Summary and Action Items

The Lead Exposure and Prevention Advisory Committee (LEPAC) convened on December 11, 2024 to discuss methods to improve blood lead testing and prevent adult lead exposure. Virtual participation through a ZOOM meeting was used to hold the meeting. A total of 118 public participants and 59 federal employees attended the meeting or a portion of the meeting. The meeting was open to the public.

Voting LEPAC Members Present (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 (HUD)
- 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 (ED)
- Gary Edwards, B.S., Retired Environmental Health Supervisor
- Brenna Flannery, Ph.D., Senior Regulatory Toxicologist, Center for Food and Applied Nutrition, U. S. Food and Drug Administration (FDA)
- 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
- Mary Elizabeth (Mary Beth) Hance, B.A., Senior Policy Advisor, Division of Quality and Health Outcomes, Children and Adults Health Program Group, Center for Medicaid and CHIP Services, Centers for Medicare and Medicaid Services (CMS)
- Kristina Hatlelid, Ph.D., M.P.H., Toxicologist, Director of Toxicology and Risk Assessment, U.S. Consumer Product Safety Commission (CPSC)
- Gredia Huerta-Montañez, M.D., F.A.A.P., Senior Principal Research Scientist, Northeastern University College of Engineering and University of Puerto Rico Medical Sciences Campus
- Aaron Lopata, M.D., M.P.P., Chief Medical Officer, Maternal & Child Health Bureau, Health Resources and Services Administration (HRSA)
- Mikki Meadows-Oliver, Ph.D., R.N., Clinical Professor, New York University – Rory Meyers College of Nursing
- Grace Robiou-Ramírez 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)
- Jeffrey Sanchez, B.A., Director of Health Informatics, Impact Assessment, Inc.
- Megan Sparks, Ph.D., M.P.H., Epidemiologist II, Johnson County Department of Health and Environment
- Brian Weaver, M.P.H., Preventing Lead Exposure in Adults (PLEA) Workgroup Chair, Lead Policy Advisor, Wisconsin Department of Health Services

Non-Voting LEPAC Liaison Members Present

- Abraham Kulungara, M.P.H., Senior Director, Environmental Health, Associate of State and Territorial Health Officials (ASTHO)
- Ruth Ann Norton, B.A., President and CEO, Green & Healthy Homes Initiative (GHHI)
- 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)
- Amanda Reddy, M.S., Executive Director, National Center for Healthy Housing (NCHH)

- 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)
- 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)

Presenters (in alphabetical order)

- Gail Gettens, M.S., E.C.M.P., Child Development Specialist and Health Communications Coordinator, New Hampshire Department of Health & Human Services
- Michael Kosnett, M.D., M.P.H., F.A.C.M.T., Associate Adjunct Professor, Colorado School of Public Health
- Nicole Lang, A.P.R.N., Nurse Case Manager, New Hampshire Department of Health and Human Services
- Brian Weaver, M.P.H., PLEA Workgroup Chair, Lead Policy Advisor, Wisconsin Department of Health Services

CDC Attendees who participated in the LEPAC Meeting (in alphabetical order)

- Alexis Allen, M.P.H., Public Health Advisor, LEPAC Committee Management Specialist, Lead Poisoning Prevention and Surveillance Branch, National Center for Environmental Health (NCEH), Centers for Disease Control and Prevention (CDC)
- Paul Allwood, Ph.D., M.P.H., RS, Branch Chief, LEPAC Designated Federal Officer (DFO), Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Aaron Bernstein, M.D., M.P.H., Director, NCEH/Agency for Toxic Substances and Disease Registry (ATSDR), CDC
- Nicholas Hatch, M.P.H., ORISE Fellow, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC
- Perri Ruckart, Dr.P.H., M.P.H., Team Chief/Health Scientist, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

Public Commenter

- Tom Neltner, J.D., National Director, Unleaded Kids

Federal Attendees (in alphabetical order)

- Terri Blunk†
- Carlove Bourdeau*
- Quanza Brooks-Griffin*
- Sharunda Buchanan*
- Latasha Cain*
- Motria Caudill*
- Stella Chuke*
- Emmy Cohen†
- Cheryl Cornwell*
- Donna Devonish*
- Sheryl Driskell*
- Gabrielle Dys*
- Erin Evans*
- Deonna Foster*
- Stiven Foster†
- Melanie Franklin*
- Warren Friedman†
- Arlisha Gray*
- Glykeria Hadjisimos*
- Kibrten Hailu*
- Qaiyim Harris*
- Amanda Hernandez*
- Stephanie Hillard*
- Eric Hooker†
- Wenping Hu*
- Jeff Jarrett†
- Noelle Kachinsky*
- Keana Kaleikini†
- Brian Kennedy*
- Melissa Korniejczuk*
- Sheila Xiah Kragie†
- Tanya LeBlanc*
- Amie Lindenboim†
- Chanya Liv†
- Amy McRae*
- Michelle Medeiros†
- Edward Van Oeveren†
- Shannon Omisore*
- Wellington Onyenwe*

