

**THE CENTERS FOR DISEASE CONTROL
LEAD EXPOSURE AND PREVENTION ADVISORY COMMITTEE**

(LEPAC)

INAUGURAL MEETING HELD VIA ZOOM WEBINAR CONFERENCING

APRIL 29, 2020 9:00 A.M.

PRESIDING OFFICER: PERRI RUCKART, MPH,
DESIGNATED FEDERAL OFFICER, NCEH/ATSDR

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APPEARANCE OF THE MEMBERS:

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MATTHEW AMMON, M.S., LEPAC Chair, Director, Office of Lead Hazard Control and Healthy Homes, U.S. Department of Housing and Urban Development.

PATRICK N. BREYSSE, Ph.D., C.I.H., Director, National Center for Environmental Health/Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention.

JEANNE BRISKIN, M.S., Director, Office of Children's Health Protection, U.S. Environmental Protection Agency.

WALLACE CHAMBERS, JR., M.P.H., Deputy Director, Environmental Public Health, Cuyahoga County Board of Health.

TIFFANY DEFOE, M.S., Director, Office of Chemical Hazards-Metals, Occupational Safety & Health Administration, U.S. Department of Labor.

**APPEARANCE OF THE MEMBERS:
(continued)**

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Coordinator, Environmental Health Mission Area,
U.S. Geological Survey.

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Peter's Pediatrics, St. Peter's Health Partner
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KARLA JOHNSON, M.P.H., Administrator, Healthy
Homes Environmental Consumer Management and
Senior Care Department, Marion County Public
Health Department.

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Nutrition Advisor, Office of Policy Support Food
and Nutrition Service, U.S. Department of
Agriculture.

ERIKA MARQUEZ, Ph.D., M.P.H., Assistant Professor,
School of Public Health, University of Nevada at Las Vegas.

ANSHU MOHLLAJEE, Sc.D., M.P.H., Research
Scientist III, Childhood Lead Poisoning
Prevention Branch, California Department of
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**APPEARANCE OF THE MEMBERS:
(continued)**

JILL RYER-POWDER, Ph.D., M.N.S.P., Principal
Health Scientist, Environmental Health Decisions.

HOWARD MIELKE, Ph.D., M.S., Professor,
Department of Pharmacology, Tulane University
School of Medicine.

TAMMY BARNHILL-PROCTOR, M.S., Acting Director,
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**APPEARANCE OF THE MEMBERS:
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JANA TELFER, M.A., Strategic Projects Officer,
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CELESTE PHILIP, M.D., M.P.H., Deputy Director for
Non-Infectious Diseases, Centers for Disease Control and
Prevention.

MONICA LEONARD, CDR, Acting branch chief of CDC's
Lead Poison Prevention and Environmental Health
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Center for Environmental Health, Centers for
Disease Control and Prevention.

JEFFERY REYNOLDS, Health Scientist,
Contractor, Cherokee Nation Assurance (CNA), LLC,
Community Guide Office, Office of the Associate
Director for Policy and Strategy, Centers for
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Transcript Legend

-- Break in speech continuity

... Indicates halting speech, unfinished sentence
or omission of word(s) when reading

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1 PROCEEDINGS

2 **MS. RUCKART:** Okay. Good morning, everyone,
3 and welcome to CDC's Inaugural Lead Exposure and
4 Prevention Advisory Committee LEPAC Meeting. I'm
5 Perri Ruckart, the LEPAC designated federal
6 official. I'm an epidemiologist by training, and
7 I've been with CDC for over 20 years and with the
8 Childhood Lead Poisoning Prevention Program since
9 2017 where I'm currently the team lead for the
10 Program Development, Communications, and Evaluation
11 team.

12 We're glad you're joining us virtually and
13 thank you for your flexibility during these
14 unprecedented times.

15 In addition to the members and the speakers,
16 we have approximately 150 attendees viewing the
17 meeting. Please note that audience members will
18 be muted during the meeting and a transcript of
19 the meeting will be made available on our website
20 in the near future.

21 Because we have a full schedule, we will
22 adhere to the agenda times as -- hopefully, best
23 as we can.

24 **INTRODUCTIONS**

25 **MS. RUCKART:** I will now turn it over to the

1 members and speakers to briefly introduce
2 themselves, when I call on you. And if I
3 mispronounce your name, please accept my
4 apologies and correct me.

5 I'd like to turn it over to Dr. Pat Breysse,
6 the Director of CDC's National Center for
7 Environmental Health.

8 (inaudible)

9 **MS. RUCKART:** Pat, are you there?

10 (inaudible)

11 **MS. RUCKART:** Okay. We will come back to
12 Dr. Breysse.

13 Next up, Matt Ammon. He's the LEPAC chair.

14 **MR. AMMON:** Hey there. This is Matt Ammon.
15 I am the director of HUD's Office of Lead Hazard
16 Control and Healthy Homes. I've been enjoying my
17 job at HUD for 26 years. And before that, I
18 helped EPA establish the 402/404 Program.

19 And it's great to be here, and I can't wait
20 to get through and hear the presentations and
21 really expand a lot of the great work that is
22 going on around the country. Thank you.

23 **MS. RUCKART:** Great. Thank you.

24 Jeanne Briskin?

25 **MS. BRISKIN:** This is Jeanne Briskin from

1 the Environmental Protection Agency. I'm the
2 director of EPA's Office of Children's Health
3 Protection. I've been with EPA since 1983, and I
4 worked on the development of the first set of
5 regulations to limit lead in drinking water in
6 the late '80s.

7 **MS. RUCKART:** Okay. Great.

8 I was having some technical issues before,
9 and I'm actually able to connect. I'm going to
10 put my phone on mute and make sure you can hear
11 me through the computer audio. So just please
12 bear with me a second.

13 (pause)

14 **MS. RUCKART:** Okay. I don't think my
15 computer audio is working right now.

16 This is Perri. Can you hear me through my
17 phone?

18 **UNIDENTIFIED SPEAKER:** Yes.

19 **UNIDENTIFIED SPEAKER:** Yes.

20 **MS. RUCKART:** Okay. Thank you.

21 Next we have Wallace Chambers.

22 **MR. CHAMBERS:** Yes. How's everybody doing?

23 This is Wallace Chambers. I'm with the Cuyahoga
24 County Board of Health in Ohio, currently the
25 Deputy Director of Environmental Public Health.

1 I started in public health in 1995, was in
2 several roles and -- a risk assessor as a
3 program manager of HUD grants and as a
4 supervisor.

5 And I'd like to thank everybody for allowing
6 me to be on the committee, and hopefully I can
7 share and contribute to the group. Thank you.

8 **MS. RUCKART:** Okay. Thank you.

9 Tiffany DeFoe.

10 **MS. DEFOE:** ... Chemical Hazards-Metals and
11 the director of Standards and Guidance OSHA. I
12 have been with OSHA since 2002. I've been with
13 the Office of Metals that whole time. I came in
14 as an intern and have worked my way through
15 different roles, including working on risk
16 assessments and working as a project manager.
17 And I have been -- become a -- the director
18 pretty recently, in the last year -- sorry, two
19 years.

20 And I very much -- let's see. My standards
21 experience, I've worked for OSHA on hexavalent
22 chromium and silica and beryllium standards.

23 We are just now getting started on an
24 advanced notice to proposed rule-making for lead,
25 and I'm excited to work with you all on this

1 project.

2 **MS. RUCKART:** Good morning.

3 **UNIDENTIFIED SPEAKER:** Good morning.

4 **MS. RUCKART:** Next, Dr. Michael Focazio.

5 **DR. FOCAZIO:** (inaudible) Geological Survey
6 since 1990. My research focus has been in
7 drinking water, broadly, lead being one of
8 several analytes that we've looked at over the
9 years. And more recently over the past 10 years
10 or so, I've managed our environmental health
11 research programs.

12 **MS. RUCKART:** Great.

13 I have gotten a message that Dr. Breysse is
14 available to introduce himself now.

15 Pat?

16 **DR. BREYSSE:** Good. Can you hear me now?

17 **MS. RUCKART:** Yes.

18 **DR. BREYSSE:** Great.

19 Yeah. So this is Pat Breysse. I'm the
20 Director of the National Center for Environmental
21 Health, and I also direct the Agency for Toxic
22 Substances and Disease Registry which has an
23 interest in lead as well.

24 And I've been with CDC for five-and-a-half
25 years. Prior to that, I was with Johns Hopkins

1 University Bloomberg School of Public Health as a
2 professor in the Department of Environmental
3 Health where I had a large wide-ranging
4 background.

5 But I would probably characterize myself as
6 an exposure scientist and a collaborator on
7 numerous epidemiology studies. Thank you.

8 **MS. RUCKART:** Okay. Dr. Nathan Graber.

9 **DR. GRABER:** Hi. Good morning. This is
10 Nathan Graber, and I'm currently a primary care
11 pediatrician in the Capital District of New York.

12 I have extensive experience in the field of
13 lead exposure prevention, management, and
14 treatment of lead-poisoned children.

15 After completing my residency in pediatrics
16 at Jacobi Medical Center in the Bronx, I went on
17 to a fellowship in pediatric environmental health
18 at the Mount Sinai School of Medicine. During
19 that time, I worked with the Region 2 Pediatric
20 Environmental Health Specialty Unit, and along
21 with Dr. Joel Forman, I wrote the guidelines for
22 the New York City Department of Health and Mental
23 Hygiene on lead exposure in pregnancy. After
24 that I joined the ad-hoc CDC committee working on
25 national guidance on the same topic.

1 During -- following fellowship I oversaw
2 environmental public health programs for the New
3 York City Department of Health and Mental
4 Hygiene -- this included the adult blood lead
5 registry -- and then went on to direct the New
6 York State Department of Health Center for
7 Environmental Health which included lead
8 prevention and surveillance programs for both
9 adults and children.

10 Just an interesting piece of trivia, my
11 grandfather was a house painter in the early part
12 of the 20th century, but he had to stop doing that
13 work because of the consequences of severe lead
14 poisoning.

15 I just want to say I'm very grateful for
16 this opportunity to serve on the Lead Exposure
17 Prevention Advisory Council, and I look forward
18 to doing great work for -- with everyone here.

19 **MS. RUCKART:** Thank you.

20 Karla Johnson.

21 **MS. JOHNSON:** Hi. I'm Karla Johnson. I'm
22 with the Marion County Public Health Department
23 in Indianapolis, and I am the administrator of
24 our Healthy Homes Department. And we have
25 healthy homes inspections, blood lead testing,

1 and those sort of other related issues. I've
2 been doing this work now for probably -- well, my
3 son's now 22, so I think I started when I was
4 pregnant with him, as a case worker.

5 And while I know I'm listed on this
6 committee, my professional role, I think that
7 what I really bring to the table and would be
8 probably more versed in would be the mother of a
9 lead-poisoned child, because my 22-year-old is
10 lead-poisoned. And I think that what I'd really
11 like to do is broaden the vision of what we think
12 about when we talk about protecting lead-poisoned
13 children.

14 I think oftentimes we forget about them
15 after they turn seven. But that seven-year-old
16 -- or six, actually, that child becomes a
17 22-year-old at some point. And the effects of
18 lead poison live with them for their lifetime.
19 So I want to be able to, at least, speak for
20 those older children, and as we go forward,
21 looking at what we want to do to help these
22 children. I want to be that voice because I'm
23 living with and have mothered a lead-poisoned
24 22-year-old son.

25 **MS. RUCKART:** Thank you.

1 Donna Johnson-Bailey.

2 **MS. JOHNSON-BAILEY:** Good morning, everyone.

3 I'm Donna Johnson-Bailey, and I'm a senior
4 nutrition advisor, and support collaborative
5 research and policy efforts within the Office of
6 Policy Support in the Food and Nutrition Service.
7 I offer technical assistance to the nutrition
8 assistance programs, and I've been with the
9 agency for more than 20 years as a nutritionist.

10 I think what I contribute to this effort is
11 the broad range of support that the food and
12 nutrition programs offer to families and
13 communities challenged by the risk of lead
14 exposure. So I'm looking forward to joining this
15 process.

16 **MS. RUCKART:** Thank you.

17 Dr. Erika Marquez.

18 **DR. MARQUEZ:** Hi. This is Dr. Marquez.
19 And, again, I'm thankful for being able to serve
20 on this committee.

21 I am an assistant professor over at the
22 University of Nevada, Las Vegas. And in my
23 tenure here at -- at UNLV, I am actually
24 overseeing the implementation of lead in healthy
25 homes programs, acting -- currently overseeing

1 the implementation of the Nevada statewide
2 Childhood Lead-Poisoning Prevention Program,
3 aiming to really improve surveillance in our
4 state.

5 And, again, I'm excited to be on here and
6 look forward to bringing some contributions to
7 the committee.

8 **MS. RUCKART:** Thank you.

9 Dr. Howard Mielke.

10 (no response)

11 **MS. RUCKART:** Howard, can you hear us?

12 (no response)

13 **MS. RUCKART:** We'll come back to him.

14 Dr. Anshu Mohllajee.

15 **DR. MOHLLAJEE:** Hi. Good morning, everyone.

16 My name's Anshu Mohllajee. I'm from the
17 Childhood Lead Poisoning Prevention Branch in
18 California, where I've been there for over 10
19 years. And currently, I supervise a team of six
20 epidemiologists.

21 And so I look forward to providing a
22 perspective of what's happening at the state
23 level, and hopefully figure out a way to deal
24 with the struggles that we've had of identifying
25 children with lead poisoning and in the future

1 that they have the appropriate services. Thank you.

2 **MS. RUCKART:** Thank you.

3 Dr. Jill Ryer-Powder.

4 **DR. RYER-POWDER:** Yes. This is Jill
5 Ryer-Powder. I am very honored to be a part of
6 the Lead Exposure Prevention Advisory Council.

7 I currently work at Environmental Health
8 Decisions as a toxicology consultant. I do human
9 health risk assessment, looking at exposure and
10 toxicity of chemicals at properties or in the air
11 or in the soil to determine what type of cleanup
12 is necessary.

13 I also do litigation support where I try to
14 connect exposure with diseases. I've done a lot
15 of lead cases with childhood exposure to lead. I
16 look forward to contributing to this effort with
17 my expertise in toxicology and exposure. And I
18 also got a -- recently got a master's degree in
19 nutrition from Tufts in their nutrition science
20 and policy program.

21 So I look forward to helping with the
22 combination of nutrition and lead exposure to
23 prevent health defects.

24 **MS. RUCKART:** Okay. Thank you.

25 Dr. Howard Mielke. Are you able to hear us

1 now?

2 **DR. MIELKE:** Yes, I hear you. Do you hear
3 me now?

4 **MS. RUCKART:** Yes. Yes.

5 **DR. MIELKE:** Okay. Great.

6 **MS. RUCKART:** We are connected to you.

7 **DR. MIELKE:** Yeah. My name's Howard Mielke.

8 And I'm very honored to be a nominee of the
9 American Chemical Society to serve on this
10 committee.

11 I am a research professor in the Department
12 of Pharmacology at Tulane University of Medicine
13 in New Orleans. My research is on the impact of
14 signaling from environmental sources outside the
15 organism. Throughout my career, my research has
16 increasingly focused on children and their lead
17 exposure in the urban environment. And I should
18 point out that my daughter was lead-poisoned at
19 the age of three, and so it -- that heightened my
20 interest.

21 Over the last five decades of research,
22 they've been distilled into pre -- primary
23 prevention and -- from environmental signaling
24 and especially children's lead exposure, traffic
25 flows, and disparities within urban communities

1 from lead aerosols in lead-dust-contaminated
2 soils.

3 And I'm very pleased to be a member of the
4 committee.

5 **MS. RUCKART:** Thank you. Okay.

6 Tammy Proctor.

7 **MS. PROCTOR:** Good morning. My name is
8 Tammy Proctor, and I am with the U.S. Department
9 of Education, and I'm from the Office of
10 Elementary and Secondary Education. And it is an
11 honor to be a part of this committee.

12 I come to you, this committee, with my
13 experience in working with -- at the state,
14 local, and federal level working in IDEA,
15 Individuals with Disabilities Education Act,
16 which is the law that helps support services to
17 children who have been exposed to lead as one of
18 the exposures to disabilities and other
19 disabilities.

20 And I am excited to be here to learn a
21 little bit more about lead and the actions that
22 are being taken to ensure that we provide a safe
23 environment to young children.

24 **MS. RUCKART:** Thank you.

25 And then I want to mention Dr. Monique

1 Fountain-Hanna is a LEPAC member who's not able
2 to join us today.

3 Dr. Fountain-Hanna works for the Maternal
4 and Child Health Bureau at the Health Resources
5 and Service Administration, HRSA.

6 So that is all of our members.

7 Now, I would like our speakers and some
8 other participants on the phone to introduce
9 themselves when I call on you.

10 Dr. Sharunda Buchannan.

11 **DR. BUCHANNAN:** Good morning, everyone.
12 This is Dr. Sharunda Buchannan. I'm happy to be
13 here as part of the LEPAC and presenting today.
14 I also have been at CDC ATSDR for a very long
15 time. I'm actually celebrating my 30th year.

