The 416 form is comprehensive reporting for all children enrolled in Medicaid for at least 90 days throughout a year and combines claims and managed care data.
    - National and state data are publicly reported each year on the Medicaid website.
  - CDC and CMS will meet with the nine CDC recipients working on CORE for data sharing efforts.
  - In California, the data use agreement took several years to finalize, and matching has proved challenging due to state-level data being de-identified.
- LEPAC members inquired if WIC funding can be used for lead testing to reduce barriers and improve testing rates as children are already in the clinic.
  - Some CLPPPs already partner with WIC, and CDC has been working closely with WIC to build a partnership.
  - Another lever to help WIC improve testing is cost sharing.
    - WIC dollars cannot be used to pay for testing, but WIC can make referrals.
    - CDC is looking into cost sharing between CLPPP and WIC, with CLPPP funding to be used towards fees for testing and administration.
  - Recipients in CDC's community of practice are beginning to share innovative ideas about working with WIC.

## Updates from LEPAC Members on Lead-Related Activities

Wallace Chambers, Jr., Ph.D., M.A.S., M.H.A., R.E.H.S., Deputy Director, Environmental Public Health, Cuyahoga County Board of Health

- To increase compliance with lead hazard control, orders are being placed into Cuyahoga County's records office so that any new buyers or owners of the property are aware.
- Lead remediation actions are being enforced by the courts.

# Nathan Graber, M.D., M.P.H., F.A.A.P., Clinical Associate Professor, Department of Pediatrics, Albany Medical Center

- A lead hazard identification requirement for a New York State rental registry and proactive inspection program is included in the budget.
  - Public health law requires local health departments to register their properties and conduct proactive inspection programs.
  - Visual inspection is required, along with subsequent dust wipe sampling if no visual hazards are identified.
  - Remediation funding is given to landlords and property owners of these rental properties.

• Most decision-making on which communities are included is delegated to the local level.

Kristina M. Hatlelid, Ph.D., M.P.H., Toxicologist, Division of Health Sciences, U.S. Consumer Product Safety Commission (CPSC)

- CPSC is actively screening shipments and products at ports with an emphasis on finding lead.
- A diversity risk manager was hired to identify and address safety disparities among people who are at greater risk of lead exposure.

# Grace M. Robiou- Ramirez de Arellano, M.P.H., Director, Office of Children's Health Protection, U.S. Environmental Protection Agency, Office of the Administrator, United States Environmental Protection Agency (EPA)

- EPA created a web tool that provides outreach and educational resources about heavy-metal exposures from cultural products in multiple languages.
- The Children's Health Protection Advisory Committee is providing EPA with recommendations on lead and community engagement to increase awareness through effective outreach and education while using EPA's authorities to address all sources of lead.
- Lead-based paint workshops are being held to educate about detection and exposure to potential lead hazards in residential lead-based paint work.
- An updated Integrated Science Assessment for Lead is planned for release in 2024; this is a science-based solutions document about lead in air.
- Community awareness sessions are held nationally, including basic educational sessions on understanding lead and train-the-trainer sessions for community-based organizations.
- EPA's enforcement and compliance section released a strategic toolkit for developing partnerships, conducting community engagement, and maintaining ongoing communication with communities undergoing or planning to undergo enforcement activities.
- EPA is providing funding for communities to improve their drinking water distribution systems by investing in the state revolving fund.
- Lead modeling and mapping efforts are underway.
- EPA is soliciting comments on an update to the residential soil lead guidance for Superfund and Resource Conservation and Recovery Act (RCRA) sites.
- An endangerment finding for aviation gas is to be announced in the coming days.

# Erika Marquez, Ph.D., M.P.H., Assistant Professor, School of Public Health, University of Nevada, Las Vegas

- Nevada gained \$2 Million in American Rescue Plan Act (ARPA) dollars to build capacity across the state.
- Part of this funding will go towards building health district capacity by distributing LeadCare II devices into Medicaid provider offices and providing trainings to help health districts conduct lead risk assessments.

# Anshu Mohllajee, Sc.D., M.P.H., Research Scientist Supervisor I, Childhood Lead Poisoning Prevention Branch, California Department of Public Health

• California Department of Public Health (DPH) has been working with the Department of Social Services to get data about lead in childcare facilities and distribute this information to local CLPPPs, state health jurisdictions, and families.

- DPH is working with the Department of Healthcare Services to make sure Medi-Cal blood lead testing and anticipatory guidance includes the updated blood lead reference value (BLRV).
- Numerous publications and educational materials for both providers and families are being created around anticipatory guidance towards lead testing.
- Education about all sources of lead air pollution, including from aircraft and shooting ranges, is being conducted.

# *Tina Helene Hanes, R.D.N., R.N., Senior Technical Advisor, Supplemental Nutrition and Safety Programs, United States Department of Agriculture (USDA)*

- The Department of Agriculture Food and Nutrition Service, Certification and Eligibility branch sent information about CDC's updated BLRV to WIC agencies which are required to use it to evaluate risk starting October 1, 2024.
- The national office is strongly encouraging states to use this new level, and they will be evaluating state plans to know how many states have revised their action level.

# Mary Elizabeth (Mary Beth) Hance, Senior Policy Advisor, Division of Quality and Health Outcomes, Children and Adults Health Program Group, Center for Medicaid and CHIP Services, CMS, Centers for Medicare and Medicaid Services

• CMS will continue to work with CDC to both engage with the AAP and amplify a lead poisoning prevention message to various groups.