- Scott Pauley*
- Audrey Pennington *
- Tara Radosevich†
- Brenda Reyes†
- Tekerri Rivers*
- Alison Rodriguez*
- Hope Robool*
- Sandra Sheehy*
- Brianna Siracuse*
- Madison Smith*
- Rebecca Tsai*
- Carolyn Waddell*
- Kristen Wallon*
- Cynthia Ward*
- Michael Wichman†
- Trina Williams*
- Amelia Yu†
- Valerie Zartarian†

*Attendees from CDC/ATSDR †Attendees from other Federal Agencies

Public Attendees (in alphabetical order)

- Mounika Abbareddy
- Nadja Allmann
- Fanaye Amsalu
- Suzy An
- Henry Anderson
- Kinsey Anderson
- Elysse Andrews
- Sheila Anthony
- Jordan April
- Renee Bailey
- Jella Balgos
- Ryan Barker
- Archie Beasley Jr.
- Amanda Beckett
- Heidi Beidinger
- Rose Belony
- Dean Berthiaume
- Amy Bertrand
- David Bilveau-Viel
- Judah Boulet
- Candice Briese
- Alexis Brown
- Dylan Brown
- Mary Buchanan
- Brittney Bucko
- Perry Cabot
- Brianna Caprioni
- Tirdea Carmen
- Veronica Chandra
- Angelica DeCianni
- Joshua Clayton
- Paula Comeau
- Valerie Cooley
- Imelda Cortez
- Brian Coyle
- Ginny De La Cruz
- Krista Davis
- Vanessa Delafuente
- Alexsandra Dolan
- Beverly Drouin
- Mary Dussol
- Jacqueline Ehrlich
- Kelci Faulkner
- Enderleen Ferland-Jamali
- Stephanie Fisher
- Brianna Foley
- Ivy Francis
- Lindsay Fraser
- Daniel Fries
- Jessica Fuchs
- Bridget Gaussa
- Perry Gottesfeld
- Amy Hallmark
- Darla Hamende
- Afsheen Hasan
- Clare Henrie
- Melissa Holmes
- Michaela Horn
- Cori Ice
- Melisa Illies
- Aichatou Issa
- Anneke Jansen
- Seratia Johnson
- Mark Jones
- Emile Jorgensen
- Julia Kaya
- Melissa Kealey
- Christine Kennedy
- Janine Kerr
- Amanda Kiehl
- Megan Knudsen
- Christy Kuriatnyk
- Sean Lamb
- Christine Lee
- Ben LePage
- Debra Lewis
- Jennifer Liebreich
- Yvette Lopez-Vazquez
- Melinda Lozovoy
- Catherine Lufkin
- Isaac Lukenge
- Zhen-qiang Ma
- Nancy Madrigal
- Steve May
- Shonda Mayo
- Kert McAfee
- Mary McMahan
- Angela Medina
- Henri Menager
- Tycoma Miller
- Melissa Mittelholzer
- Valerie Montoya
- Becky Mooren

- Wilmarie Muñiz-Forestier
- Elias Munoz
- Shadia Musa
- Thomas Muscarella
- Michelle Myer
- Allison Natcher
- Abby Nelson
- Alicia Nelson
- Maria Neveux
- Ed Norman
- Madison Novosel
- Pam Oatis
- Kevin Officer
- Becky O'Meara
- Elizabeth Osterbauer
- Janet Panning
- Nicole Perez-Rodriguez
- Jess Pruett
- Sudha Rajagopalan
- Zay Rezania
- Amanda Ri'Chard
- Theresa Sanders
- Kimberly Schneider
- Andrew Schumacher
- Danny Schwartz
- Christin Seo
- Forrest Sharp
- Samantha Sites
- Darrin Sluga
- Megan Snow
- Kristina Somday
- Jolene Spacht
- Ashley Stacy-Boddapati
- Rachael Stough
- Derry Stover
- Lisa Strong
- Danielle Timp
- Craig Updyke
- Tina Wahl
- Anna Walker
- Berna Watson
- Emma Whitehead
- Jessica Willard
- Jodi Willemsen
- Jonathan Whipple
- Alexandria Williamson
- Scile Wilz
- Cathy Wood
- Megan Workman-Rivera
- Teresa Wortmann
- Alexandria Writz
- Huiqin Wu
- Tari York
- Lily Zhou