16 My first introduction to lead was as an
17 environmental health service officer back in 1993
18 where I actually investigated the lead in copper
19 rule. There was some sort of gastrointestinal
20 effects related to lead in copper back in
21 Nebraska where I actually sort of investigated
22 that.

23 And after leaving the EIS program, I went
24 directly to the CDC -- or came directly to CDC to
25 work in the lead-poisoning arena and I've been

1 there ever since. So this is about my 26th/27th
2 year in the lead arena. So welcome, everyone.

3 **MS. RUCKART:** Thank you.

4 Dee Gardner.

5 **MS. GARDNER:** Good morning, everyone. This
6 is Dee Gardner. I am a senior Committee
7 Management Specialist in the Federal Advisory
8 Committee Act Program. I've been with CDC for 31
9 years and about 20 of those years I've been
10 working in FACA which is -- I have responsibility
11 for oversight of CDC's federal advisory committees.

12 **MS. RUCKART:** Great.

13 Jeff Reynolds, are you on the line?

14 (no response)

15 **MS. RUCKART:** I'm -- I don't believe he's
16 joined in yet. He'll be speaking later this
17 morning. So I just wanted to check if he was on.

18 Jana Telfer.

19 **MS. TELFER:** Good morning. It's a pleasure
20 to be here. This is Jana Telfer. My official
21 title is Strategic Projects Officer for the
22 National Center for Environmental Health and
23 Agency for Toxic Substances and Disease Registry.

24 But apart from the title, I specialize in
25 emergency and risk communication and strategic

1 planning and am able to use those skills in a
2 variety of projects as well as in response to
3 national or international emergencies. We'll be
4 using the strategic planning component today
5 rather than the emergency response.

6 **MS. RUCKART:** Yeah. Jana will be leading
7 our discussion portion.

8 So thank you, Jana.

9 CDR Monica Leonard.

10 **CDR LEONARD:** Hello, everyone. Good
11 morning. I am CDR Monica Leonard. I'm
12 currently our acting branch chief of CDC's Lead
13 Poison Prevention and Environmental Health
14 Tracking Branch. It's a pleasure to join you
15 this morning.

16 I also want to introduce some other senior
17 leaders from our division. We have joining us as
18 well Dr. Erik Svendsen. He's our director of the
19 division of environmental health science and
20 practice. And also we have our Associate
21 Director for Policy joining us as well from our
22 division, Mrs. Amy Cordero.

23 Thank you all so much for joining. It's a
24 pleasure that we have our committee members on
25 board this morning, and we also want to welcome

1 those who are participating virtually. We have
2 partners who are also in the audience.

3 Perri.

4 **MS. RUCKART:** Okay. Thank you.

5 So I believe that covers all of the
6 introductions. I would now like to turn it over
7 to Dr. Breyse to give some opening remarks.

8 **DR. BREYSSE:** Thank you. And, once again,
9 good morning, everybody. It's a pleasure to be
10 here with you. So we're delighted to have you
11 all participate in our inaugural LEPAC meeting.
12 I would certainly have much preferred a chance to
13 meet you all face-to-face and, you know, have
14 some personal interaction. But we're doing the
15 best we can, and hopefully this will work out
16 just fine.

17 So I want to begin by acknowledging that CDC
18 is celebrating the 30th anniversary of the
19 Childhood Lead Poisoning Prevention Program this year. So
20 this has been a longstanding effort on the part
21 of CDC and the Center for Environmental Health.

22 The lead poisoning prevention program is one of the
23 flagship programs in the most important programs
24 in the National Center for Environmental Health,
25 and we're excited about getting some input and

1 some advice from you all as we take the program
2 into the future.

3 So the lead program and its partners
4 continue to work in a number of innovative ways
5 as we begin to think about how we shift the
6 program into a more primary prevention mode.
7 Over the past year, the lead program has
8 developed and continues to enhance what we call
9 the Lead Exposure Risk Index, or LERI. And this
10 index helps healthcare providers, policy makers,
11 gain a full understanding of the lead poisoning
12 at the local level, allowing you to target your
13 preventive efforts in those areas where the
14 biggest gain is to be made.

15 I'd also mentioned that earlier this month
16 the program published an article in *Environmental*
17 *Epidemiology* by Dignam, et al. This article
18 describes a new approach to quickly detecting
19 changes in surveillance patterns by using an
20 altering algorithm-developed method to assess
21 historical childhood blood lead data.

22 So one of the things we're trying to do is
23 we're -- if we're going to do surveillance right,
24 surveillance has to allow us to target our
25 efforts in a timely manner. So while -- if

1 the -- in Flint, for example, we were able to
2 look back a year-and-a-half later at the
3 surveillance data and say, oh, yes. We can see a
4 big signal here. It doesn't do the public a lot
5 of good if it takes us a year-and-a-half to use
6 our surveillance data to detect a signal.

7 So based on the experience in the Flint
8 case, we've asked a number -- we've asked the
9 program to be more proactive about how to use
10 surveillance data in a more timely manner and
11 this was one of the attempts we've made with
12 that. So you'll hear about good things like this
13 as we go forward.

14 So I'm going to try and be with you as much
15 as I can today. I have to duck out a couple of
16 times, but for the most part I'm happy to be here
17 through the day.

18 But there's just one other introduction I'd
19 like to make before we move on, and within CDC
20 we're organized such that the non-infectious
21 disease standards are all led by a single deputy
22 director, and that deputy director is Celeste
23 Philip. She's on the phone with us today.

24 So Dr. Philip oversees our work in the
25 Center for Environmental Health as well as CDC

1 standards that focus on the tracking in
2 preventing chronic diseases, birth defects and
3 injuries. Prior to taking her position at CDC,
4 Dr. Philip served in state and local health
5 leadership roles, including as health officer in
6 Sonoma, California and as the state Surgeon
7 General in Florida.

8 She's a physician who completed her
9 residency in preventive medicine, as well as a
10 former EIS officer.

11 And I want to just thank Celeste for joining
12 us this morning. And we may hear from her as we
13 go on if she wants to share some of her
14 experiences or insights based on her years of
15 working with childhood lead poisoning as we go
16 forward.

17 So I think I'll just stop there, and I want
18 to make sure we try and stay on schedule. So
19 again, thank you all for being here, and I look
20 forward to meeting and working with you over the
21 years. Cheers.

22 **MS. RUCKART:** Okay. Thank you.

23 This is Perri, again. Before we go into the
24 charge and purpose which will be
25 discussed by our chair, I just want to let

1 everyone know I was having some technical issues.
2 I'm going to try to connect through my computer
3 audio. So I'm going to lose you for a second.
4 That's okay. I'm familiar with the charge and
5 purpose. And then when I connect in, I'm just
6 going to double check that you can hear me.

7 So please bear with me, but now I'd like to
8 turn it over to Matt Ammon for the charge and
9 purpose. Thank you.

10 **CHARGE AND PURPOSE**

11 **MR. AMMON:** Thank you. I'll speak slow and
12 deliberate so that you have time to get back on.

13 So the Lead Exposure and Prevention Advisory
14 Committee was established by the Water
15 Infrastructure and Improvements for the Nation
16 Act of 2016, otherwise known as the WIIN Act;
17 having positive acronyms is always important.

18 The purpose of the LEPAC is to review
19 research and federal programs and services
20 related to lead poisoning and to identify
21 effective services and best practices for
22 addressing and preventing lead exposure in
23 communities.

24 The LEPAC is charged with, one, reviewing
25 the federal programs and services available to

1 individuals and communities exposed to lead;
2 reviewing current research on lead exposure to
3 identify additional research needs; reviewing and
4 identifying best practices or the need for best
5 practices regarding lead screening and the
6 prevention of lead poisoning; identifying
7 effective services, including services relating
8 to healthcare, education, and nutrition for
9 individuals and communities affected by lead
10 exposure and lead poisoning; and, finally,
11 undertaking any other review or activities that
12 the HHS Secretary determines to be appropriate.

13 LEPAC is also charged with submitting an
14 annual report -- pending funding availability, of
15 course -- to the HHS Secretary as well as various
16 committees in the Senate and the House. That
17 includes an evaluation of the effectiveness of
18 the federal programs and services available to
19 individuals and communities exposed to lead; an
20 evaluation of additional lead exposure research
21 needs; an assessment of any effective screening
22 methods or best practices used or developed to
23 prevent or screen for lead poisoning; input and
24 recommendations for improved access to effective
25 services related to healthcare, education, or

1 nutrition for individuals and communities
2 impacted by lead exposure; and, finally, any
3 other recommendations for communities affected by
4 lead exposure, as appropriate.

5 That is the complete charge and purpose as
6 well as other requirements related to reports
7 that we need to submit on an annual basis.

8 With that, I'll send it back to you, Perri.

9 **MS. RUCKART:** Actually, a little bit ahead
10 of schedule, and I do want to stick to the -- oh,
11 can everyone hear me? Can you hear me?

12 **UNIDENTIFIED SPEAKER:** Yes.

13 **MS. RUCKART:** Okay. Thank you. Because I
14 reconnected through my computer audio, I wasn't
15 sure there for a second.

16 So I do want to stick to the agenda times as
17 best as we can since we have speakers who will be
18 calling in or connecting in at their designated
19 time, and there may be audience members who only
20 want to -- are able to participate for certain
21 sessions. So we do have about 12 minutes if --

22 **DR. BREYSSE:** Perri, can I say a few more
23 words then?

24 **MS. RUCKART:** Yes. Yes. Please.

25 **DR. BREYSSE:** This is Pat. Yeah. So maybe

1 I can give a little bit more background if you
2 don't mind.

3 **MS. RUCKART:** Yes. Please go ahead, Pat.

4 **DR. BREYSSE:** So prior to the LEPAC, the
5 Center for Environmental Health received guidance
6 on lead through our Board of Scientific
7 Counselors. So the Board of Scientific
8 Counselors was a FACA committee that was
9 established to advise the leadership of the
10 Center for Environmental Health and the
11 leadership of ATSDR on their programs and their
12 issues and activities of the day.

13 And within that Board of Scientific
14 Counselors, we had a lead work group. And that
15 lead work group was charged with giving the
16 program advice on lead, giving the federal government advice
17 on lead, and helping us with lead activities
18 going forward.

19 Now, with the WIIN Act, as you heard,
20 Congress specifically asked us to establish the
21 lead-specific advisory committee which you are
22 all on today. And it's probably the timing, and
23 that worked out kind of well because at the same
24 time as that was happening, there was a move to
25 reduce the number of federal advisory committees

1 across the federal government and our board -- as
2 a result, our board of scientific counselors was
3 sunsetted. And when the board of scientific
4 counselors was sunsetted, our lead working group
5 sunsetted as well.

6 So I think it, actually -- you know, timing
7 worked out well. So as we are sunsetting one
8 group, we're setting up this group. So there's
9 continuity of advice and input with activities
10 that we're doing -- undertaking under lead with
11 the board of scientific counselors now
12 transitioning to the LEPAC.

13 So that's a bit of history that brings us to
14 where you are today and why this is a timely
15 meeting to be having. And we can answer any
16 questions you might have about that history as
17 well.

18 **MS. RUCKART:** Yes. And because -- this is
19 Perri, again. Because we have about 10 extra
20 minutes and we were not planning for this, if you
21 would like to make a comment, please introduce
22 yourself first, and --

23 Darcy, let me ask you. Do you think we
24 should use the chat function to recognize people
25 who want to speak?

1 **MS. PETH:** This is for attendees, audience
2 members? Not for panelists?
3 **MS. RUCKART:** Panelists.
4 **DR. BREYSSE:** Panelists.
5 **MS. PETH:** Okay. Yes. Either the chat
6 function or the raise-hand function.
7 **MS. RUCKART:** Okay. If there's anyone who
8 would like to make a comment or a question about
9 the charge, please use the chat function, and I
10 will call on you.
11 Darcy, help me out if I miss somebody coming
12 up in the chat and you see them.
13 (pause)
14 **MS. RUCKART:** Okay. Seeing no one who would
15 like to make a comment, I propose that we move on
16 to Dee Gardner for the new member orientation,
17 and if we have a few minutes before
18 Dr. Buchannan's presentation, we can take a very
19 quick five-minute break or so.
20 **MS. GARDNER:** Thank you, Perri.
21 Darcy, are you going to be showing my
22 slides?
23 **MS. PETH:** Yes.
24 **MS. GARDNER:** Okay. Those are not the slides
25 -- that's not the slide deck.

1 **MS. RUCKART:** Dee, this is Perri -- I
2 never received slides from you.

3 **MS. GARDNER:** Okay. I thought I shared
4 them. Okay. So let me -- I have them here.

5 **DR. BREYSSE:** You could share your screen if
6 you have them.

7 **MS. GARDNER:** I do have them. I tried to
8 share my screen, and it gave me a message saying
9 that you cannot -- okay. So if --

10 I guess, Darcy, if you can allow me to share
11 my screen?

12 **MS. RUCKART:** Or would it be best for her
13 just to e-mail it directly to you?

14 **MS. GARDNER:** Can you guys see it?

15 **MS. PETH:** Yes.

16 **MS. RUCKART:** Yes. Yes, that's pretty good.

17 **NEW MEMBER ORIENTATION**

18 **MS. GARDNER:** Okay. Excellent. Thank you.

19 Again, my name is Dee Gardner, and I am the
20 senior Committee Management Specialist. And I
21 work in the Federal Advisory Committee Act
22 Program which is part of the Chief Information
23 Officer Strategic Business Initiatives Unit.

24 Let's see. Let's see how -- okay. Here we
25 go. Okay. There we go. Okay. So this

1 presentation will highlight the key components of
2 the legislative foundation for advisory
3 committees. We'll talk about the Federal
4 Advisory Committee Act which provides the legal
5 foundation for establishing and managing federal
6 advisory committees. We'll talk about
7 congressional intent and the oversight and
8 management of advisory committees.

9 We'll also look at the administrative
10 aspects of committee management, which includes
11 establishing advisory committees; the advisory
12 committee's role; advisory committee meetings and
13 membership; and we'll also briefly discuss
14 subcommittees and work groups as well as the
15 advisory committee communication process.

16 Congress found that advisory committees are
17 a useful and beneficial means of furnishing
18 expert advice, ideas and diverse opinions to the
19 federal government. As a result, Congress
20 enacted FACA to do several things.

21 One, to ensure that new committees are
22 established only when they are -- were determined
23 to be essential; that committees provide advice
24 that is relevant, free of undue influence, and
25 open to the public; that uniform procedures

1 govern all aspects of federal advisory
2 committees; and that everyone has knowledge of
3 the purpose, membership, activities, and costs of
4 federal advisory committees. Finally, Congress
5 determined that advisory committees should be
6 terminated when they have fulfilled their
7 purpose.

8 The Federal Advisory Committee Act defines
9 oversight and management responsibilities.
10 Standing congressional committees review reports
11 of committee activities each year to determine
12 whether the committee performs a necessary
13 function not already being performed, whether the
14 committee be abolished or merged, or the
15 responsibility of the committee should be
16 revised.

17 The President delegated to the administrator
18 of GSA responsibility for oversight of all
19 federal advisory committees. GSA monitors
20 executive branch compliance with FACA. They
21 provide written guidance and FACA training. They
22 submit an annual comprehensive review for the
23 President's consideration and transmittal to the
24 Congress. Cabinet level department heads
25 establish administrative and management

1 guidelines for advisory committees to comply with
2 directives of the administrator of GSA.

3 These guidelines standardize the
4 establishment, procedures, and documentation of
5 advisory committee accomplishments and ensures
6 the public has accessibility to reports and
7 records and other papers of the committee.

8 Excuse me.

9 Federal advisory committees provide advice
10 and recommendations to federal officials on a
11 broad range of issues affecting federal policies
12 and programs. Committees allow the public the
13 opportunity to participate actively in the
14 federal decision-making process.

15 Federal advisory committees may be
16 established in two ways: by congressional or
17 presidential mandate or at the discretion of
18 agency's leadership. Mandated committees are
19 authorized by law or by presidential executive
20 order.

21 Discretionary committees are established
22 when an agency has determined a need for advice
23 and recommendations from experts who are not
24 federal employees. GSA must approve the
25 establishment of a discretionary committee.

1 The purpose of the advisory committee is
2 then memorialized in a charter. The agency
3 designates a federal official who is familiar
4 with the matters under consideration by the
5 committee to serve as a designated federal
6 officer. The DFO is responsible for the
7 day-to-day management of the committee and must
8 approve the meeting agendas, ensure notices of
9 meetings are published in the Federal Register,
10 and attend all committee meetings.

11 And last, the committee members are
12 appointed by the President or agency head and the
13 chair is designated. Most of CDC advisory
14 committee members are appointed by the Secretary
15 of the Department of Health and Human Services.

16 This slide shows the structure of federal
17 advisory committees. Federal advisory committee
18 membership must be balanced in terms of points of
19 view represented and the functions to be
20 performed by the committee. Members include
21 special government employees who are private
22 citizens who have the expertise or experience
23 needed by the committee. SGEs are subject to the
24 standards of ethical conduct for the employees of
25 the executive branch.