# Tammy Barnhill-Proctor, M.S., Supervisory Education Program Specialist, Office of Innovation and Early Learning, Office of Elementary and Secondary Education, U.S. Department of Education

- The ED will continue to share and use information from CDC, EPA, and HHS in their infrastructure and sustainability news.
- Communities and schools are being informed about the importance of lead screening, prevention, and abatement regarding health and environmental sustainability.
- Lead education conversations and partnerships with relevant stakeholders such as the National Association of Elementary School Principals are being considered.

# Aaron M. Lopata, M.D., M.P.P., Chief Medical Officer, Maternal & Child Health Bureau, Health Resources and Services Administration (HRSA)

- The Health Resources and Services Administration (HRSA) is distributing lead poisoning information to providers through the Health Center Program and their partnership with the AAP.
- CDC and HRSA-owned health centers released a joint letter in January 2023 on the importance of lead testing and screening to all health centers and clinical staff.
- CDC gave a presentation to all health center clinical staff providing them with information on lead poisoning prevention and screening.
- Place-based programs such as Healthy Start are being examined as an opportunity to further educate people on lead poisoning prevention.

Rebecca Fry, Ph.D., M.S., Carol Remmer Angle Distinguished Professor in Children's Environmental Health, University of North Carolina-Chapel Hill, Department of Environmental Sciences and Engineering

- Lead was identified on the University of North Carolina at Chapel Hill (UNC) Campus, and remediation is underway.
- A guide directed towards universities on lead identification, sampling, exceedances, and best practices to protect students and staff from lead was published.
- The Superfund Research Program aims to educate communities in North Carolina who are potentially exposed to lead or other toxic metals in their drinking water.
- To promote environmental justice and identify communities with higher exposure to lead, a tool called EnviroScan was developed that can overlay lead contamination in the state of North Carolina with variables like poverty and access to medical care.
- Pregnant women can have water samples tested through a water testing program launched in partnership with UNC physicians, and if levels come back as unsafe, a water filter is provided.
- A partnership with the Maternal, Infant and Early Childhood Home Visiting Program is underway to develop and distribute educational materials and questionnaires for home visits to increase awareness around lead exposure.

# Matthew Ammon, M.S., LEPAC Chair; Director, Office of Lead Hazard Control and Healthy Homes, U.S. Department of Housing and Urban Development (HUD)

- HUD is funding the Green and Resilient Retrofit Program to conduct energy efficiency and climate resiliency upgrades in low-income rental properties.
- Radon is now a part of their environmental review process.
- \$880 million was given to communities and nonprofits working with HUD to fund various programs including lead hazard control programs.
- A housing needs assessment was published that specifically targets housing preferred by Native Hawaiian, Alaska Native, and Pacific Islander persons.

Patrick Parsons, Ph.D., Director, Division of Environmental Health Sciences, Chief, Laboratory of Inorganic and Nuclear Chemistry, New York State Department of Health, liaison to Association of Public Health Laboratories (APHL)

- Association of Public Health Laboratories (APHL) is helping state and local public health labs adapt to the new BLRV.
- The Elemental Analysis workgroup for APHL conducted a survey of state and local public health labs to understand strategies to adapt to the new BLRV.
- New policy suggests that a background lead testing amount of 0.2 micrograms per deciliter is feasible.
- Tighter quality assurance and quality control measures are being implemented.
- The Clinical Laboratory Standards Institute is set to publish new guidance that includes the updated BLRV as the upper limit of the blood lead reference interval.
- EPA's proposed lowering of dust lead clearance levels might force a shift away from atomic absorption analysis, which is how the vast majority of tests are conducted.

Lauren Zajac, M.D., M.P.H, F.A.A.P, Assistant Professor, Icahn School of Medicine at Mount Sinai, liaison to American Academy of Pediatrics (AAP)

• AAP is updating their lead poisoning prevention policy statement and technical report.

- Educational videos are being created for parents on lead poisoning, and for providers on the importance of blood lead screening and testing and interpreting the updated BLRV.
- AAP's Council on Environmental Health and Climate Change meeting is approaching, where conversations will continue with EPA and CDC.

Stephanie Yendell, D.V.M, M.P.H., Senior Epidemiology Supervisor, Minnesota Department of Health (MDH), liaison to Council for State and Territorial Epidemiologists (CSTE)

- CSTE has a number of workgroups and committees pertaining to lead, including the Environmental Health Committee and the Health Equity Committee.
  - The Electronic Laboratory Reporting and Electronic Case Reporting workgroups are looking to standardize data across lead and other conditions.
  - The Data Standardization Work Group is collaborating with CDC on standardizing core case data elements for all reportable conditions.
- Sub-dividing HEDIS data into one- and two-year-olds could help improve testing rates.

# Alexis Allen, M.P.H., Public Health Advisor, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC; on behalf of Karla Johnson, M.P.H., Administrator, Marion County Public Health Department

- The Marion County Public Health Department is developing a project using Artificial Intelligence (AI) to empower residents to make housing choices appropriate for their needs by summarizing publicly accessible lead-related information scraped from the internet.
- Conversations are taking place with water utilities to get information on lead service lines and state agencies to get information regarding lead in homes.

Meeting Adjourned 12:06 PM