Meeting Notes

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

- Dr. Bernstein, a pediatrician who has been the NCEH 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, HUD

- The 2023 LEPAC annual report was emailed to LEPAC members for their review in November 2024
- LEPAC members voted to approve the report

Reviewing the LEPAC Charge

Perri Ruckart, Dr.P.H., M.P.H., Team Chief/Health Scientist, Lead Poisoning Prevention and Surveillance Branch, NCEH, CDC

- The LEPAC was established by the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016
- The purpose of LEPAC is to review research in federal programs and services related to lead poisoning and to identify effective services and best practices for addressing and preventing lead exposure
- The LEPAC is charged with
    - Reviewing federal programs and services available to individuals and communities exposed to lead
    - Reviewing current research on lead exposure to identify additional research needs
    - Reviewing and identifying best practices, or the need for best practices, regarding lead screening and the prevention of lead poisoning
    - Identifying effective services, including services related to healthcare, education, and nutrition for individuals and communities affected by lead exposure and lead poisoning
    - Undertaking and other review or activities that the HHS Secretary determines to be appropriate
- The LEPAC submits an annual report to the HHS Secretary and the United States Congress which includes
    - An evaluation of the effectiveness of the federal programs and services available to individuals in communities exposed to lead
    - An evaluation of additional lead research exposure needs
    - An assessment of any effective screening methods or best practices used or developed to prevent or screen for lead poisoning
    - Input and recommendations for improved access to effective services relating to healthcare, education, or nutrition for individuals and communities impacted by lead exposure
    - Any other recommendations for communities affected by lead exposure as appropriate

Improving Blood Lead Testing From a Local Perspective

Gail Gettens, M.S., E.C.M.P., Child Development Specialist and Health Communications Coordinator, New Hampshire Department of Health & Human Services

Nicole Lang, A.P.R.N., Nurse Case Manager, New Hampshire Department of Health and Human Services

- New Hampshire is a small, rural state with high childhood lead exposure rates, with 1,207 children having a blood lead level (BLL) ≥ 3.5 µg/dL in 2023
- Due to the COVID-19 pandemic, testing rates for one- and two-year-olds dropped by 25% across the state with 5,360 fewer children getting tested between 2020 and 2022
- New Hampshire began considering a lead testing quality improvement project coupled with continuing medical education training using an Extension for Community Healthcare Outcomes (ECHO) model
    - ECHO is a virtual training model that uses centralized education hubs to teach healthcare workers in underserved and rural areas about federal, state, and local lead testing policies
    - Providers obtain continuing medical education credits for participation
- New Hampshire discussed this project with Utah, which had a similar program; the Wisconsin and New Jersey American Academy of Pediatrics (AAP) chapters; and the national AAP to determine how to best establish and fund the project

- Partnerships with the New Hampshire AAP chapter, AmeriHealth Caritas (a Medicaid Managed Care Organization [MCO] and ECHO hub), and Ruth Gubernik, an independent consultant, were established
- Onboarding of program practices began in November 2023; a diverse group of eight practice teams joined and participated in six active training sessions
- Physicians were offered 25 maintenance of certification (MOC) part four points for participation
- Each monthly session began with a quality improvement consultant reviewing the data submitted by practices and brainstorming improvements
- This program worked to increase lead exposure risk assessments, provision of anticipatory guidance materials, testing rates, and follow-up testing rates
- New Hampshire saw significant growth in testing rates, and testing rates are now about equal pre-pandemic baseline testing
- The provision of a lead exposure risk assessment doubled and anticipatory guidance had a nine-fold increase
- Using the MOC part 4 points with the ECHO model improved engagement and allowed physicians to learn and immediately apply their knowledge to make quality improvement changes
- Using point-of-care testing instead of venous draws in pediatric practices increases testing rates

Discussion

- In New Hampshire, children with BLLs ≥ 5 µg/dL are referred to nutrition and child development services and have their homes assessed for lead hazards
    - If lead hazards are found in the home, the property must undergo abatement unless it is owner-occupied; landlords and owners are connected with grant programs in the state to access funding to undergo remediation
    - By increasing testing rates, the state's nurse case managers are busier inspecting homes for lead hazards
    - Informing providers of state lead poisoning abatement laws enables them to discuss these laws with their patients
- New Hampshire encourages any state wanting to implement this type of improvement project to connect with their local AAP chapter and AmeriHealth Caritas if their state contracts with them
- One member would like to see more guidance from CDC on using point of care testing
- New Hampshire believes their universal testing law increased testing rates, helped them recover quickly from decreased testing due to the COVID-19 pandemic, and avoided confusion among providers about the Medicaid Healthcare Effectiveness Data and Information Set (HEDIS) measure
    - Despite children enrolled in Medicaid being required to get testing at both 12 and 24 months, the Medicaid HEDIS measure requires only one test by age two
    - According to New Hampshire, providers sometimes assume the HEDIS measure is in accordance with Medicaid requirements and often follow only the HEDIS measure requirements
- New Hampshire is heavily focused on point-of-care testing in terms of educating and incentivizing it because it provides immediate results while the patient is still in the office and encourages the parents to get a confirmation test if needed