1 Ex officios are federal officials who
2 represent their agencies as subject matter
3 experts, and a committee may or may not include
4 ex officio members.

5 Committees may also include liaison
6 representatives. Liaisons represent special
7 interest groups, organizations, or affected
8 populations. And specifically for LEPAC, LEPAC
9 does not have any ex officios or liaison
10 representatives. They do have federal employees
11 who do serve on this committee.

12 The Federal Advisory Committee Act outlines
13 the requirements for holding advisory committee
14 meetings.

15 A meeting must -- a meeting notice must be
16 published in the Federal Register at least 15
17 days before the meeting to give the public
18 advance notification.

19 The notice must include the purpose of the
20 meeting, a summary of the agenda, time, location,
21 and public access information.

22 The designated federal officer must approve
23 the agenda and be present at all committee
24 meetings.

25 Members of the public must be given the

1 opportunity to speak or file a written statement.

2 Detailed minutes must be kept and made
3 available to the public.

4 And finally, official records generated by
5 or for an advisory committee must be retained for
6 the life of the committee, and upon termination
7 of the advisory committee, the records must be
8 processed in accordance with the Federal Records
9 Act and regulations issued by the National
10 Archives and Records Administration.

11 This slide briefly talks about subcommittees
12 and work groups. Committees sometimes need to
13 perform special tasks, and they form subgroups to
14 do this. We call these subcommittees or work
15 groups.

16 A subcommittee includes at least one SGE
17 member of the parent committee who serves as the
18 chair. A subcommittee provides work products
19 directly to the parent advisory committee for
20 deliberation, discussion, and decision.

21 HHS and CDC policy currently requires
22 compliance with open meeting requirements of
23 FACA.

24 Work group membership includes at least two
25 members of the parent committee or subcommittee.

1 The work group gathers information, they conduct
2 research, they analyze issues and facts and
3 report to the subcommittee or parent committee.
4 Work groups are not subject to FACA's open
5 meeting requirements.

6 This slide just gives some examples of some
7 CDC FACA committees. FACA committees provide
8 significant recommendations to the President and
9 federal agencies in the nation on a broad range
10 of issues.

11 CDC committees include the Advisory Board on
12 Radiation and Worker Health. This is CDC's only
13 presidential advisory committee. This board
14 provides advice on the development of guidelines,
15 scientific validity, and quality of dose
16 reconstruction efforts and possible radiation
17 exposure of employees -- at the Department of
18 Energy facilities.

19 The Healthcare Infection Control Practices
20 Advisory Committee provides advice and guidance
21 regarding the practice of infection control and
22 strategies for surveillance, prevention, and
23 control of healthcare-associated infections,
24 anti-microbial resistance, and related events in
25 healthcare settings.

1 This slide just shows a communication
2 pathway for advisory committee work products from
3 the committee all the way to Congress.

4 So a few things that you should take away
5 from this new member orientation today are two
6 summary points. First, that FACA ensures that
7 advice rendered to the executive branch by
8 advisory committees and their subgroups is
9 objective, accessible to the public, and
10 independent. And second, the advice and
11 recommendations your committee provides to CDC
12 will reach the highest levels of the U.S.
13 government.

14 This last slide just shows our contact
15 information. If there are any questions
16 regarding this presentation or if you have any
17 questions that relate to FACA, you can either
18 reach out to me or reach out to Perri, and Perri
19 will get those questions over to me so that we
20 can then get a response to you.

21 So Perri, I'll turn it back over to you.

22 **MS. RUCKART:** Okay. Thank you, Dee.

23 So again, we have a few minutes till
24 Dr. Buchannan's presentation.

25 I will ask if there's any comments or

1 questions for Dee while we have her here. Please
2 use the chat function, and I will recognize you,
3 for our panelists only.

4 (pause)

5 **MS. RUCKART:** I'm not seeing any messages
6 come in through the chat. I'll give it a few --
7 oh -- okay.

8 I'd like to recognize our chair, Matt Ammon.
9 Please go ahead.

10 **MR. AMMON:** Hi Perri. I just have a
11 question. And has it been typical in the past
12 that any other reports or the work of the
13 advisory committee be part of any congressional
14 testimony or ask any members or even the chair to
15 be part of a specific, you know, subcommittee's
16 testimony?

17 **MS. GARDNER:** This is Dee. Yes. That is
18 possible. I know that in the past, under the
19 advisory -- the old lead advisory committee,
20 there has been a request for testimony. I, you
21 know, cannot speak to whether that will be the
22 case for this particular committee. So it --
23 it's possible.

24 **MR. AMMON:** Thank you.

25 **MS. RUCKART:** Okay. Thank you, Dee.

1 Any other questions from our members?

2 (pause)

3 **MS. RUCKART:** I'll give it another minute.

4 If you do think of any questions later, please
5 just reach out to me -- this is Perri -- and we
6 can get them answered for you. I am speaking to
7 our LEPAC members.

8 (pause)

9 **MS. RUCKART:** Okay. Well, we are 10 minutes
10 ahead of schedule, and, as I mentioned, I do want
11 to stick to the times because we have people who
12 may be joining us because they want to hear
13 certain presentations or discussions.

14 So we will take a few minute break and
15 reconvene promptly at 10 a.m. It is now 9:50,
16 according to my clock.

17 (Break taken, 9:50 till 10:00 a.m.)

18 **MS. RUCKART:** Okay. It's 9:59. We have
19 just another minute or so.

20 (pause)

21 **MS. RUCKART:** Okay. It's 10:00 a.m. Let's get
22 started back up. I would now like to turn it
23 over to Dr. Sharunda Buchannan. She's going to
24 speak to us about key federal programs and the
25 Federal Lead Action Plan.

1 Dr. Buchannan.

2 **KEY FEDERAL PROGRAMS AND FEDERAL LEAD ACTION PLAN**

3 **DR. BUCHANNAN:** Good morning, again,
4 everyone. Hopefully everyone can hear me okay.

5 Thanks for the opportunity to talk to you
6 for just a few moment -- minutes this morning about
7 the Federal Lead Action Plan to Reduce Childhood
8 Lead Exposure and Associated Health Impacts. We
9 call it the Federal Lead Action Plan for short.

10 I realize that a number of our LEPAC members
11 may be very familiar with this plan, but there
12 may be others that are not. So that's to
13 actually present just a snapshot of what this
14 plan includes, and it's my honor to do so today.

15 The Federal Lead Action Plan was developed
16 by the President's Task Force on Environmental
17 Health Risks and Safety Risks to Children. It is
18 a roadmap or a blueprint, if you will, for
19 describing federal-wide actions to collectively
20 reduce childhood lead exposure and improve
21 children's health.

22 Next slide, please.

23 This presentation is for official business
24 use only. As we move forward in talking about
25 the Federal Lead Action Plan, I'd like to first

1 give you a little bit of background on the
2 President's Task Force on Environmental Health
3 Risks and Safety Risks to Children: who is it,
4 what is it, and what is its function.

5 Second, I will delve a little further into
6 the plan and how it was developed, including
7 outlining its vision, goals, and key priorities.

8 And then finally, I'd like to give you a
9 brief snapshot of where we are implementing the
10 plan and documenting our progress.

11 Next slide, please.

12 Allow me to take us all the way back to
13 April, 1997, when President Clinton issued an
14 executive order, 13045. This established the
15 President's Task Force on Environmental Health
16 Risks and Safety Risks for Children. This task
17 force serves as the focal point for federal
18 government agencies to scope, plan, and act
19 together to address children's environmental
20 health. Its key function is to recommend to the
21 president federal strategies for ensuring
22 children's environmental health and safety within
23 limits of the administration's budget.

24 The objectives of the task force are
25 threefold: First, to identify party issues of

1 environmental health and safety risks to
2 children that can best be addressed by federal
3 interagency efforts; two, to recommend and
4 implement interagency actions to protect and
5 promote children's environmental health and
6 safety; and then third, to communicate with
7 federal, state, local, and tribal decision-makers
8 to protect children from environmental health and
9 safety risks.

10 Next slide, please.

11 The President's task force, as you can see
12 here, consists of 17 federal members. The
13 Environmental Protection Agency, EPA, and the
14 Department of Health and Human Services, HHS,
15 serve as co-chairs.

16 I'd like to acknowledge Dr. Sandy Howard, I
17 believe who's in the audience, that serves as the
18 chair on the HHS side, as well as Dr. Jeanne
19 Briskin from EPA who is currently a LEPAC member.

20 Next slide, please.

21 A lead subcommittee was established under
22 the President's task force within the Department
23 of Health and Human Services, CDC, the
24 Environmental Protection Agency, and the Department
25 of Housing and Urban Development. All serve as

1 co-chairs. The lead subcommittee spearheaded the
2 actual writing of the strategy with input from
3 the steering committee and member agencies.

4 Next slide, please.

5 Right around the same time as the lead in
6 water contamination crisis was in full swing in
7 Flint, Michigan, the President's task force began
8 to consider the fact that though we had done a
9 great job and made great strides in reducing
10 childhood lead poisoning as a public health
11 issue; we still had a ways to go.

12 In fact, eliminating childhood lead
13 poisoning, a federal strategy targeting lead
14 paint, completed in 2000, was the last strategy
15 that the President's task force could actually
16 point to. This document focused primarily on
17 expanding efforts to correct lead paint hazards,
18 especially in low-income housing. It included a
19 set of recommendations to eliminate childhood
20 lead poisoning in the U.S. over a 10-year time
21 frame.

22 Of course, with the issues emanating from
23 those happening in Flint, Michigan, this
24 highlighted our need to consider and focus not
25 only on lead paint in housing but also additional

1 sources like water and other things.

2 Next slide, please.

3 In 2016, federal agencies came together
4 again to produce the document "Key Federal
5 Programs to Reduce Childhood Exposure and
6 Eliminate Associated Impacts." This compendium of
7 federal lead-related activities and programs
8 serve as a foundational document for an updated
9 Federal Lead Action Plan. It's focused on
10 current and planned activities to reduce childhood
11 lead exposure as over 58 federal programs and
12 efforts were identified.

13 I also provided here a link for those who
14 would like to go and delve into this particular
15 publication a little bit more deeply.

16 Next slide, please.

17 In the winter of 2016-2017, the President's
18 task force began the process of developing an
19 updated federal action plan to address childhood
20 exposures more broadly. We received a broad
21 range of public comment and worked to address
22 most of these comments in our deliberations and
23 planning.

24 The action plan has the highest level of
25 support, including the deputy secretary of HHS,

1 the administrator of the EPA, the secretary of
2 HUD, and other agency principals. They all met
3 in February of 2018 and agreed on the goals of
4 the plan.

5 In the spring of 2018, agency partners
6 committed to specific action. Following
7 interagency and OMB review, the Federal Lead
8 Action Plan was finally released in 2018 of
9 December.

10 Next slide, please.

11 What's the vision of our action plan? The
12 vision, as you can see here, is for the country
13 to become a place where children, especially
14 those in vulnerable communities, live, learn, and
15 play protected from the harmful effects of lead
16 exposure.

17 Our mission is to improve the health of
18 children in the U.S. by eliminating harm from
19 lead exposure through federal collaboration.

20 Next slide, please.

21 We all agreed upon four main goals of the
22 Federal Lead Action Plan: Goal one, to reduce
23 children's lead exposure to lead sources; two, to
24 identify children in high-risk communities and
25 improve their health outcomes; three, to

1 communicate more effectively with stakeholders;
2 and, finally, number four, to support critical
3 research areas.

4 Next slide, please.

5 For each of the goals that are presented in
6 the Federal Lead Action Plan, we also documented
7 key priorities. For Goal 1 -- and I point your
8 attention to the key priority under this goal.
9 It is to reduce children's exposure to lead-based
10 paint, lead service lines, contaminated drinking
11 water, and contaminated soil.

12 Next slide, please.

13 Under Goal 2, to identify children in
14 high-risk communities and improve their health
15 outcomes, the key priority for this particular
16 goal is to improve identification of children
17 exposed to lead and assure linkages to follow-up
18 services through patient-centered medical homes
19 in a coordinated system of care.

20 Next slide, please.

21 Goal 3, communicate more effectively with
22 stakeholders. We want to consolidate as a key
23 priority and streamline federal messages to
24 improve public awareness of the dangers
25 associated with lead exposures and to prompt

1 actions.

2 We want to make sure that we're all on the
3 same page when we're talking about lead and what
4 needs to be done to reduce and/or eliminate that
5 in the future.

6 Next slide, please.

7 Goal 4, we'd like to support critical
8 research to inform efforts to reduce lead
9 exposure and related health effects. Key
10 priority under this particular goal, prioritize
11 and address the critical research needs,
12 including lead research and data needs identified
13 by the states and tribes for informing policies
14 and gaps in knowledge.

15 Next slide, please.

16 This action plan exemplifies an outstanding
17 interagency collaboration and synergistic
18 efforts. And while it naturally describes only
19 federal activities, we realize that these
20 activities are informed and encouraged by
21 partnerships and connections with nonfederal
22 stakeholders including states, locals, tribes,
23 tribal governments, nonprofits, professional
24 organizations, advocacy groups, businesses, and
25 many others.

1 As we continue to improve blood lead
2 screening rates, identify high-risk populations,
3 and ensure effective follow-up for children, our
4 stakeholders will help us to establish the goals
5 and reach the objectives that we'd like to do
6 over the course of the next few years. They play
7 an essential role in helping us measure our
8 collective progress in protecting children from
9 lead exposure and associated health effects.

10 Next slide, please.

11 I'd like to talk a little bit about the
12 progress to date. Following development and
13 release of the Federal Lead Action Plan, each
14 individual agency at the departmental level has
15 initiated development of implementation plans.
16 Collectively, a number of us met last December,
17 December 19, to discuss ongoing and future
18 research plans in a two-day federal research
19 workshop.

20 The lead subcommittee is spearheading
21 development of a progress report. And the report
22 with a number of highlighted activities is
23 expected to be debuted during the Lead Poisoning
24 Prevention Week in October.

25 Next slide, please.

1 We at CDC look forward to a day when
2 children's exposure -- and I'm sure all of us
3 here, when lead can be eliminated from children's
4 environment. And in the interim we believe that
5 the work of LEPAC will go and contribute a long
6 way to advancing these goals.

7 This meeting has definitely great merit and
8 we would like to hear from not only the LEPAC
9 panelists but also the CDC panelists and really
10 hear how they believe that the research and the
11 goals of the Federal Lead Action Plan actually
12 complement what this LEPAC group will set out to
13 do in the near future.

14 With that, I'll turn it back over to you,
15 Perri.

16 **MS. RUCKART:** Okay. Just needed a second to
17 unmute myself.

18 So we do have about 15 minutes or so before
19 the next scheduled presentation, and as I've
20 said, we really want to stick to those times so
21 that people who are joining for particular
22 sessions don't miss those.

23 We do have some time scheduled for questions
24 after our morning break, but I believe now would
25 be a good time to take a few questions from the

1 panelists. If you'd like to raise your hand, we
2 can recognize you. Or if -- comments or
3 questions.

4 (pause)

5 **DR. BREYSSE:** This is Pat. If I could jump
6 in just for a minute?

7 **MS. RUCKART:** Yes, please.

8 **DR. BREYSSE:** So I want to focus on that
9 last slide for a minute. And I think we all
10 recognize that we've known about the hazards of
11 lead, particularly the children, but across the
12 whole lifespan, for a long, long, long, long,
13 long, long time. We've also known about the
14 presence of it in our environment. We know how
15 people are exposed. It's in the workplace, in
16 our homes, in the air as we play. We know where
17 lead is in the environment and we know how it
18 comes into contact with people and we know how
19 people can be burdened by it. And we've known
20 about that for a long, long time.

21 And so what I would like to hear from the
22 panelists is some thoughts about how do we shift
23 society now to eliminating hazardous sources of
24 lead from our environment. We want -- we
25 could start with children, but if we protect

1 children, we'll protect across the lifetime.

2 So why are we still dealing with this
3 problem today? And what do we need to do to
4 shift the discussion to commitment -- to a
5 commitment to actually making it happen? We've
6 been managing this issue as best we can for
7 decades. When are we going to stop trying to
8 manage it and when are we going to move towards
9 eliminating lead from -- hazardous sources of
10 lead from children's environment?

11 Now, I don't mean we get rid of lead.
12 Lead's a naturally occurring element. We all
13 know that there'll always be some naturally
14 occurring lead. But sources of lead from manmade
15 activities that create hazards for children's
16 environment, we need to begin to shift the
17 discussion.

18 And I know there are places like in Flint,
19 Michigan, because of the problem there, they're
20 trying to make Flint be a lead-free city.
21 There's a growing lead-free cities initiative
22 across the country. The lead-pipe collaborative
23 is trying to get rid of lead pipes across the
24 country.

25 What do we need to do to kind of harvest the

1 public health energy that we all bring to the
2 table to make this happen and commit the country
3 to once and for all eliminating lead? Otherwise
4 we'll still be managing it, you know, for the
5 next fifty, hundred years. It will always have
6 pockets of risk that will crop up.

7 So I think I'll just stop there and see if
8 anybody wants to react.

9 **MS. RUCKART:** Okay. I will be monitoring
10 the chat to see if there are any panelists who
11 would like to speak.

12 (pause)

13 **MS. RUCKART:** We have about 13 minutes till
14 the next presentation.

15 **DR. BREYSSE:** You don't have to be shy.

16 (pause)

17 **DR. RYER-POWDER:** Hello?

18 **MS. RUCKART:** Okay. I would like to
19 recognize Dr. Ryer-Powder. She has raised her
20 hand.

21 **DR. RYER-POWDER:** Yes. Yeah. This is Jill
22 Ryer-Powder. So I do a lot of work in human
23 health risk assessment with -- I do a lot of lead
24 contaminated sites. So just from my standpoint,
25 there's a lot of sites out there that -- where

1 there's residential communities that are -- have
2 soil contamination with lead, but they're from
3 former operations, and they're kind of in the
4 process of figuring out how to clean them up and
5 what standards to clean them up to.

6 So my take on this -- I know in California
7 we have a pretty stringent lead standard of
8 80 milligrams of lead per kilogram of soil. But
9 if you look across the states and even at the
10 USEPA level, there's a lot of different levels.

11 So I would make some kind of proposal that
12 somehow to get all the states and the USEPA on
13 the same page as to a conservative and
14 health-based level of lead in soil that everyone
15 can agree upon and make sure sites are being
16 cleaned up to that level.

17 **DR. BREYSSE:** So this is Pat. If I could
18 just maybe -- that's a great point to discuss.

19 I just want to remind people that, you know,
20 the CDC and the lead program were non-regulatory.
21 Part of the reason why the LEPAC has
22 representatives from HUD and EPA and other
23 federal agencies is if we know that if we want to
24 be effective, we have to coordinate and harmonize
25 our activities with other federal agencies.

1 That's why they're here.

2 But, you know, we would not -- the CDC would
3 not, you know, play a regulatory role in that
4 sense, although we would support any effort to
5 kind of harmonize things and makes things work
6 better going forward.

7 So I just wanted to make sure that's clear.
8 And if anybody else wants to add their thoughts
9 to that comment, go ahead now.

10 **MS. RUCKART:** Okay. Well, Wallace Chambers
11 has raised his hand, so I'd like to recognize
12 him, and then we'll just kind of go in order. I
13 think that will help manage the comments that
14 come in. Okay?

15 **MR. CHAMBERS:** Yes. I was -- as Pat was
16 asking that question, I was reading some of the
17 materials, and I was wondering myself, as far as
18 the differences of how each -- every state
19 handles lead poisoning at the local level. I was
20 thinking maybe we could be more upstream and
21 develop local policies or nuisance laws to
22 address lead poisoning.

23 For instance, I was reading about how
24 Mississippi had a problem with multiple children
25 getting lead poisoning because there's really no

1 laws requiring inspection and treatment of units
2 identified with lead hazards. And here in Ohio,
3 when we've identified a house with lead hazards,
4 if the owner at some point in time doesn't do
5 anything or it becomes vacant, we initiate
6 placarding the property so it won't be re-rented
7 to children under the age of six, or anybody for
8 that matter in some cases.

9 So I was just wondering, you know, some of
10 the things we can do may be more of a local level
11 to be more stringent and attack that from a
12 nuisance abatement standpoint. Thanks.

13 **MS. RUCKART:** Okay.

14 Next, I'd like to recognize Karla Johnson.

15 (no response)

16 **MS. RUCKART:** Karla?

17 **MS. JOHNSON:** Sorry. I had to -- I'm sorry.
18 I had to unmute myself.

19 **MS. RUCKART:** Yes. Yes.

20 **MS. JOHNSON:** I was thinking about when we
21 look at how do we stop managing this problem,
22 move into the next phase of, you know,
23 elimination or, you know, really addressing the
24 children who have lead poisoning. And I think a
25 lot about the messaging of this. And I've been

1 doing this for several years, many years, and I
2 remember very early on when I was doing this how
3 we framed it, at least from where I am, in a way
4 that, you know, you're going to be, you know,
5 you're more likely if you're minority, if you're
6 lower income, if you -- there were all of these
7 things that if someone can eliminate themselves
8 from that category, then they will just go ahead
9 and, you know, not really consider themselves a
10 problem and maybe not address the issue.

11 When I think about how do we move this
12 forward to the next step, it's really about
13 messaging. This has to -- we have to let
14 everyone know how it is a concern for everyone.
15 People are more motivated when it hits home.
16 Because if we look at any number of things that
17 are happening in the world today, and the
18 motivation that moves people is when it feels
19 like it's a threat that's going to come home,
20 and, you know, impact them.

21 I think we need to look at the messaging and
22 make it everybody's problem. When everybody has
23 a problem, then they're going to be motivated to
24 address it. Then we look at it from, you know, a
25 legislative standpoint, and we can address it

1 legislatively as well. But I think the messaging
2 has to be: This is a concern for everyone and how
3 does it impact you? Or how does it impact your
4 children? How does it impact society? Why
5 should you be concerned? And at that point, then
6 those people are the ones that move their
7 lawmakers. And they're willing to put their
8 money behind it.

9 **MS. RUCKART:** Okay. Thank you. We have six
10 minutes. I'd like to go to Nathan Graber.

11 **DR. GRABER:** Okay. So I think -- going back
12 to Pat's original question, I think it's a really
13 big question. It's not simple because the
14 problem with lead exposure, it's very complex.
15 It's throughout the life cycle. It's from before
16 birth until well into late adulthood.

17 And we focused a lot on secondary prevention
18 for a lot of the time which is relying on
19 surveillance programs to inform us. What are the
20 sources of lead that are most prevalent? And we
21 know from that experience that the most effective
22 way to address the lead problem is through
23 primary prevention.

24 I don't think we can give up secondary
25 prevention. I think the two of them have to work

1 together and the most effective way to do that is
2 local knowledge because the sources of lead --
3 it's still predominantly, you know, lead-based
4 paint in older homes for -- through the majority
5 of exposures, and we need well-funded, you know,
6 comprehensive programs at the local level to --
7 with consistent and regular enforcement with
8 strong local policies in order to eliminate those
9 sources of lead.

10 One of the things that you said in your --
11 prior to your -- in your leadoff to your question
12 was that we know that lead is natural, naturally
13 occurring. But the reality is lead is naturally
14 occurring but not at the levels that we see in
15 the environment. The levels that we see in the
16 environment are entirely because of human
17 activities. All right?

18 And if we're going to make -- if we're going
19 to make a big difference, we have to continue to
20 drive down blood lead levels, all right. And the
21 way we do that is by eliminating those sources of
22 lead that are in the environments where kids
23 live, where kids learn, where they play, but also
24 for the adults in those environments and the
25 adults in their workplaces as well.

1 **MS. RUCKART:** Okay. We have four minutes.
2 I would like to recognize Dr. Howard Mielke and
3 then see if we have anyone else and then get back
4 on the agenda.

5 (inaudible)

6 Howard, did you wish to speak?

7 **DR. MIELKE:** Okay. I got it.

8 **MS. RUCKART:** Thank you.

9 **DR. MIELKE:** The emphasis that has often
10 been part of our commentary on lead has been, of
11 course, lead-based paint. And it is a very large
12 and high concentration of lead within paints,
13 especially the older paints that were, you know,
14 commonly used from -- before the 1940s and maybe
15 into the '50s.

16 But the other source that is far more
17 invisible and far more insidious was the use of
18 lead in gasoline. And that accumulated in the
19 city in a pattern according to traffic flows.
20 And all this lead became a legacy within our
21 cities. That turns out to be a legacy within
22 especially the older, more traffic-congested
23 parts of the city.

24 And I've been thinking about this for many
25 years. And one of the problems that we had is

1 that the lead industry was very effective at
2 convincing the public that the source of lead was
3 from paint, not from their product, from
4 tetraethyl lead of the Ethyl Corporation. And
5 they had an undue influence in even setting the
6 400 parts per million standard that is currently
7 part of what we're dealing with.

8 At that time, in this -- for the city of New
9 Orleans, we were looking at the exposure of
10 children in relationship to the amount of lead in
11 the soil. And we saw that, at that time, when
12 the guideline was 10 micrograms per deciliter,
13 that 80 parts per million was pretty safe. For
14 most children living in areas of the city where
15 children were playing, their blood lead levels
16 tended to be well below 10 if the amount of lead
17 in the soil was 80.

18 Well, that now has changed enormously, and
19 we're really not paying enough attention to the
20 legacy within the soil compared to, I mean, air
21 and water, and we need to deal with all of
22 them -- air, water and soil -- and that's --
23 would be part of what I think is a move forward
24 towards primary prevention.

25 **MS. RUCKART:** Okay.

1 **DR. BREYSSE:** Great.

2 Howard -- can I say a few words, if you
3 don't mind Sharunda -- I mean Perri? If I jump
4 in, real quick before we move on?

5 **MS. RUCKART:** Sure.

6 **DR. BREYSSE:** So I agree with everything
7 everybody said. But, Howard, I just want to be
8 careful about something because we're going to
9 want you guys to help us think about the role of
10 CDC's reference value and the role it plays --
11 and you referred to it, and I just want -- I just
12 want to be careful, and I know you were just
13 speaking generally, but you refer to it as a
14 blood lead standard.

15 It's not a standard. If you -- and it's a
16 -- it's really a tool to use in surveillance, and
17 so we're going to ask you to help us think
18 through about, you know, what our reference value
19 is, how we establish it, how should it be used,
20 and should it be a driver for regulatory or not.
21 We don't think it should.

22 But oftentimes people will say things like,
23 EPA's and CDC's regulations don't agree with one
24 another. Well, that's not really correct because
25 remember, we're non-regulatory. And EPA and HUD,

1 they have a regulatory burden that they fulfill
2 and we support them as best we can, but we don't
3 mean to, you know, get involved with -- interfere
4 with their activities in any way. And we're
5 going to periodically ask us to step back and --
6 and what you're trying to do here is give CDC
7 advice on how -- what we do and how we fit in.

8 Now, obviously, it touches on some of the
9 other agencies, but I don't want to spend a lot
10 of time thinking about, you know, what EPA can do
11 better, what HUD could do better. We need to
12 understand what they're doing or why they're
13 doing it and how that affects what we do. But
14 you're primarily here to advise us. Us, being
15 CDC and HHS on the lead programs.

16 So just a couple of things. I just want to
17 parameterize for us, if you don't mind, before we
18 move too far along. We're going to get into all
19 this stuff in a lot more detail as this committee
20 moves forward. So thank you.

21 **MS. RUCKART:** Thank you.

22 **DR. MIELKE:** Thank you.

23 **CDC'S ROLE IN LEAD POISONING PREVENTION AND LESSONS**
24 **LEARNED**

25 **MS. RUCKART:** So it is now 10:31. I am

1 going to move on to the next presentation. I do
2 see that two other people had wanted to speak and
3 we will circle back to you at the next
4 opportunity to do that.

5 Good morning, again. I'm Perri Ruckart, and
6 I'm going to discuss CDC's role in childhood lead
7 poisoning prevention and lessons learned.

8 Next slide, please.

9 Overall U.S. population blood lead levels,
10 as evidenced by NHANES data, have declined over
11 time. This is due in large part to successful
12 federal policies and in controlling sources of
13 lead in the environment, including the removal of
14 lead from gasoline, paint, plumbing fixtures and
15 consumer products. These data are generated in a
16 collaboration between CDC's National Center for
17 Health Statistics and NCEH's Division of
18 Laboratory Sciences which runs the national
19 biomonitoring program and produces the national
20 exposure report on U.S. population exposures to
21 over 300 chemicals.

22 And this graph shows the overall trends in
23 geometric mean blood lead levels in U.S.
24 children, age one to five, which has declined
25 from 15 micrograms per deciliter in the late

1 1970s to less than one microgram per deciliter in
2 the most recent four years of NHANES. This
3 represents a 94 percent decrease over time.

4 This success was heralded as one of the top 10
5 greatest public health achievements in the U.S.
6 for the first decade of the new millennium.
7 Unfortunately, as a result, childhood lead
8 poisoning prevention was subsequently defunded by
9 Congress in 2012 which virtually eliminated the
10 program at that time.

11 Next slide, please.

12 And we have been quite successful in meeting
13 the Healthy People 2020 Objectives with respect
14 to reducing blood lead levels in children
15 overall. The following Healthy People 2020
16 Objectives have been exceeded: EH 8.1, which is
17 to reduce blood lead levels in children in the
18 97.5th percentile for ages one to five, and EH 8.2,
19 to reduce the mean blood lead levels in children
20 -- geometric mean for children ages one to five
21 years.

22 And as I showed earlier, the nationally
23 representative NHANES data have been
24 instrumental in monitoring effectiveness of U.S.
25 policies around preventing exposure to lead at

1 the population level. However, it has become
2 increasingly difficult to use these data to
3 highlight the ongoing problem of lead exposure
4 facing U.S. children today due to the small
5 number of children tested for lead in NHANES and
6 the inability to make local inferences.

7 Next, please.

8 However, significant disparities in blood
9 lead levels by geographic location, race,
10 ethnicity and poverty still exist. There are
11 many locations throughout the U.S. with
12 significant numbers of children with lead
13 exposure. The figure on the left illustrates the
14 estimated geographic distribution of children
15 with blood lead levels greater than or equal to
16 the current CDC blood lead reference value of
17 five.

18 In addition, on the right you can see
19 the relative disparities and the percent of
20 children with elevated blood lead levels by race
21 and ethnicity and poverty status.

22 Well-established risk factors for lead
23 exposure include living in older housing, living
24 in poverty, and being of non-Hispanic black race
25 ethnicity.

1 Next slide, please.

2 CDC has a long-standing role in childhood
3 lead poisoning prevention. CDC has defined
4 criteria to interpret blood lead levels in
5 children since 1975. And this slide shows how
6 the terms, definitions, and interpretations of
7 what is considered childhood lead poisoning have
8 changed and declined over time from a high of 60
9 micrograms per deciliter in the 1960s to the
10 current level of five.

11 And I want to note that it is currently
12 recognized that there's no safe level of lead in
13 children's blood. Even low levels of lead in the
14 blood have been shown to affect IQ, the ability
15 to pay attention and academic achievement. But
16 the good news is that childhood lead poisoning is
17 100 percent preventable.

18 Next slide, please.

19 And this slide shows milestones in CDC's
20 Childhood Lead Poisoning Prevention Program
21 which, as you heard, is celebrating its 30th
22 anniversary this year.

23 Since 1991, the Department of Health and
24 Human Services, HHS, released a strategic plan
25 for the elimination of childhood lead poisoning

1 that called for development of a nationwide
2 surveillance system and set forth a comprehensive
3 agenda to eliminate childhood lead poisoning.

4 In the early 1990s, CDC strongly recommended
5 screening by blood lead testing for virtually all
6 children age one to five years and that all
7 children under the age of two years be screened
8 at least once. And CMS adopted these universal
9 screening requirements for Medicaid enrolled
10 children as part of a 1993 settlement of a
11 nationwide class-action lawsuit charging the
12 federal government with failing to implement
13 appropriate lead testing. But despite a renewed
14 focus on lead poisoning prevention in the early
15 to mid-1990s, universal screening was not
16 achieved.

17 In 1995, elevated blood lead levels became
18 the first noninfectious condition added to CDC's
19 notifiable disease surveillance system. And as a
20 result of HHS's strategic plan, CDC supported
21 state and local health departments to develop and
22 sustain robust, comprehensive childhood lead
23 poisoning prevention programs, including blood
24 lead screening and case management.

25 And in 1997, CDC initiated a childhood blood

1 lead surveillance data collection with 10
2 participating states.

3 Also in 1997, CDC recommended targeted
4 screening efforts to focus on high-risk
5 neighborhoods and children based on local factors
6 such as age of housing and other
7 socio-demographic risk factors to improve
8 surveillance and targeting of these high-risk
9 children.

10 Unfortunately, by the time the events of the
11 Flint water crisis came to light in 2014 and
12 2015, lead poisoning prevention had already been
13 declared a public health success and the program
14 was essentially defunded by Congress in 2012, as
15 I previously mentioned. The increased national
16 attention in the aftermath of Flint created new
17 interest and investment in developing capacity
18 that had been lost as a result of the program
19 being defunded.

20 And in 2017, CDC was able to fund 39 states
21 plus D.C. to collect blood lead surveillance
22 data.

23 Next slide, please.

24 And part of the long-term recovery efforts
25 in the aftermath of Flint included passage of the

1 Water Infrastructure Improvements for the Nation,
2 or WIIN Act. This legislation authorized HHS
3 agencies to take actions to support the Flint
4 recovery and put infrastructure in place to
5 assist lead poisoning prevention programs. CDC
6 received \$35 million to, one, enhance childhood
7 lead poisoning prevention program activities;
8 two, support the development of a voluntary Flint
9 lead exposure registry; and, three, establish a
10 new lead exposure and prevention advisory
11 committee, the LEPAC, under the requirements of
12 the Federal Advisory Committee Act, or FACA, of
13 October, 1972.