Public Comment

Tom Neltner, J.D., National Director, Unleaded Kids

- LEPAC needs to have more frequent meetings to have follow up discussions on important topics
    - The Lead Exposure Risk Index (LERI) needs to be discussed again to provide context for the maps of lead service lines provided by water utility agencies
- FDA will hopefully release food action levels this month
- CDC should consider using the term "action level" for the blood lead reference value because it is a more common term than in 2016
- Using The California Division of Occupational Safety and Health (Cal/OSHA) as a model for the PLEA workgroup recommendations is a great way to prevent lead take home to families
- We need to consider lead exposure in adults as a prominent cardiovascular risk factor on par with smoking, hypertension, and elevated cholesterol
- The American College of Obstetricians and Gynecologists (ACOG) and CDC guidelines on testing during pregnancy should recommend the review of lead risk factors to ensure that they are validated and useful
- Focus on screening houses, since they are the biggest source of most lead exposures
- Consider the unintended consequences of blood lead testing during pregnancy
- The *Journal of Pediatrics* recommended universal blood lead testing during pregnancy; this should be evaluated by CDC
- He supports the draft PLEA recommendations that discuss the low compliance rate for renovation, repair, and painting work; improving this would protect children and families living in the home
- The PLEA Report should call on CDC to collaborate with HUD along with other agencies mentioned in recommendation XVI, 6
- The data sharing Memorandum of Understanding (MOU) between CDC, EPA, and HUD should be updated so CDC is encouraged to share non-public data with these agencies

Lead-Related Updates from LEPAC Members

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

- CDC selected three winners for the Lead Detect Prize – a $1 million prize competition to accelerate the development of more advanced point-of-care blood lead testing technology
    - The three winners were
        - Meridian Bioscience: first place using electrochemical sensors to detect lead in blood
        - OndaVia: second place using optical technology
        - GlucoSentient: third place using a DNAzyme sensor
    - This challenge will likely help motivate companies to produce more point-of-care blood lead tests
    - CDC may consider continued support by developing comprehensive resource kits to help teams identify and pursue additional support mechanisms or by launching additional phases

- CDC published a supplement to the Journal of Pediatrics titled The Impact of Lead Exposure on Children and Adolescents: Current Updates
- CDC hosted the 2024 Annual Recipients Meeting in Atlanta, with the theme "Taking the Next Steps, Collaborating Across All Sectors Towards a Lead-Free Future"
    - Almost 400 people attended from all 62 CDC-funded programs, the Flint Registry, and community-based partner organizations
- CDC is beginning to evaluate the need to update current community-based blood lead testing guidance
    - Guidance currently recommends following CMS requirements for universal testing of children enrolled in Medicaid at 12 and 24 months and targeted testing for children not enrolled in Medicaid based on age and sociodemographic risk factors
    - CDC will review the literature pertaining to universal and targeted approaches, get partner input and support, and develop a report with recommendations that will be presented for consideration to CDC leadership
- CDC launched the Lead-Free Communities Initiative, which will help communities develop and implement customized plans to become lead-free
    - This consists of a national learning and support network for communities interested in reducing and eliminating lead exposure hazards and a curated library of resources and information about lead and elimination strategies and practices

Matthew Ammon, M.S., LEPAC Chair; Director, Office of Lead Hazard Control and Healthy Homes, HUD

- HUD distributed a record amount of funding to local community grantees, including local governments, nonprofits, Native American tribes, and universities
    - As of December 11, 2024, HUD awarded over $570 million to communities across the country to support the whole-home approach with the Healthy Homes Production Program, as well as the Older Adult Home Modification Program
- HUD developed health outcomes to be used both as specific performance indicators and ideas embedded in nearly all programs
- HUD received funding under the Inflation Reduction Act for the Green and Resilient Retrofit Program, which incorporates lead abatement and remediation
    - HUD gave $1.5 billion in grants and loans to housing providers in 40 states, Washington, D.C., and Puerto Rico to make existing homes greener, healthier, and safer by focusing on pollution emissions, water efficiency, energy conservation, and reducing costs
- HUD signed a data sharing MOU with EPA and CDC to make responding to issues quicker and more effective