14 Next slide, please.

15 CDC's Childhood Lead Poisoning Prevention
16 Program, or CLPPP, in partnership with federal,
17 state, and local health agencies, aims to
18 eliminate childhood lead poisoning as a public
19 health problem. Through our cooperative
20 agreement program, we currently fund 42 states,
21 five counties, five large cities, and the
22 District of Columbia to conduct blood lead
23 surveillance activities and to develop programs
24 and policies. And you can see our vision and
25 mission on this slide.

1 Next slide, please.

2 The CDC CLPPP has four core program
3 strategies under its existing cooperative
4 agreements, EH18-1806 and EH17-1701, and they're
5 listed here on this slide. We had planned to put
6 out a new competitive notice of funding
7 opportunity, or NOFO, in spring 2020, to
8 increase the reach of our national surveillance
9 program. However, the new NOFO was canceled due
10 to COVID-19 and the previous two NOFOs were
11 extended for another year. We anticipate putting
12 out the new NOFO next spring instead.

13 Next slide, please.

14 CDC has had various funding opportunities
15 for state and local health departments related to
16 lead-poisoning prevention, and each funding
17 opportunity contained different priorities.
18 Shifting priorities were linked to changes in the
19 types of information collected and received. And
20 this slide shows our cooperative agreements
21 dating back to 2006 through 2017.

22 Next slide.

23 This map shows the 53 programs currently
24 funded by CDC to conduct childhood lead poisoning
25 prevention and surveillance activities. As

1 mentioned, it's 42 states, five large cities,
2 five counties, and D.C. Data are de-identified
3 before being shared with CDC. Each state has its
4 own legislation for blood lead testing and
5 reporting to state health departments. And case
6 definitions and follow-up action levels vary from
7 state to state.

8 Next slide.

9 And this slide shows data from funded
10 programs on childhood blood lead testing rates.
11 The percentage of children less than six years of
12 age who were tested was lowest in 2018.

13 Next slide.

14 As mentioned previously, elevated blood lead
15 levels were designated as the first noninfectious
16 condition to be notifiable to CDC in 1995, and in
17 1997 CDC's CLPPP began collecting blood lead
18 surveillance data on children less than 16 years
19 of age from state and local health departments on
20 a voluntary basis.

21 This slide shows an overview of the blood
22 lead surveillance data submitted to CDC over
23 time. The red line indicates the trend for
24 confirmed blood lead levels greater than or equal
25 to 10 micrograms per deciliter and the green line

1 indicates the trend for blood lead levels between
2 5 and 9 micrograms per deciliter, both as a
3 percent of children tested.

4 Now, as you can see, these have
5 substantially decreased over time. The blue bars
6 show the decrease in blood lead tests on
7 individual children reported to CDC and that
8 corresponds to when the program was defunded in
9 2012. The decline corresponds.

10 Next slide, please.

11 There is no syndromic surveillance method
12 currently applied to childhood blood lead
13 surveillance in the United States or other
14 countries. State surveillance databases are
15 potentially underutilized. Most are used to
16 create periodic reports.

17 However, as Dr. Breysse mentioned, CDC lead
18 program staff published a paper earlier this
19 month in Environmental Epidemiology that
20 describes a new validated alerting algorithm to
21 rapidly analyze children's blood lead
22 surveillance data and alert health department
23 authorities to potential spikes of elevated blood
24 lead levels that require public health
25 investigation.

1 Application of this algorithm has the
2 potential to enhance the childhood lead poisoning
3 prevention surveillance landscape to potentially
4 mirror infectious disease syndromic surveillance.
5 And the article describes the successful
6 evaluation of the method on data from 20 U.S.
7 counties and jurisdictions.

8 The methods apply signal detection to blood
9 lead surveillance data to improve the recognition
10 of patterns, such as spikes and reports of
11 elevated blood lead levels, and this graph shows
12 monthly trends in blood lead levels over time for
13 Flint, Michigan.

14 Next slide, please.

15 And in addition to programs at the state and
16 local level, there are many cross-activities
17 related to lead around CDC as shown on this
18 slide. And most, if not all, are located within
19 our center of the National Center for
20 Environmental Health.

21 Next slide, please.

22 CDC's CLPPP has partnered with ATSDR's
23 Geospatial Research Analysis and Services Program
24 called GRASP to create a tool to help public
25 health officials, healthcare providers and the

1 general public identify and map community risk
2 for lead exposure.

3 And as Dr. Breysse mentioned, this tool is
4 called the lead exposure risk index, or LERI, and
5 it uses U.S. Census data and other source -- data
6 sources to determine the lead exposure risk for
7 every census tract.

8 And census tracts are subdivisions of
9 counties for which the Census collects
10 statistical data. The LERI ranks each tract of
11 potential risk factors, including age of housing,
12 poverty, race ethnicity, population density,
13 ambient air levels of lead, presence of lead in
14 soil, no-lead sites and other relevant factors,
15 and groups them into related themes such as
16 housing, socioeconomic status, and environmental.

17 As of 2016, there were 74,023 census tracts.
18 Census tracts are small relatively permanent
19 statistical subdivisions of a county or county
20 equivalent and generally have a population size
21 between 1,200 and 8,000 people with an optimum
22 size of 4,000 people.

23 The current LERI draft is additive and
24 percentile ranked with no weighting of the
25 individual factors that make up the index.

1 Percentages for each variable in a census tract
2 are calculated and each census tract is
3 percentile ranked. Percentile rankings for each
4 of the three themes are calculated by summing
5 over the variables in each theme. For example,
6 percentile rankings for the five
7 socio-demographic variables are sums.

8 An overall ranking for all census tracts is
9 calculated by summing percentiles across all
10 eleven variables. And this results in overall
11 LERI values ranging from zero to one.

12 Currently, we are working on validating the
13 model and building the user interface.

14 Next slide, please.

15 Additionally, we fund the Flint Lead
16 Exposure Registry. To date, there are over
17 27,000 individuals pre-enrolled, over 9,600 have
18 been fully enrolled, and there have been over
19 6,800 referrals to services, and these numbers
20 are growing. More information is available at
21 flintregistry.org.

22 The registry also includes Flint Lead-Free
23 with the goal of eliminating lead exposure in
24 Flint by 2022 and over 9,500 lead service lines
25 have been replaced so far.

1 Next slide, please.

2 Each year at the end of October, NCEH and
3 ATSDR partner with HUD and EPA to participate in
4 National Lead Poisoning Prevention Week, NLPPW.
5 Established in 1999 by Congress, last year, 2019,
6 marked the 20th anniversary of NLPPW's call to
7 increase awareness of lead poisoning prevention,
8 provide resources, and encourage action during
9 this week and beyond. In support of this
10 outreach, the federal partners developed a toolkit
11 with lead poisoning information, guidance for
12 creating localized outreach, customizable
13 materials, talking points and social media
14 messages among other resources.

15 CDC shared the toolkit with stakeholders
16 and cooperative agreement recipients to support
17 their outreach efforts. And from October 20th to
18 26th, 2019, CDC, along with their cooperative
19 agreement recipients, and ATSDR, HUD, EPA, state,
20 tribal, and local governments and other
21 organizations, individuals, and industry
22 converged on social media. This effort
23 heightened awareness about why and how to prevent
24 lead poisoning and its serious health effects.

25 On October 22nd, NCEH/ATSDR's health

1 communicators participated in the National Center
2 for Healthy Housing-led NLPPW Twitter chat.
3 Last year's chat reached nearly 130,000 unique
4 Twitter users, with total estimated potential
5 views of nearly 1.5 million and more than 1,000
6 likes.

7 Next slide, please.

8 In addition to our NLPPW partnership, we had
9 many strategic partners (indiscernible) to help
10 in these efforts. Dr. Buchannan just spoke about
11 some of these, such as the President's Task Force
12 on Environmental Health Risks and Safety Risks to
13 Children and our lead elimination efforts.

14 Effective lead interventions are generally
15 the result of a network of partnerships that
16 translate the sponsoring organization's big
17 picture mission into tangible activities and
18 high-impact outcomes in local communities.

19 Next slide, please.

20 And more information is available on our
21 website listed here.

22 That is all the comments that I wanted to
23 say about CDC's role in lead poisoning prevention
24 and our lessons learned at this time.

25 I see we have 10 minutes until our break, so

1 why don't we go ahead and circle back to some of
2 the panelists who had their hand raised before,
3 and then see if there's time for additional
4 comments.

5 I will now recognize Matt Ammon.

6 **MR. AMMON:** Thank you. A great overview and
7 great presentation from Sharunda too.

8 Just circling back to what Dr. Breysse was
9 talking about, in terms of elimination, you know,
10 obviously, we use that -- this is Matt from HUD,
11 we use that language, too, in everything that we
12 do, that focusing on the elimination in
13 continuing what we're doing and what support
14 we're offering locally, you know, is how we are
15 driving all of our activity.

16 So having the group advise us on
17 aspirational goals with the focus of elimination,
18 you know, I think that definitely should be a
19 guiding goal. And, you know, with the group --
20 you know, the federal government has, you know, a
21 lot of -- you know, we do a lot, you know. But
22 we also support a lot. You know, we are
23 conveners, you know, we're funders. We should be
24 thinking about bringing in and expanding
25 partnerships into sectors maybe we haven't dealt

1 with before, supporting local initiatives and
2 listening to communities. Because I think if --
3 you know, definitely at the end of the day,
4 everything happens at the local level.

5 So having approaches, you know,
6 community-based approaches to lead hazard control
7 and eliminating risk and things of that nature,
8 you know, really needs to be focused locally.
9 And I know all of our roles have been to listen
10 to communities and listen to what their needs are
11 in providing feedback to what our programs are
12 doing and making suggestions on new programs or
13 new ideas or being flexible in that.

14 And one of the issues that we are finding is
15 certainly while there has been a tremendous
16 amount of new capital raised for lead action
17 control work in communities, you know, there is a
18 capacity issue. And we have to find ways that
19 within the funding that we have to be able to
20 make that work for communities, because I
21 certainly think, you know, focusing on areas of
22 what are high-impact need, which we know those
23 areas around the country, you know, I can
24 certainly see that focusing on elimination, if we
25 have the right tools and the right resources, but

1 also offer the right flexibility within those to be
2 able to saturate neighborhoods and get ahead of
3 the problem and not just focus continually on
4 secondary but also focus on primary.

5 So again you know, I think I echo a lot of
6 what I heard about, you know, elimination being
7 the guiding goal, but also there's a lot of --
8 you know, again, everything happens locally, and
9 so focusing on what we can do and what we should
10 be doing to help locals at the end of the day, I
11 think would be very, very productive in getting
12 us to that elimination goal.

13 **MS. RUCKART:** Okay. Thank you.

14 Anshu Mohllajee. Mohllajee had her hand
15 raised.

16 **DR. MOHLLAJEE:** Yeah. Thank you.

17 First of all, just talking about the
18 presentation, I am really looking forward to that
19 LERI index. And so any way of outreaching to
20 states who might be interested in helping you,
21 you know, review the index or the presentation of
22 that, I think there would be a lot of folks out
23 there who'd be really interested in that. So I
24 just wanted to comment about that.

25 And then going back to the original question

1 is something that California has had to really be
2 looking at and thinking about the prevention
3 focus, partly because we were recently audited by
4 the state, and the auditors felt that there
5 needed to be really a focus on primary
6 prevention.

7 And so when we've been thinking about that,
8 we realize as we all can -- when we're thinking
9 about lead poisoning, it does have to be a
10 multifactorial approach. And so -- and because I
11 am an epidemiologist and lead a group of
12 epidemiologists, we're often thinking about the
13 data that we need.

14 And so while the focus has been really on
15 blood lead testing, one of the issues -- and
16 actually your presentation spoke to that -- is
17 that -- you know, in the late 1990s, having the
18 focus on universal testing and then it being
19 moved to target testing.

20 And unfortunately, what we're seeing is we
21 are not getting the targeted testing, the patchwork
22 process, and so the children that need to be
23 tested, the children in publicly-supported
24 programs aren't being tested.

25 And really there's a sense of what happens

1 if we actually did have universal testing so we
2 could get the data, so we could understand who
3 are the children at risk. Based on what we've
4 seen, it is true that paint dust, soil, water
5 are still the major risk factors, but also
6 there's a lot of other risk factors that you
7 can't just get that come from the environment,
8 that come from the use of spices, the use of
9 different herbal remedies, use of cosmetics,
10 things of that nature also coming out. And we're
11 seeing that in our cases.

12 So really the approach of universal testing
13 would be so significant. That way we could have
14 the data. But with that data also, kind of
15 switching our -- or adding to the universal
16 testing of children, really this idea of maybe
17 universal testing of properties, or
18 how do we get that data property so we know where
19 we need to pinpoint our interventions and our
20 targeting efforts.

21 And as part of this process, we're really
22 interested in groups of people and organizations
23 that tried -- have tried to use both blood lead
24 data and property data and think of that in a
25 very innovative way. And we found some folks in

1 Chicago have looked at that. And we're really
2 interested in -- and, you know, what are the
3 other best practices used throughout the U.S.
4 They're really trying to get all these pieces of
5 data together and look at the approach at all
6 different levels.

7 So I just wanted to say that. Thanks.

8 **MS. RUCKART:** Okay. Thank you. It's 10:56.
9 We have four minutes till our scheduled break and
10 then we come back and we can have a more full
11 discussion about anything we heard.

12 Does anyone have anything they'd like to say
13 now? Or we could break a few minutes early and
14 reconvene at 11:15 for our more robust discussion
15 about the morning presentations.

16 (pause)

17 **MS. RUCKART:** Okay. Let's break now. I
18 have 10:57. We will come back at 11:15 and begin
19 our formal committee member discussion period on
20 the morning presentations.

21 Oh, Nathan, we will recognize you when we
22 come back. I hope you don't mind. I just saw
23 that you had your hand raised. We'll go to you
24 first before we get into our facilitated
25 discussion. Thank you.

1 (Break taken, 10:57 till 11:15 a.m.)

2 **MS. RUCKART:** This is Perri. It's 11:13.

3 We'll be starting back in two minutes.

4 (pause)

5 **MS. RUCKART:** Okay. Welcome back. This is
6 Perri Ruckart. It's 11:15. Before I turn it
7 over to Jana Telfer to officially start our
8 member discussion on the morning presentations, I
9 want to circle back to Nathan Graber who had his
10 hand raised.

11 **DR. GRABER:** Okay. Thank you, Perri.

12 So this may come up actually in the
13 facilitated discussions. So I don't know how
14 much I want to get into everything that I wanted
15 to comment on. But I think one of the things I
16 want to just say is that when Anshu's talking
17 about all the points that you brought up are
18 really spot on and we have to think about, you
19 know, the -- all these things we have to -- we do
20 have to think about this, and it kind of feeds
21 into what Matt was asking for which is sort of
22 the aspirational goal.

23 And I think the aspirational goal here is
24 kind of the move away from using children's blood
25 lead levels as a way to monitor environmental

1 exposures, and more move towards that primary
2 prevention surveillance where we're looking more
3 at things like children's environments and also
4 for the -- sort of the emerging kind of
5 contaminates -- the specific sources like foods
6 and spices -- and actually testing those things
7 and working with -- working in the case of the
8 products with international partners in order to
9 address those sources, and then working with
10 the -- sort of the local governments to develop
11 policies that are going to address those sources
12 in the environment, such as the paint and water
13 sources as well.

14 I think that's really -- like the big
15 aspirational goal is to kind of really move
16 everything towards that primary prevention
17 approach as opposed to the using kids for
18 surveillance. But it's really important to
19 continue surveillance and expand the surveillance
20 to blood lead levels because -- one, to continue
21 to monitor to make sure we're doing the -- a
22 great job at achieving our goals, especially in
23 the highest risk communities, but also because
24 there are emerging sources and that's -- and we
25 don't know about those until we've identified it

1 through the case investigation of a lead-poisoned
2 child.

3 And the other thing I just want to ask, and
4 then maybe this can be addressed during the
5 discussions, I'm getting a little bit more
6 clarity on the scope of our advisory council, and
7 it seems like we're really focused on childhood
8 lead poisoning. And sometimes it's really hard
9 to kind of separate that out because kids are so
10 impacted by the exposures occurring in other
11 parts -- other places, like the workplace where
12 there are take-home exposures, or for adults like
13 pregnant women and lead in pregnancy.

14 **MS. RUCKART:** Okay. Thank you.

15 Jana, I'll now turn it over to you to go
16 through the committee members in the round-robin
17 fashion for any comments and discussions on the
18 morning presentations.

19 **COMMITTEE MEMBER DISCUSSION ON MORNING PRESENTATIONS**

20 **MS. TELFER:** Okay. Thank you. And I look
21 forward to hearing from everyone. It's been a
22 very interesting morning for me as an observer
23 thus far.