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

- Since ED does not have the authority to conduct lead prevention activities in school environments, it shares guidance and information from EPA and CDC
- ED posts information on its Safe and Healthy Students clearinghouse

Gary Edwards, Retired Environmental Health Supervisor

- He is a member of the PLEA workgroup and contributed to the PLEA Report

Brenna Flannery, Ph.D., Senior Regulatory Toxicologist, Center for Food and Applied Nutrition, FDA

- FDA collaborated with federal, state, local, and international partners to respond to lead contamination of apple cinnamon pouches and identified the source of the issue
    - Compliance activities included issuing public health alerts, sending warning letters to industry and distributors, and pursuing voluntary recalls
- FDA continues to sample colored spices and imported foods through its Toxic Elements in Foods and Foodware monitoring program
- FDA is engaged with international partners through the Codex Alimentarius Committee on Contaminants in Foods to develop recommended maximum levels for lead in herbs and spices
- Guidance for industry and action levels for lead in processed foods intended for babies and young children will be issued by the end of 2024
- Import alert 99-45 for imported pressure cookers containing high levels of lead is being maintained
    - Third-party internet retail websites were contacted and the removal of these products was requested
    - Retailers committed to remove and prohibit these pressure cookers from their websites
- FDA is engaged in the International Lead Exposure Working Group under the subcommittee of the President's Task Force on Environmental Health Risks and Safety Risks to Children
- Dietary lead exposure estimates for infants 0 – 11 months of age and young children 1 – 6 months of age were published in October 2024
    - These were determined using lead concentration data from the FDA Total Diet Study and food consumption data from the National Health and Nutrition Examination Survey (NHANES)

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

- Lead found on UNC campus was remediated, and an article was published on these efforts
- UNC runs the Water Institute, which helps promote initiatives for global lead-free environments
- The UNC National Institute of Environmental Health Sciences funded Superfund program focuses on private well contamination in North Carolina
    - This work found lead in private drinking well water is associated with preterm birth risk
    - Exposure is unequal across the state and higher for Native American communities
- UNC is working to increase clinician understanding of how to ask their patients questions on environmental factors like lead

Mary Elizabeth (Mary Beth) Hance, B.A., Senior Policy Advisor, Division of Quality and Health Outcomes, Children and Adults Health Program Group, CMS

- The National Committee for Quality Assurance (NCQA) HEDIS blood lead screening measure was included in CMS's child core set of quality measures as of 2023
    - HEDIS is not in alignment with the Medicaid blood lead screening requirements
    - Data released earlier this year showed a state median of 57% of children receiving a blood lead test by their second birthday
- CMS released a report that includes 2021 blood lead screening data with 2022 and 2023 data to hopefully be released in the near future

Kristina Hatlelid, Ph.D., M.P.H., Toxicologist, Director of Toxicology and Risk Assessment, CPSC

- CPSC continues to emphasize enforcing existing lead-related regulations through import surveillance
- Enforcement efforts may result in consumer product recalls or other similar announcements
    - Latest information is available on cpsc.gov and saferproducts.gov
- CPSC is preparing a request for information and comments related to the current regulations for lead content component parts of children's products and lead content of paints and surface coatings

Aaron Lopata, M.D., M.P.P., Chief Medical Officer, Maternal & Child Health Bureau, HRSA

- HRSA conducted lead screening for 600,000 children between 9 and 72 months old through its Bureau of Primary Health Care in 2023 which is 25,000 more children than in 2021
- Lead screening, abatement, and other lead prevention and treatment measures are funded through the Title V program in the Maternal & Child Health Bureau
- Increasing focus on lead poisoning in health education provided by the Healthy Start program at HRSA is a potential growth opportunity in the future

Gredia Huerta-Montañez, M.D., F.A.A.P., Senior Principal Research Scientist, Northeastern University College of Engineering and University of Puerto Rico Medical Sciences Campus

- Establishing a Pediatric Environmental Health Specialty Unit (PEHSU) was important in supporting local AAP chapters to develop the Puerto Rico Lead Surveillance System
- A similar, very successful ECHO program to New Hampshire was implemented in Puerto Rico which helped
    - identify lead prevention champions who continue to support lead poisoning prevention efforts
    - the Puerto Rico Department of Health be more aware of blood lead testing problems
- The ECHO presentation has shown just how useful improved access to point-of-care testing would be in Puerto Rico
    - Puerto Rico requires a license and certification to conduct point-of-care testing

Mikki Meadows-Oliver, Ph.D., R.N., Clinical Professor, New York University – Rory Meyers College of Nursing

- She surveyed pediatric nurse practitioners in New York about barriers to lead screening and found that privately insured practitioners do not think their patients are at risk