24 I would -- first, before we go to the
25 committee members, I'd like to ask if Dr. Breyse

1 has any framing comments he would like to make
2 for this particular component of the discussion.

3 **DR. BREYSSE:** Oh, no. I think we'll just
4 let it carry on, but I will just comment on
5 Dr. Graber's comment.

6 So our scope is not limited to children. So
7 we're able to consider adults' issues and across
8 the lifespan, you know, because, as you know, you
9 carry a legacy of exposure from your childhood
10 whether you're exposed to it as an adult or not.

11 But, you know, there's increasing concern
12 about all sorts of adult diseases that might
13 manifest itself later in life as well. So that's
14 something we need to think about also.

15 **MS. TELFER:** Thanks, Pat.

16 All right. What we're going to do for this
17 discussion, as we will for the others -- because
18 we're not able to see each other face-to-face,
19 which for some may be a relief if you are doing
20 the work-in-pajamas approach, but we're going to
21 go person by person and ask you to comment on
22 this morning's presentations with whatever
23 elements are most important to you. And do so
24 inside about a two- to three-minute time frame
25 because that way we will be able to include

1 everybody in the morning discussion before we
2 have our next break.

3 So what I'll do is I will call on you, and this
4 time we're just going to go in order in which
5 you're listed on the roster. And so we will
6 start with Matthew Ammon as our chair.

7 And remember to unmute yourselves.

8 **MR. AMMON:** I did, too early.

9 **MS. TELFER:** I'm sorry, I kept talking.

10 **MR. AMMON:** I know I've already talked, you
11 know, somewhat, just about not only framing
12 issues but also, you know, again, the framing of
13 what are the aspirational goals and things that
14 we need to focus on.

15 You know, I think the good thing is that in
16 looking at the charge and the purpose, a lot of
17 the underlying work, you know, has been done already
18 as part of the lead action plan, you know, the --
19 reviewing the federal programs. And there's
20 already been activity regarding research, and the
21 group has already met last year on that. And
22 there's a bunch of really good information coming
23 out from that.

24 Best practices, I think, is something that
25 focusing on that, I think, is really, really key.

1 And, you know, again, as part of the lead action
2 plan, there's some information about things that
3 our communities are doing. Because I think that
4 as part of our work should be, you know, lifting
5 and supporting what is going on locally -- and
6 I'll continue to say that -- because I think at
7 the end of the day, our work is only going to go
8 so far, but having communities engage in doing
9 their own and expanding upon and using our work
10 as a catalyst, I think, is key.

11 And, you know, we're seeing a lot of
12 activity in the local communities, such as
13 pre-rental occupancy inspections, such as these
14 really large-scale programs that fund affordable
15 housing, which is -- to me, could really serve as
16 the root, you know. And the voice behind what
17 we're doing is -- and in terms of engaging
18 capital, you know, about the idea that the work
19 that we're doing can preserve affordable housing
20 and all of the different things that housing is
21 about and support.

22 You know, for us in the housing world, that
23 has really resonated into allowing expanding into
24 other sectors and other partners, both in terms
25 of the screening side and other work that is

1 going on at the community level. And whether it
2 is childhood or adult, you know, again, seeing
3 our work as a real catalyst for other local work
4 and how that goes on, I think is a really, really
5 important aspect of our work.

6 Again, you know, I think the community-based
7 approach is, I think, is really, really important,
8 and CDC talked about that -- its role at -- you
9 know, what needs to happen locally; what we need
10 to support locally because that is where the work
11 is going to happen and matter in that one home,
12 in that one neighborhood, in that community. And
13 being able to go into an area and saying, we're
14 going to fix this community, I think, is a very
15 powerful thing. And we've been looking for ways
16 to do that, engaging the local leadership as
17 well, such as having mayor's challenges and
18 things of that nature, which I think is going to
19 make a difference.

20 So I think there's some great foundational
21 information that was provided this morning, both
22 on the key federal programs and the Federal Lead
23 Action Plan, you know, as well as CDC's role. We
24 are a hand-in-hand partner with CDC because, you
25 know, obviously, they do the surveillance work

1 and the clinical work and we do the work in the
2 home. So it's a really good marriage, if you
3 will, between (indiscernible) and what is
4 happening locally.

5 And so, again, elevating that and supporting
6 what is going on locally, to me, you know, at the
7 end of the day is going to provide the value for
8 this work moving forward. Thank you.

9 **MS. TELFER:** Super. Thank you very much.
10 That was terrific context and I think frames up
11 the rest of the discussion very nicely.

12 We'll move to Tammy Proctor next.

13 **MS. PROCTOR:** Yes. As I sit here, and
14 listening, I think there's a lot of information that
15 we know. There's a lot of things going on,
16 there's a lot of great work happening at
17 community levels, at some state levels. But
18 there was a few things that I believe that -- and
19 we've been doing this for a long time, so this is
20 not new for me.

21 I think someone alluded to it earlier in
22 terms of the message. I think we need to begin
23 to look at how we're messaging lead exposure as a
24 problem. I think the message of, you know, it's
25 only impacting certain communities, yes. We do

1 know that in some communities there are higher
2 risks and greater risks. But when you talk about
3 the foods and other places where lead exposure
4 can be a potential pathway for children
5 and families, we need to talk about it as a
6 whole. And when you talk about it as a whole, as
7 an impact to everyone, then you get those higher
8 level responses.

9 Also, I'm sitting here listening to -- the
10 question was what can CDC do in order to support
11 lead communities. You have a partnership
12 with some of the great (indiscernible) communities. I
13 know a lot of federal governments -- we're not --
14 we have some Americans who are in authority and
15 some of us (indiscernible) and when you're
16 talking about impacts and changes at the state
17 and local levels, and the -- I guess the
18 authority changes. At the federal level, we can
19 put out all of the guidance, we can put out all of
20 the regulatory laws that we want to, but in the
21 end when we continue to allow states and local
22 communities to then make decisions around how
23 they react, how they respond, the time frames,
24 you think about what basically -- it took over a
25 year for a response to only to begin to do

1 something.

2 And so I think that we need to be a little
3 bit more intentional about how we take the data,
4 how we marry that with what's regulatory, what
5 agencies can actually go out -- an agency like
6 HUD, we keep talking HUD is public housing --
7 and include some of the non-public housing, but
8 some of those entities where we know this lead
9 exposure is coming through, we need to be
10 intentional about how we align guidelines,
11 regulatory expectations. And we need to hold
12 state and local communities to (indiscernible).

13 **MS. TELFER:** Thank you very much. As a
14 communicator, I certainly appreciate your
15 perspective and would -- just briefly before we
16 move to Jeanne Briskin, if you all are not
17 familiar with the work of the FrameWorks
18 Institute, that might be a resource that would be
19 worth looking at.

20 Ms. Briskin.

21 **MS. BRISKIN:** Good morning. So based on the
22 conversations that have been had, three points
23 come to mind.

24 One is at the December workshop on research
25 -- well, there was a point made about the value

1 of getting the states and EPA together around
2 soil lead levels for cleanup. And I just wanted
3 to note that EPA is working through our Office Of
4 Research and Development on assessing and better
5 understanding the relationship between blood lead
6 levels and soil lead levels to help evaluate soil
7 lead cleanup level options.

8 Second, I want to echo a statement that
9 somebody made earlier about the important role of
10 the CDC blood lead -- I'll call it action
11 level -- although it's not a regulatory level, it
12 is used as a jumping-off point for many different
13 types of evaluations and actions, and so
14 messaging around that is important.

15 And that leads to my third point which is --
16 I want to echo a point somebody else made about
17 the importance of communicating around exposure
18 and impacts of exposure to lead. Particularly
19 I've heard people want to know, well, you know,
20 it's -- it's just going to shift one IQ point,
21 what difference does that make. And what's --
22 what's missing is the subtlety of a distribution,
23 of exposures, and the proxy for an IQ point
24 across a population. There's so many subtleties
25 that go into that.

1 But the fact that people are asking
2 questions like that, I think points to the
3 importance of us looking at how we communicate
4 around the impacts of lead exposure and the value
5 of preventing lead exposure. Thank you.

6 **MS. TELFER:** Thank you. I appreciate your
7 enumerating those for benefits of those of us who
8 are taking notes.

9 Wallace Chambers, you would be up next.

10 **MR. CHAMBERS:** Yes. I really don't have --
11 I spoke earlier. I really don't have much more
12 to add other than what other people have said.

13 But another thing I was thinking when I was
14 reading those documents is that when we come to
15 messaging, there was a lot of information on a
16 return of investment, on being proactive and
17 having zero levels of blood lead in children. So
18 I think that might -- excuse me -- that might be
19 a good way to message, as well. Thanks.

20 **MS. TELFER:** Thank you.

21 Tiffany DeFoe.

22 **MS. DEFOE:** Hi. Yeah, so at the --
23 I'm going to refer back to the December, 2019
24 research workshop also. I recall there, there was
25 a great presentation by NIOSH where they

1 discussed, of course, take-home exposure and
2 particularly some ideas about how we might
3 improve collection and integration of information
4 on elevated blood lead levels. They were
5 speaking specifically about ABLES, about adult
6 blood lead levels in that case with information
7 on lead levels in occupations and workplaces and
8 referral systems that are in some states in
9 places -- in place already to take information
10 from surveillance of adult blood lead and use it
11 to help target interventions at the workplace.

12 And this is -- it's an idea that's partially
13 in place already in that way and could
14 potentially be expanded to include information
15 from childhood screening and also use it to help
16 identify cases where there might be a take-home
17 issue and collaborate with local, with state OSHA
18 or regional offices to help address that issue at
19 its source.

20 Along those lines, in the presentation about
21 the CDC's role, I wonder if some of those
22 cooperative agreements and funding opportunities
23 that were talked about, if there is a rule or a
24 focus for collection of occupational information
25 when surveillance is being done. I think with

1 adults, you know, occupation's always a suspicion
2 when you get an elevated blood lead. With
3 children, I think it -- the collection of
4 information on the occupation of adults in the
5 home, if I understand correctly, is a little
6 spottier and maybe that's an area that would
7 benefit from some funding support or focus in a
8 collaborative agreement.

9 Those are my thoughts. Also I really
10 appreciate the presentations. They were very
11 informative. Thanks.

12 **MS. TELFER:** Thanks, Tiffany.

13 We'll move to Michael Focazio.

14 **DR. FOCAZIO:** ... personally could be useful
15 to this group as well as U.S. Geological Survey.
16 And like CDC, we have no regulatory role, but we
17 do have a pretty big research role and lots of
18 data sets and information that I'm going to start
19 really understanding more what could potentially
20 be useful.

21 So one of the things I just did after
22 hearing Jeanne Briskin talk about the soils and
23 the exposure pathways, USGS has a lot of soils
24 data. USGS has a lot of water data. So there's
25 a potential role there for us to stand up some

1 information that hopefully could be useful for
2 the broader research community as well as people
3 making decisions about regulations.

4 And so I quickly put a slide together, just
5 for my own benefit, looking at the slide that we
6 saw earlier on lead exposure disparities which
7 was basically, I think, NHANES data, the map of
8 the United States, and then I just side-by-side
9 the USGS soil/lead data in the zero to five
10 (indiscernible) level across the United States.

11 And I'm not saying there's necessarily an
12 association there, but there's -- there are two
13 major data sets there that could potentially be
14 discussed in context of, you know, what are the
15 important exposure sources and what data sets
16 exist to try to answer questions like that.

17 So that's where I'm coming from on this, and
18 I hope that will be useful as we go forward. It
19 looks like we do have some information that could
20 be useful.

21 **MS. TELFER:** Thank you. That's really
22 helpful and encouraging as well.

23 Nathan Graber.

24 **DR. GRABER:** Okay. Thanks, again.

25 I do have a few additional thoughts. I'm

1 going to try to focus my comments on the -- around
2 surveillance because I think that's a big role
3 that CDC plays. And one thing as a pediatrician,
4 I -- being in primary care now, I learned a lot about
5 ways that you can effectively enhance testing in
6 primary care practices. And kids don't just go
7 to pediatricians. They go to family medicine
8 doctors, and they go to other providers for their
9 primary care to get their vaccines and so on.

10 And one way to enhance testing is -- really
11 is -- and CDC can work on this -- is through
12 funding of programs that put point-of-care
13 testing machines in primary care doctors'
14 offices, as well as in places like
15 (indiscernible) offices where they're currently
16 monitoring hemoglobin for anemia -- it's just as
17 easy at the same time to take some blood for
18 testing for lead -- funding of the local
19 surveillance programs at the state level, at the
20 city level, and all those kind of things.

21 But also, you know, when CDC says something,
22 it tends to have a strong influence. I know it
23 doesn't necessarily have, you know, a regulatory
24 role but it does have an influence on the way
25 things are done. And for us, a big driver of

1 what we do in terms of primary care are
2 (indiscernible) metrics, and insurance companies
3 will hold us to those (indiscernible) metrics,
4 our accreditations, such as being let's say a --
5 a patient-centered medical home with -- or other
6 certifications that actually raise our level of
7 reimbursement in the practice. You know, we'll
8 look towards things like HEDIS measures or CDC
9 recommendations and will hold us to those, and
10 that's a really important thing. When CDC
11 messages out the importance of blood lead
12 surveillance, then other folks are really
13 listening.

14 And the other thing is, is that, you know, as we
15 get to lower, lower blood lead levels, the
16 laboratories are perfectly capable of achieving
17 better accuracy around the results of testing,
18 and we could certainly -- CDC should be looking
19 at methods to improve that accuracy for the
20 point-of-care testing, as well as holding
21 laboratories for higher standards of quality.

22 You know, one of the things I think very
23 interesting is that you showed a beautiful slide
24 on the NHANES data on how blood lead levels come
25 down over time, and that seems to send out the

1 message that, wow, we're really winning this
2 thing, but we all know, everybody on this call
3 knows that in certain communities that curve is
4 not coming down as quick. If anything, it's -- a
5 lot of places it's kind of flattened out, and it
6 doesn't get better until you start to implement
7 effective strategies to reduce environmental
8 sources.

9 And one of the other roles that kind of CDC
10 plays is that -- is getting that information out
11 there about the blood lead level changes within
12 those communities and using -- that could be a
13 driver for changes in local policy.

14 And also CDC can evaluate the effectiveness
15 of interventions, such as looking at local laws
16 that focus on primary prevention and showing how
17 they are effective, but also the other thing
18 that keeps coming up is this continued
19 misinterpretation of what the reference value is.
20 Is it an action level? Is it simply a tool for
21 monitoring the effectiveness of interventions,
22 and -- as Pat had mentioned earlier on the call.
23 And one of the things that, you know --

24 **MS. TELFER:** Thank you very much. I regret
25 having to break in, but I do want to afford some

1 time to your fellow panelists and also be
2 respectful of the fact that Perri is trying to
3 keep us on a schedule.

4 So we'll have some additional time this
5 afternoon, and I, for one, will look forward to
6 hearing what more you have to offer. Thank you
7 very much.

8 Karla Johnson. And remember to unmute
9 yourselves.

10 **MS. JOHNSON:** I did. I'm sorry.

11 **MS. TELFER:** Thank you.

12 **MS. JOHNSON:** I want to thank everyone for
13 those great presentations this morning.

14 I had mentioned earlier today that I thought
15 that we really needed to look at the messaging,
16 and one of the things that was coming to mind as
17 everyone was talking, even just now, was that
18 forgotten in this conversation is to include
19 parents in this conversation that we can do all
20 of the sort of activities outside of the parents'
21 control, perhaps, and we need to -- housing, you
22 know, physicians' testing, et cetera.

23 But if you don't include the parents in
24 this, and to motivate them and to help them to
25 understand why this is important, as well as the

1 community-wide effort to get the messaging out
2 that it is everybody's issue, I think we're
3 going to just continue to spin our wheels or at least
4 not make progress as quickly as we would like to.

5 So, you know -- and I say that because I'm a
6 parent and I know that I have been on both sides
7 of this fence where this discussion happens, but
8 it excludes the partnership with the parents. So
9 there needs to be a partnership in this whole
10 messaging, and then we will make -- we will -- no
11 one is more motivated to protect their children,
12 generally speaking, than a parent. So this could
13 move a lot faster if we got them on board with
14 the correct information and messaging.

15 **MS. TELFER:** Thank you very much for
16 speaking to the value of audience-centered
17 communication. Anything further?

18 **MS. JOHNSON:** No. I'm good. Thank you.

19 **MS. TELFER:** Okay. Super. Thank you.
20 Donna Johnson-Bailey.

21 **MS. JOHNSON-BAILEY:** Thank you. And I
22 appreciated the comments today and the
23 presentations. They offered insights about the
24 charge, and I particularly appreciated the points
25 about strategic partnerships. Within USDA, the

1 WIC program provides food packages and health and
2 social service referrals for eligible pregnant
3 women, mothers, infants, and young children up to
4 the age of five. And during a WIC nutrition
5 assessment, hemoglobin and hematocrit levels are
6 assessed to screen for iron-deficiency anemia.
7 Infants who have not obtained a hematological
8 test between six and nine months are required to
9 have a test performed between nine and twelve
10 months. And if levels are low, clients receive
11 appropriate food packages and referrals to
12 medical care.