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

- EPA put out an endangerment finding on lead emissions from aircraft operating on leaded fuel contributing to air pollution anticipated to endanger public health and welfare
- EPA released regulations on secondary lead smelters, large municipal waste combustors, the iron and steel manufacturing industry, and national air pollution standards for passenger cars, light-duty trucks, and medium-duty vehicles

- EPA finalized the Lead and Copper Rule Improvements (LCRI) requiring drinking water utilities to replace lead pipes within ten years and lowering the action threshold
- EPA updated a lead paint dust regulation for pre-1978 housing and childcare facilities
- EPA put out a guidance for reducing screening levels for lead in residential soils, coupled with a billion-dollar investment for cleanup projects at one hundred Superfund sites
- EPA allocated $3 billion for states and territories to identify and replace lead piping and $26 million for lead in schools and childcare facilities
- EPA launched the Get the Lead Out partnership with 200 underserved communities to provide funding and medical assistance
- EPA conducted a number of enforcement, training, and outreach actions
- EPA joined the Partnership for a Lead-Free Future to tackle lead poisoning in lower- and middle-income countries
- EPA co-chairs the President's Task Force on Environmental Health Risks and Safety Risks to Children and its lead subcommittee published a progress report on the Federal Lead Action Plan
- LEPAC should meet more frequently to be more active and collaborative
- LEPAC should consider how to sustain and further collaborative action and leverage resources to move the needle on lead poisoning prevention

Jeffrey Sanchez, B.A., Director of Health Informatics, Impact Assessment, Inc.

- Impact Assessment has been working with Los Angeles County's Childhood Lead Poisoning Prevention Program (CLPPP) and HUD Lead Hazard Reduction grant-funded programs
- Lead-Free Homes LA is the result of a twenty-year paint litigation settlement that occurred in 2019 that focuses on housing sources of lead
    - Lead-Free Homes LA which focuses on pre-1950 housing, low-income families and households with children has remediated over a thousand homes
- Impact Assessment activities include
    - looking at non-housing sources, such as foods, cultural sources, and take-home exposure
    - conducting lead housing and non-housing risk surveys and providing tailored education based on those risks and referrals to services and additional blood lead testing
    - establishing a Lead-Free Homes LA evaluation committee to provide process improvements and program accountability
    - using housing inspection data to guide primary prevention programs by identifying housing code violations linked to lead hazards and overlaying that with housing data and property rates
    - conducting outreach and education to inform about lead safe practices
- LEPAC should consider other similar proactive code enforcement programs across the country to target populations not getting lead testing

Megan Sparks, Ph.D., M.P.H., Epidemiologist II, Johnson County Department of Health and Environment

- Johnson County Health Department works closely with the Kansas CLPPP and municipal water systems for point-of-care testing and drinking water testing, respectively
- The Kansas CLPPP helps disseminate educational materials to families

- Johnson County Health Department will be doing a point-of-care drive-through testing event next summer, and they will also conduct drinking water testing
- The Kansas CLPPP is expanding testing for children enrolled in Medicaid, getting home inspection reimbursement processes in place, and onboarding more lead-focused nurses in local health departments

Brian Weaver, M.P.H., PLEA Workgroup Chair, Lead Policy Advisor, Wisconsin Department of Health Services

- Wisconsin updated its blood lead testing recommendations to universal testing so that all children at ages 1 and 2 are recommended for testing or by age 6 if no record of a previous test exists
- Wisconsin's Medicaid program has maintained the pay-for-performance measure related to blood lead testing for children under 6 enrolled in Medicaid
- Wisconsin CLPPP is developing a media campaign for 2025 to educate the public and providers about the new blood lead testing recommendations
- A multi-agency effort between an organization overseeing consumer protection, the Wisconsin Department of Justice, and the Wisconsin Department of Health Services, along with the regional HUD office and the U.S. District Attorney's Office was created to enforce lead hazard orders in rental properties in the City of Milwaukee
- Wisconsin passed a bill last fiscal year investing $50 million to address environmental hazards such as mold and lead paint in older properties
- Wisconsin is developing key partnerships with NCHH and foster care to support foster parents in maintaining/ensuring a lead-free home
- Wisconsin has a partnership with Head Start programs to increase blood lead testing
- Wisconsin's adult lead program and its CLPPP are working together to develop pregnancy lead exposure screening and blood lead testing recommendations by 2025

Lead-Related Updates from LEPAC Liaisons

Abraham Kulungara, M.P.H., Senior Director, Environmental Health, ASTHO

- ASTHO, with support from CDC's Lead Poisoning Prevention and Surveillance Branch, continues to collaborate with state and territorial health agencies, including those without an established CLPPP
- ASTHO is working with NCHH and community-based organizations to offer resources and staffing support for childhood lead poisoning prevention, especially among rural areas

Ruth Ann Norton, B.A., President and CEO, GHHI

- GHHI chaired Maryland's Task Force on Lead Poisoning Prevention
    - The Task Force is focused on ensuring lead is included in all relevant water policies
    - This effort includes detecting lead in spices and food products
- GHHI is looking at emerging opportunities to support low-income homeowners on a whole-house basis for using greenhouse gas reduction dollars to reduce lead
    - This work is being performed in New Jersey, Pennsylvania, Maryland, Memphis, Tennessee, Detroit, Michigan, Washington, D.C., and Providence, Rhode Island

- GHHI is releasing a toolkit for people who are pursuing decarbonization and lead abatement in homes for health improvement
- GHHI is working with the city of Oakland to ensure a holistic approach to lead poisoning prevention is being pursued following their lead settlement
- GHHI is strengthening campaigns around getting kids tested for lead in Maryland
- GHHI won the Lancaster General Health University of Pennsylvania Health Systems Day-To-Day Lead Removal Program contract
    - Abatement and remediation will be performed in 3,000 homes through a $50 million settlement
- People can apply for the GHHI grants by visiting www.greenandhealthyhomes.org/thrivingcommunities/

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 APHL

- The Clinical & Laboratory Standards Institute (CLSI) published the third-edition measurement procedures for the determination of lead in whole blood in the document C-40
    - They have added detailed procedures for measuring lead in blood based on inductively coupled plasma mass spectrometry, updated information on clinical and public health significance of BLLs < 5 µg/dL, provided additional guidance for LeadCare II device quality assurance practices at 3.5 µg/dL, and provided a protocol for checking for lead contamination of materials and supplies
    - They removed the classic anodic stripping voltammetry procedure for older bench-top instrumentation and the procedure for measuring lead in urine
- CMS tightened criteria of quality specifications for labs that do blood lead testing under a Clinical Laboratory Improvement Amendment (CLIA) certificate
- APHL held their annual conference with a whole session devoted to lead poisoning

Stephanie Yendell, D.V.M, M.P.H., Senior Epidemiology Supervisor, Minnesota Department of Health (MDH), liaison to CSTE

- At the June 2024 CSTE conference, several environmental and occupational health members reported being unable to move forward without CDC funding support for coordinating and reviewing Adult Blood Lead Epidemiology and Surveillance (ABLES) and CLPPP surveillance; assessing opportunities to improve coordination and data sharing; and tracking lead poisoning cases across the lifespan
- CSTE administered an assessment of jurisdictional policies and practices to identify what BLLs during pregnancy and lactation activate public health action
- CSTE is partnering with NCEH on a noninfectious food-borne outbreaks workgroup and assessment which includes states, tribal, local, and territorial representatives to improve standardized surveillance and processes for responding to outbreaks

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

- With CDC funds, AAP was able to publish a set of short videos on the health impacts of lead, common things that contain lead, and what parents can do to protect their children on their healthychildren.org website

- AAP released a policy statement and technical report on lead
- AAP's Council on Environmental Health and Climate Change is revising and reviewing related documents to be published in the fifth edition of the Pediatric Environmental Health Manual

Preventing Lead Exposure in Adults (PLEA) Workgroup Draft Report

Brian Weaver, M.P.H., PLEA Workgroup Chair, Lead Policy Advisor, Wisconsin Department of Health Services

Michael Kosnett, M.D., M.P.H., F.A.C.M.T., Associate Adjunct Professor, Colorado School of Public Health

- PLEA was charged with examining adult lead exposure with a focus on actions by U.S. public health agencies that might prevent exposure and mitigate lead-related adverse effects
- The objective of the PLEA workgroup was to generate this report for discussion and feedback
- The PLEA workgroup consists of subject matter experts in adult lead exposure and occupational health
- The draft report is divided into five sections with recommendations for consideration by LEPAC
- The draft report was posted on the LEPAC website before the meeting and was distributed to LEPAC members for review