13 But I think it's important to recognize that
14 there have been changes in the healthcare
15 structure which have affected surveillance and
16 strategic partnerships. Prior to 1999, state and
17 local health departments provided services for
18 families eligible for WIC. Shifts to managed
19 care systems have changed those relationships
20 between WIC and healthcare.

21 And so if folks are interested in learning
22 more, there is some background information that
23 can be found in the WIC blood-work requirement
24 final rule, but I also think it's important that
25 in this process we consider some of the changes

1 to our healthcare systems and those strategic
2 partners that may affect our surveillance of
3 children in particular.

4 That's it.

5 **MS. TELFER:** Thank you very much. Those
6 were important observations and very helpful to
7 know where to find additional information.

8 Erika Marquez.

9 **DR. MARQUEZ:** Hey. So I'm going to echo a
10 lot of what has already been said, that I
11 think -- I agree that CDC's in a position of
12 influence, and that can help us in strengthening
13 state efforts.

14 And I agree that we need to strategize our
15 messaging. I know in our local efforts we begin
16 to try to push more of that life course approach,
17 so I appreciate that. That is something we can
18 tackle that is not just focused on children under
19 six and that we can use these messagings to
20 really support the importance of lead testing
21 early in life because it has all these long-term
22 outcomes.

23 I think one thing that I -- that kind of
24 brought to mind is in the strengthening efforts
25 across states is how do we as a committee

1 strengthen between states and laboratories and
2 even our office of Medicaid. I know those are
3 things that even in our state we have challenges
4 with and how can this committee help kind of
5 support those efforts.

6 And I think one other thing that came up in some
7 of the presentations this morning and may be more of a
8 point of clarity is that we had in one of the
9 slides that the 3.5 micrograms per deciliter was
10 a recommendation in 2017, and what is our charge
11 in terms of that recommendation and maybe where
12 are we at at that point.

13 But, again, I think I echo a lot of what has
14 already been said in making sure that we focus,
15 again, more on that primary prevention.

16 **MS. TELFER:** Thank you very much.

17 Howard Mielke.

18 **DR. MIELKE:** Okay. Sorry. I also
19 appreciated the presentations that were made.

20 I had a couple of interests in the LERI map
21 that was put out. I have looked at those kinds
22 of maps in the case of the city of New Orleans.
23 It's simply too crude in many cases to describe
24 the amount of lead exposure that's taking place
25 across the city. We have a much more refined map

1 on the basis of the amount of lead by census
2 tract. And I wonder if LERI has other
3 measurements that I'm not aware of of the amount
4 of lead in the soil.

5 USGS certainly has done some great work on
6 that topic. Unfortunately, their mission
7 statement says on non-urban environments, and I
8 wish that could be changed because I think the
9 services of the USGS would be extraordinary and
10 helpful in terms of looking at the urban
11 environment.

12 I was interested in the Dignam article and
13 the -- it appears to me that seasonality is part
14 of the whole issue. This is a topic that I first
15 recogni-- or was introduced to in Minnesota when
16 -- during the wintertime, when children were
17 basically trapped in their houses for almost nine
18 months a year, their blood lead levels went down,
19 but as soon as the windows opened and they went
20 outside, the blood lead levels went up. In that
21 seasonality, we started thinking about soil as
22 part of the issue, the overall issue of exposure.

23 The -- my daughter had some experience --
24 she was lead-poisoned about three years old at a
25 childcare center and the issue was not the

1 interior of the childcare center. The interior
2 was great, lots of cleaning taking place all the
3 time. But as soon as she went outside, she ended
4 up playing in a hazardous waste site in which the
5 soil lead levels were about 400 parts per million
6 or more, 500 to 1,000, and as soon as I cleaned
7 that up -- I was already experienced in looking
8 at soil -- her blood lead levels when down very
9 quickly. And I assume other children in the same
10 childcare center would've had the same
11 experience.

12 And so I've been thinking about realizing
13 that my vision is that we have really good maps
14 of soil lead across cities and that you can use
15 these maps as a way of focusing on greening the
16 city, cleaning the city up using materials that
17 are easily available to any city to make the
18 interior of the city, especially the interior of
19 the city where the highest hazards are showing
20 up, much cleaner and greener and better
21 environments to live in.

22 And those are my comments. Thank you.

23 **MS. TELFER:** Thank you, Dr. Mielke. And
24 thank you for sharing your personal experience.
25 Things become much more relevant when we

1 understand how they affect people, and so thank
2 you for translating the numbers and giving them a
3 human face.

4 Anshu Mohllajee.

5 **DR. MOHLLAJEE:** Sorry, I had to unmute
6 myself. Thank you.

7 I did speak earlier and it's been very
8 valuable to listen to others' comments and just,
9 you know, maybe start brainstorming different
10 things that we could be doing at the state and
11 really just compo --

12 The common -- many people have echoed the
13 idea of having the -- working on the
14 communication, the messaging. Also the
15 involvement of parents has been spoken up. Also
16 through their own personal stories that I think
17 are very valuable.

18 And then when the last comment, just
19 thinking about, you know, the best practice is
20 this idea of if you know that there's a lot of
21 soil that has lead in your backyard, what are the
22 best practices? What are the practical things
23 that we can do to remedy the situation where that
24 is affordable?

25 And different tools that we can give to

1 communities, I think, is also very valuable, and
2 something that we should think about.

3 And then my last thought is also just
4 thinking about CDC's role in lead poisoning
5 prevention. The grants -- unfortunately, this
6 past grant cycle that was just going to be issued
7 for this year has been canceled, but is there
8 another way to involve states in a dialogue that
9 aren't receiving money from CDC directly is just
10 something that I think could be interesting. Is
11 there a way that we can communicate with one
12 another to learn about best practices, to learn
13 what other people are doing?

14 So thank you.

15 **MS. TELFER:** Super. Thank you for offering
16 that insight, and I know it's a challenge that we
17 consider within CDC, and I appreciate your
18 raising that.

19 Jill Ryer-Powder is our last contributor
20 today, and then we'll go back to Perri for some
21 consideration of how we want to handle the rest
22 of the discussion.

23 So, Jill.

24 **DR. RYER-POWDER:** Thank you.

25 First, I want to thank everyone for their

1 very informative presentations. I think a lot of
2 what I have to say has kind of been said by the
3 previous panel members, but like I said before,
4 I do work in exposure assessment and human health
5 risk assessments, so I'm working on a lot of
6 sites that have lead contamination.

7 So I was wondering what is the best way to
8 make the connection between these communities
9 where there's lead in their soil or their air or
10 their water and making sure that they have
11 surveillance and programs in place or how to get
12 surveillance programs in place. You know, what
13 is the best way to make that connection?

14 **MS. TELFER:** Thank you very much.

15 These are all thought-provoking comments.
16 I've made extensive notes myself even though I am
17 not a direct part of the program.

18 So I'd like to turn back to Perri Ruckart to
19 sum it up and give you your directions for the
20 next stage.

21 **MS. RUCKART:** Thank you, Jana. I wanted to
22 respond to a few of the comments I heard during
23 this discussion.

24 First off, there was a comment about
25 take-home exposures and do we collect information

1 on that at CDC. So we do collect information on
2 take-home exposures. We also at the CDC level
3 are partnering with NIOSH and their ABLES
4 program, which is the adult blood lead
5 surveillance, to have a more closer coordination
6 between the take-home exposures from adults to
7 children. And I know that North Carolina, one of
8 our funded partners, has done some case studies
9 and some work in this area. So that is something
10 we're aware of and we do capture that when
11 we're aware of that.

12 The article that I referenced earlier,
13 Dignam et al, on the algorithm, we will send out
14 the link where you can find the full text
15 article so you can read that if you're
16 interested.

17 The LERI, I wanted to just briefly talk
18 about that. There was some comments about that.
19 So the LERI is just meant to suggest areas that
20 may be at higher risk so that public health
21 officials and pediatricians can target the
22 potentially high-risk children. We're not trying
23 to, you know, fully enumerate the risk. We're
24 just trying to shed some light on areas that are
25 good for targeting. When the LERI website user

1 interface is made available, all the
2 documentation about the variables and the data
3 sources that went into making the LERI will be
4 posted and available for your view.

5 So those were just a few comments I wanted
6 to make based on our discussion.

7 We have six minutes to noon, so why don't we
8 go ahead and just break six minutes early?

9 **DR. BREYSSE:** Perri? Perri? This is Pat.
10 Can I add a few things too? Do you mind?

11 **MS. RUCKART:** Of course. Sure, Pat. Of
12 course, sorry.

13 **DR. BREYSSE:** So there's a number of
14 comments about sites and industrial facilities,
15 and we have a curious kind of dichotomy between
16 the Center for Environmental Health and ATSDR.

17 So ATSDR, you know, has this
18 congressionally-mandated mission to deal with
19 hazardous waste sites, hazardous waste exposures,
20 and they deal with many sites that have lead in
21 them. And they collaborate with the lead program
22 and Center for Environmental Health when they
23 address those sites.

24 But it's principally in the ATSDR domain to
25 deal with that site and they work with EPA

1 about cleanup standards and they work with
2 communities and they often do their own blood
3 lead testing as part of the site investigation
4 work. So for example, if we're -- been dealing
5 with some -- some of these sites never go away.
6 A mining site in Anaconda, Montana -- actually
7 it's a -- it's a smelt -- former smelting site
8 where we just did another round of blood lead
9 testing just to make sure because the lead
10 tailings are still there, but exposure is still
11 there, that -- the state thought they were
12 patrolling it well, the community was concerned,
13 so we came in and addressed those concerns by
14 doing blood lead testing that targeted to that
15 community for that purpose, rather than just
16 general kind of lead surveillance activities.

17 So as we get into it, we can spend more time
18 talking about ATSDR's role, but I just wanted to
19 make sure that, you know, the lead program will
20 defer to ATSDR for those issues, but they will
21 -- they will provide input and guidance and a
22 review of those reports, and they're involved as
23 well.

24 So I just wanted to make that clear. Over.

25 **MS. RUCKART:** Excuse me. Yes, sorry, I

1 was on mute. Thank you, Pat.

2 I do want to turn it over to Monica Leonard
3 to say a few things, and then I just have one
4 announcement before we take our lunch break. So,
5 Monica, turn --

6 **CDR LEONARD:** Sure. Hi, everyone. Thank
7 you so much for the very informative discussion.

8 I too just wanted to weigh in on just a
9 few of the comments that were stated earlier.
10 Just a few points.

11 Thank you for sharing about the universal
12 testing. We currently are recommending targeted
13 screening efforts specifically to focus on our
14 high-risk neighborhoods. However, we definitely
15 welcome feedback, and thank you for sharing the
16 thoughts around universal testing, as currently
17 Medicaid is doing testing specifically
18 encouraging testing of children at ages one and
19 two years of age.

20 And I know we're going to talk more about the
21 blood lead reference value later. So thank you,
22 Perri.

23 **MS. RUCKART:** Okay. Thank you, Monica.

24 So it's 11:57. Let's break for lunch. We
25 will meet back up promptly at 12:30 for our afternoon

1 session. I want to encourage everyone to leave
2 their computer on and connected just to
3 facilitate a prompt restarting at 12:30.

4 Thank you. Enjoy your lunch.

5 (Lunch break, 11:57 a.m. till 12:30 p.m.)

6 **MS. RUCKART:** Okay everybody, this is
7 Perri. It is 12:29. We will start back up in
8 just a minute. Thank you.

9 (pause)

10 **MS. RUCKART:** Okay. It's 12:30. Before we
11 start back up -- well, I hope everyone enjoyed
12 their lunch, and thank you for joining us. We
13 have a jam-packed afternoon session to get
14 through.

15 Before I turn it over to Jeff Reynolds to
16 introduce himself and tell you about the
17 Community Guide's work on their lead scan, I would
18 like to turn it over to Jana. She has some
19 remarks to help facilitate our afternoon
20 discussion.

21 Jana.

22 **MS. TELFER:** Thanks, Perri, and welcome
23 back everybody. One of the techniques we use in
24 risk communication is something called
25 anticipatory guidance. That's where you try not

1 to surprise people.

2 So after the 2:00 break, we'll come back
3 together for discussions on two separate topics.
4 One is effective services and best practices
5 regarding lead screening and the prevention of
6 lead poisoning. And for that session, I'm going
7 to begin with the people who are not part of
8 federal agencies because you all are in practice,
9 in communities, or at the state level and may
10 have a chance to have observed some of those
11 things firsthand. So we'll begin the first quest
12 -- first discussion on effective services with
13 those people who are not representatives of
14 federal agencies.

15 And the second discussion has to do with
16 research gaps and additional research needs, and
17 because my last name begins with T, I was
18 always last in the rotation. So what we're going
19 to do for that second session is just begin at
20 the back of the roster with Jill Ryer-Powder and
21 move forward.

22 So thanks very much, Perri.

23 **MS. RUCKART:** Sure. Well Jana, my maiden
24 name is Zeitz, so I can certainly understand and
25 appreciate, you know, starting at the end of the

1 alphabet and working backwards. So thank you.

2 Okay. Jeff, are you on right now?

3 **MR. REYNOLDS:** Yes. Can you hear me, Perri?

4 **METHODS AND RESULTS OF A COMMUNITY GUIDE ENVIRONMENTAL**
5 **SCAN AND SCOPING REVIEW OF LEAD INTERVENTIONS**

6 **MS. RUCKART:** Yes. So Jeff, would you
7 please introduce yourself to the group before you
8 go into your presentation.

9 **MR. REYNOLDS:** Yes, I'm Jeff Reynolds.

10 **MS. RUCKART:** Thank you.

11 **MR. REYNOLDS:** I work at The Community Guide
12 Office as a health scientist and work on multiple
13 different reviews, including this recent lead
14 prevention on scoping review. So thank you.

15 So I guess we can get started. Good
16 afternoon. As I said, I'm Jeff Reynolds, and on
17 behalf of the Community Guide Office at CDC, I'm
18 happy to be able to share with you findings from
19 our scoping review project to map available
20 evidence on effectiveness for lead prevention
21 interventions.

22 Next slide, please.

23 This shows our agenda for today's
24 presentation. I will begin by introducing the
25 Community Guide, the task force on community

1 preventive services, our scope of work and our
2 perspective on evidence of effectiveness.

3 Then we will walk through what scope
4 interviews are and how they can provide useful
5 information with some important limitations.
6 After that, we will go over the methods used in
7 the scoping review project and present our
8 initial results, including characteristics of the
9 evidence and categories of intervention studies
10 identified in our search.

11 And lastly we will cover our initial
12 impressions of the evidence, as well as gaps and
13 limitations to address at future intervention
14 research.

15 We will conclude with some thoughts on where
16 this project can go to be of use to our CDC
17 partners and even perhaps this committee.

18 Next slide, please.

19 This slide provides an introduction to the
20 Community Guide preventive services and task
21 force. The Community Guide is an office within
22 CDC that produces and houses systematic reviews
23 based on the evidence of effectiveness in the
24 population-based interventions to improve health
25 for a wide range of public health topics.

1 Interventions examined include programs and
2 policies selected from relevance to program
3 planners and decision makers in communities and
4 healthcare systems. Community Guide is also a
5 collection of methods for the conduct of
6 systematic reviews of population-based
7 interventions.

8 In contrast to other systematic review
9 organizations, our methods include a broad
10 consideration of evidence on effectiveness. And
11 for many intervention reviews, this will mean the
12 inclusion of evidence from observational study
13 designs and natural experiments. These
14 systematic reviews inform the deliberations of
15 the Community Preventive Services Task Force, or
16 CPSTF, which makes recommendations based on the
17 systematic evidence.

18 The CPSTF is an independent, voluntary panel
19 of 15 national experts in public health,
20 population-based intervention research, and
21 healthcare delivery. Although selected reviews
22 are published in peer review journals, all of the
23 work of The Community Guide and findings of the
24 task force are housed on our website. The site
25 also includes summaries of the systematic reviews

1 on effectiveness, task force recommendation and
2 rationale statements, systematic reviews on
3 economics and supporting materials from the
4 review.

5 In addition, you can find supporting
6 materials on implementation and dissemination
7 materials on specific reviews and recommendations
8 and examples of how community guide work is being
9 used in the field.

10 Next slide, please.

11 This diagram identifies a standard set of
12 issues considered in each community guide
13 systematic review project. The primary focus of
14 the systematic review is determined if available
15 evidence demonstrates that the intervention was
16 effective in achieving the intended outcomes
17 which can include reductions in morbidity or
18 mortality, improvements in more proximal health
19 outcomes, or improvements in behavioral outcomes
20 as long as they are linked to health outcomes.