Discussion

- The responsibility of take-home lead exposure prevention should be more explicitly shifted to employers rather than individual workers through expanding training, hygiene, and housekeeping requirements
- Administrative or engineering controls are more effective than individual actions
- Consider local action as a lever in Recommendation IV-4 to increase compliance with EPA's Renovation Repair and Painting program, similar to what was done in Rochester, NY
- Consider referencing provisions in the National Healthy Housing Standard in Recommendation IV-5 calling for more advocacy through the International Code Council and leveraging housing code enforcement activities
    - These codes are strongest when implemented as part of a proactive rental inspection program
- Consider concerns with the effectiveness of the ACOG assessments in Recommendation V-3, as previously mentioned during the public comment, because the provider and patient might not have extensive knowledge on lead
- Add discussion on proactively screening for housing-based exposures
- If screening is to increase, additional resources for cases must be in place
- Although screening during pregnancy is valuable and worthwhile, consider there may be some unintended consequences, particularly resulting from recent pregnancy-related legislation
- Make sure to include HUD and housing-based exposures in the collaboration between CDC and other federal partners stated in Recommendation VI-1
- The creation of a unified blood lead surveillance system in Recommendation IV-6 may only be feasible with congressional action
- The final EPA LCRI contains an economic analysis that quantified the economic benefit of reducing cardiovascular disease and ADHD by preventing lead exposure

- Consider writing more in-depth on lead exposure through food, dietary supplements, or cookware
- Add clarification that blood lead samples would be processed even if they do not include demographic information
- Consider changing the recommendation from withholding laboratory certification to receiving a citation or a deficiency that must be addressed with a plan of correction
- Consider highlighting the differences between current OSHA quality specifications and the new California standards
- Consider making these recommendations more succinct so they are more actionable or consider making an executive summary of specific actionable items

Discussion Approving the Workgroup's PLEA Report

- The LEPAC Chair reiterated that LEPAC has the capability to approve or reject the recommendations of the PLEA report. If the LEPAC approves the recommendations, it moves forward to CDC for review
- The recommendations in the draft PLEA report were unanimously approved by the LEPAC
- The approved report will be published to the LEPAC website

Discussion of Blood Lead Testing Challenges and Opportunities Post-COVID

LEPAC members provided input on the following questions:

- What have been some unique post-COVID challenges for blood lead testing?
    - There has been decreased trust in public health services, including vaccination and blood testing
    - An increase in telehealth appointments has resulted in a decline in follow-up laboratory testing
- How can we increase testing?
    - Medicaid is a key partner to improve blood lead testing rates among children
    - Partnerships with private insurance, Head Start, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), Healthy Homes, Early Head Start, the Department of Education, and PEHSUs will also increase testing rates
    - State programs can conduct localized door-to-door information campaigns in target areas and promote testing with immunizations for school-aged children
    - Focus must be given to specific populations, such as lower-income children living in older rental housing, children in foster care, and other at-risk populations
    - CDC and ACOG can update guidance for blood lead testing during pregnancy
    - Programs can work to improve self-advocacy for parents, so they know to ask for lead testing
    - Programs can ensure private practice providers understand blood lead risk is universal and testing should be conducted regardless of where a patient lives
    - Programs can conduct quality improvement projects to ensure children who are supposed to be tested for lead are being tested
    - CDC and other federal organizations should improve lead hotspot mapping
    - Providers should be encouraged to use of point of care devices resulting from the Lead Detect Prize
- How can we get to communities that are difficult to reach?

- Localized approaches such as door-to-door testing and mobile blood lead testing centers can improve testing in difficult to reach communities
- Programs should reduce the number of site and doctor visits by combining as many services as is feasible
- Blood lead testing can be performed while providers administer back-to-school immunizations
- Programs can diversify media messaging with texts, Facebook posts, and social media videos to assist with community outreach, particularly for younger parents
- Trust with public health infrastructure should be improved by educating providers and case managers
    - This can be accomplished with Continuing Medical Education credits and improving lead poisoning education for pediatric residents and medical students
- Programs should develop partnerships with community organizations and members with strong community relationships, such as school nurses, MCO case managers
- Programs should partner with local clinics to provide blood lead testing to people living in older housing

Summary of Key Themes

Matthew Ammon, M.S., LEPAC Chair; Director, Office of Lead Hazard Control and Healthy Homes, HUD

The LEPAC meeting discussed the following:

- The New Hampshire ECHO project
- Public comments on lead in water, the Lead Exposure Risk Index, adult lead exposure and the PLEA recommendations, universal testing, and the MOU with HUD, CDC, and EPA
- Member updates on key lead poisoning prevention actions taken since the last LEPAC meeting
- LEPAC comments on the draft PLEA report which members voted to approve
- Ways to increase blood lead testing through improving communication, increasing focus on populations at risk, rebuilding trust in public health, and improving collaborations with key partners

Meeting Adjourned 4:15 PM

I hereby certify that, to the best of my knowledge, the summary notes of the December 11, 2024 meeting of the Lead Exposure and Prevention Advisory Committee (LEPAC) are accurate and complete.

4/15/2025

Date

Matthew Ammon, Chair, Lead Exposure and Prevention Advisory Committee