21 In addition, the task force examines
22 evidence on postulated additional benefits and
23 potential harms of the intervention. Community
24 Guide reviews organize the evidence of
25 effectiveness to assess applicability to

1 important U.S. settings and populations,
2 including their documented impact for conceptual
3 utility to advance health equity. We also
4 retrieve and summarize evidence on intervention
5 implementation.

6 Finally, for the selected interventions with
7 evidence of effectiveness, the CPSTF directs a
8 follow-up systematic review on the economic evidence.
9 Here we are interested in studies and they offer
10 the following: Studies documenting the cost of
11 the intervention, studies documenting economic or
12 economically quantifiable benefits, and studies
13 examining the relationship between costs and
14 benefits.

15 Next slide, please.

16 The Community Preventive Services Task Force
17 is the younger partner to the U.S. Preventive
18 Services Task Force, or USPSTF. Both groups use
19 systematic reviews to draw conclusions on
20 effectiveness and issue recommendations regarding
21 the use of preventive interventions.

22 As displayed in this slide, each task force
23 has an established scope of work and both groups
24 make an effort to avoid duplication of effort and
25 the potential for mixed messages.

1 An important role of the USPSTF is that it
2 covers the effectiveness of provider-patient
3 interactions involving screening, such as cancer
4 and HIV screening. USPSTF also focuses on
5 preventive treatments and primary care or primary
6 care referral settings.

7 In contrast, the CPSTF covers
8 community-based programs and policies to improve
9 health. It is noted in dark blue. There are
10 areas of potential overlap, most commonly
11 potential reviews of health system policies and
12 programs. When the USPSTF finds a screening or
13 preventive service to be effective, CPSTF reviews
14 in that topic area, and we usually examine health
15 system intervention, such as reminder systems to
16 increase the use of that recommended preventive
17 service.

18 Of relevance to this committee, the USPSTF
19 evaluates the effectiveness of screening patients
20 for lead exposure. However, to date the CPSTF
21 has not examined the effectiveness of any
22 interventions related to lead exposure
23 prevention.

24 Next slide, please.

25 This slide describes the type of project

1 that we are presenting today, a scoping review.
2 And by definition scoping reviews are exploratory
3 projects that systematically map the literature
4 available on a topic, identifying the key
5 concepts, theories, sources of evidence, and gaps
6 in the research.

7 In contrast to an intervention-focused
8 systematic review, scoping reviews are usually
9 much broader and involve determining the presence
10 or absence of studies for the entire topic, such
11 as the prevention of lead exposure.

12 Scoping projects are an evolving process
13 with adjustments generally made to incorporate
14 new information or evidence. Like intervention
15 reviews, however, scoping reviews still involve a
16 systematic search for evidence and the systematic
17 processing of that identified evidence.

18 Briefly, the steps in the scoping review are
19 very much like the first half of a systematic
20 review. We identify the research questions and
21 determine the scope of the project and adopt the
22 initial inclusion criteria. We then conduct a
23 systematic search and screening process to divide
24 those relevant studies. Then we categorize,
25 character, and map that evidence.

1 Next, we summarize the findings usually
2 limited to the presence or absence of evidence
3 and the characteristics of studies.

4 Finally, most scoping reviews emphasize the
5 need to consult with experts to interpret the
6 evidence and the significance of those gaps.

7 Next slide, please.

8 Scoping reviews can be useful introductions
9 to the field of intervention research for a topic
10 area. For instance, scoping reviews are useful
11 to inform an assessment of the value of
12 subsequent, more specific systematic reviews. It
13 can also efficiently quantify a body of potential
14 evidence studies and organize their
15 characterization. It can also be useful as an
16 initial approach to reviews with a complicated or
17 a cross-cutting subject. And finally, they can
18 identify clear gaps in the body of evidence.

19 However, scoping reviews do not include
20 important methods used in systematic reviews,
21 such as assessment of study quality. As a
22 result, scoping reviews are not a substitute for
23 a focused systematic review for the purposes of
24 drawing conclusions on intervention
25 effectiveness.

1 Next slide, please.

2 Next we turn to the methods used in our
3 scoping review project to quantify and
4 characterize the evidence on that exposure
5 prevention interventions. We first recruited
6 subject-matter experts to a coordination team to
7 provide oversight on this project. We based our
8 input from our team. We set up and ran a
9 systematic search for lead exposure prevention
10 studies. We then screened papers using explicit
11 inclusion and exclusion criteria.

12 As part of the screening, we bought a bucket
13 of papers by exclusion criteria. We included
14 intervention studies, we assigned into broader
15 intervention approaches. We also conducted a
16 partial abstraction of all included intervention
17 studies. Putting these pieces of information
18 together, we mapped and then summarized what we
19 found and that will be the focus of our
20 presentation today.

21 However, we are still working with the
22 coordination team to refine our categories and
23 placement of evidence and also to identify
24 evidence gaps of importance to the field.

25 Next slide, please.

1 Here we identify the members of our project
2 coordination team which includes our CDC
3 partners, our federal partners, our librarian,
4 our state and local health department partners,
5 and our subject-matter experts in lead exposure
6 prevention and intervention research.

7 Next slide, please.

8 This slide presents the research questions
9 for the scoping review project. What is the
10 nature of evidence and effectiveness for
11 interventions to prevent or reduce exposures to
12 lead? What are the types of interventions? How
13 many studies examine the same intervention or a
14 similar strategy? What study designs are being
15 employed in these effectiveness evaluations?
16 Where are these studies being conducted and what
17 scale? Who are the targets of these
18 interventions or intervention evaluations? And
19 what outcomes are being studied?

20 Next slide, please.

21 Community Guide topic level projects
22 commonly make the use of conceptual program
23 diagram to help identify strategic approaches to
24 improving health for a specific topic.

25 This slide presents our initial conceptual

1 approach for lead exposure prevention. The
2 diagram will change as we work through the body
3 of evidence and to find additional intervention
4 approaches, proximal pathways, and other
5 connections. However, our main focus is on the
6 yellow circles identifying strategic approaches
7 with each strategy, including several different
8 interventions.

9 Four strategic approaches and our framework
10 are: reducing exposure to lead outside of the
11 home, reducing lead brought into the home,
12 reducing lead exposures in the home, and
13 increasing or improving clinical detection and
14 clinical or community action.

15 Of course, it's a very broad strategy.

16 **MS. RUCKART:** Excuse me, Jeff.

17 **MR. REYNOLDS:** Yes.

18 **MS. RUCKART:** This is Perri Ruckart. I want
19 to let you know that our transcriber is having a
20 hard time hearing you. If you could just speak
21 up a little bit, it would really help. Thank
22 you.

23 **MR. REYNOLDS:** Okay. No problem.

24 **MS. RUCKART:** Sorry to interrupt.

25 **MR. REYNOLDS:** Our coordination team involve

1 -- team wanted to focus on home health systems,
2 and community approaches. So excluded
3 interventions focused on reducing occupational
4 lead exposures among workers. The issue of
5 take-home lead from occupational exposures,
6 however, remained in our scoping review.

7 Also of note, the red boxes depict
8 downstream outcomes and in a CPSTF review would
9 be our potential recommendation outcomes.

10 Next slide, please.

11 This slide displays the methods used in our
12 search for evidence. We work with our librarian
13 on search strategies from multiple electronic
14 databases. Our search period ended in January of
15 this year. So the information in this
16 presentation is up to date.

17 We cast a wide net to find papers using a
18 combination of lead search string and a string
19 for interventions. Our search was restricted to
20 English language publications and studies with
21 either human subjects or environmental
22 assessments.

23 We supplemented our database searches with
24 additional hand searching of study reference
25 lists and other reviews in the topic area.

1 Several reviews provided lists of studies based
2 on exclusion criteria different from our own,
3 such as the use of observational study designs.
4 So this was an additional source for potential
5 studies.

6 Next slide, please.

7 We turned to the study inclusion and
8 exclusion criteria for the broad scoping review.
9 First, we included human and environmental
10 studies that excluded clinical treatment studies
11 on patients with lead toxicity.

12 Next, we included any intervention with goal
13 of reducing human exposure to lead with the
14 following exceptions: lab or field product
15 experiments on treatments or remediations;
16 industry or remediation, although we included
17 community efforts involving former sites;
18 occupational exposure prevention; clinical
19 treatments; trend studies not specifically
20 evaluating a program or policy; and evaluations
21 of unleaded gasoline prices. We also included
22 any comparison, even cross-sectional or single
23 group before/after designs.

24 Looking at the outcomes, we included studies
25 if they measured one or more of the following:

1 blood lead levels, environmental lead levels,
2 lead hazard knowledge, attitudes and protective
3 behaviors, and screening rates and screening
4 yields. All settings were included except
5 industrial settings related to remediation or
6 occupational exposure reduction.

7 Finally, we included any study design except
8 reviews, case series, or case reports.

9 Next slide, please.

10 This begins the result section of our
11 scoping review project, starting with the yield
12 numbers from our search for evidence and
13 screening process. The search was conducted
14 through January of this year and pulled over
15 19,000 citations. We examined the abstracts of
16 just over 1,600 papers with relevance to lead
17 prevention.

18 On the top left, we've categorized papers as
19 excluded from the scoping review but still of
20 potential interest. This included 40 economic
21 studies of lead burning or lead prevention
22 interventions, which we plan to revisit in a
23 follow-up project. Additional topics of interest
24 include review and environmental justice papers.

25 On the right, we have exclusions of low

1 interest, including numerous background and
2 methods papers and other lead topics.

3 For the final screening step, we examined
4 the full text of 201 papers and studies and
5 retrieved an additional 49 studies from our
6 reference lists and review searches.

7 Our current set of lead intervention studies
8 include a hundred and fifty-six studies described
9 in a hundred and sixty-nine papers. We partially
10 extracted these studies and on the following
11 slides identify characteristics of this evidence.

12 Next slide, please.

13 This slide presents some of the categories
14 in their initial attempt to map the body of
15 included intervention studies. We started by
16 grouping similar interventions by approach or
17 setting, and then organized those twelve groups
18 into four broader strategic approaches from our
19 conceptual diagram.

20 We will walk through some of these
21 categories and themes which are not mutually
22 exclusive. Starting on the left, we mapped three
23 intervention categories to the strategy of
24 reducing exposures outside of the home.
25 Twenty-seven studies, it says community-wide

1 interventions with most studies examining
2 remediation and screening actions in industrial
3 or post-industrial communities.

4 School interventions were evaluated in seven
5 studies, split between water system interventions
6 and playground remediation. Nine studies focused
7 on industrial site remediation, including
8 superfund sites.

9 Next, for the strategy of reducing lead
10 brought into the home, 17 studies are grouped
11 under the water system interventions and this
12 group includes lead service line replacement
13 studies and water treatment programs. A few
14 studies looked at soil replacement in yards and
15 occupational interventions in the home.

16 Moving to the third column, the strategy of
17 reducing lead exposure in the home. A large body
18 of evidence of 50 studies focused on lead paint
19 remediation, either within the home or in the
20 home and yard.

21 In the last column, for strategy of
22 increasing or improving clinical detection and
23 clinical work community action, we have three
24 groups: counseling and education programs with 40
25 studies mainly examining increasing risk

1 awareness and home prevention activities;
2 screening and follow-up studies focused primarily
3 on interventions directed at health providers,
4 such as provider reminders to increasing
5 screening; and patient management or treatment
6 which had 20 studies focused on out-patient case
7 management.

8 Lastly, we grouped policy studies but didn't
9 assign them to any one strategy because
10 individual studies span these approaches.

11 The next slide looks more closely at these
12 23 studies.

13 Next slide, please.

14 Here are the studies identified in our
15 scoping review that examine impact on various
16 policies. We've gone through the set of the 23
17 studies and grouped them into more specific
18 policy interventions. For example, six studies
19 examine the impact of state or local policies,
20 setting requirements for housing remediation and
21 abatement. Four studies looked into enforcement
22 of lead hazard standards for housing, and three
23 studies evaluated the impact of local water
24 system policies, including lead service line
25 replacement.

1 We have some take-home points to discuss.
2 First, this category includes a number of
3 distinctly different policies. Different enough
4 that a follow-up systematic review on
5 effectiveness across the group wouldn't make much
6 sense.

7 Second, while several of these policy
8 interventions sound like they may be potentially
9 useful, more important components of
10 comprehensive approach, most of them have only a
11 couple of studies suggesting the need for further
12 research. However, the two at the top,
13 remediation and abatement requirements and
14 enforcement of standards, are probably worth a
15 closer look in a focused systematic review.

16 Next slide, please.

17 Turning now to other characteristics of the
18 hundred and fifty-six studies, this table groups
19 the evidence by study design. Here we further
20 categorize the evidence in the study design
21 suitability categories used by the CPSTF.

22 On the left, we have studies of greatest
23 suitability of design which include randomized
24 control trials with moderate suitability of
25 design in the middle and least suitability of

1 design on the right. The most common design in
2 this body of evidence is the uncontrolled before
3 and after observational design with 55 studies.
4 Almost a third of the included studies use
5 comparative or trial designs, including 26 RCTs.

6 Next slide, please.

7 This slide displays the country
8 characteristics. A majority of studies took
9 place in the U.S. Of those outside of the U.S,
10 most were high-income countries.

11 Next slide, please.

12 Here we present the scoping review's
13 characteristics reported by the studies for
14 population. Most of the studies focused on
15 children, with a few studies focused on pregnant
16 women. For location, the home was the most
17 common characteristic followed by community sites
18 and former lead industrial sites. Additionally,
19 17 studies identified in the unit of interest as
20 other, such as lead jewelry.

21 Next slide, please.

22 We turn to the outcomes reported in the
23 included studies. We grouped them as focusing on
24 individuals in the population or the environment.
25 Among population outcomes, blood lead levels were

1 the most common outcome with nearly two-thirds
2 reporting the small number of studies reporting
3 health outcomes.

4 For environmental outcomes, 25 percent of
5 the studies reported on dust lead levels in the
6 home. This was followed by soil lead levels from
7 yards and lead levels from community sites.

8 Next slide, please.

9 Here we report the numbers of studies by
10 year of publication. We can see in the last 10
11 years there has been an increase in public
12 studies with 71 studies published between 2010
13 and 2019.

14 Next slide, please.

15 Here we have highlighted several issues
16 regarding the applicability of some of the
17 included studies to the current environment. We
18 plan to review these issues and evidence with our
19 coordination team, but we'll need to address
20 concerns about the relevance of the following
21 groups of studies, including this evidence on
22 effectiveness of intervention, evaluating an
23 older study still relevant to the current lead
24 prevention efforts.

25 How should evidence on effectiveness for

1 temporary interventions be used by current lead
2 prevention programs? What is the current role
3 for home cleaning interventions, for water system
4 flushing in homes and schools? How applicable
5 are findings from interventions conducted in very
6 high-risk settings, such as former mining and
7 smelting communities and Superfund sites to other
8 U.S. settings and communities?

9 Finally, which natural experiments provide
10 applicable guidance to lead prevention programs?
11 And can we learn and apply from the studies
12 evaluating the soil, water system, and housing
13 changes in New Orleans following Hurricane
14 Katrina?

15 Next slide, please.

16 We recognize a couple of additional
17 limitations of this review. First, although we
18 retrieved some federal lead prevention program
19 reports in our database search, it's quite likely
20 that our search did not capture state and local
21 prevention program reports which might include
22 relevant intervention evaluations. Second, the
23 scoping review was broadly inclusive of studies
24 evaluating any aspect of lead prevention
25 intervention.

1 As a result, the initial body of evidence
2 includes studies evaluating different research
3 questions. Any follow-up systematic review to
4 examine intervention effectiveness will need to
5 focus on the research question and require a more
6 restrictive inclusion and exclusion criteria.
7 This will result in smaller bodies of evidence
8 than suggested by our current study counts.

9 Next slide, please.

10 Here we present our initial assessment with
11 available evidence from the perspective of the
12 Community Guide. If we wanted systematic
13 reviews, based on evidence for specific lead
14 exposure prevention interventions, the results of
15 this scoping review would suggest the following.

16 There are several intervention categories
17 with moderate-sized bodies of evidence that would
18 probably support a follow-up systematic review,
19 even accounting for studies dropping out as the
20 research question there is their focus.

21 The evidence includes a mix of study designs
22 well within the typical distribution of most
23 community guide systematic review projects. In
24 addition, there are several potentially important
25 intervention approaches that warrant additional

1 research, including community-based primary
2 prevention interventions, school-based
3 interventions, and U.S. relevant take-home lead
4 prevention interventions.

5 Next slide, please.

6 We turn to our next steps for this project.
7 We are still working to finalize the scoping
8 reviewing assignments and categories. We intend
9 to further stratify categories into groups of
10 distinct interventions like we did with the
11 policy category. This will give us a better
12 assessment of candidates for potential follow-up
13 systematic reviews.

14 We will continue to work with our
15 coordination team to identify the most important
16 evidence gaps and begin to formulate an agenda
17 for further research.

18 At our last meeting, the coordination team
19 suggested that we frame our scoping review in
20 comparison to the 2017 (indiscernible) report
21 "Ten Policies to Prevent and Respond to Childhood
22 Lead Exposure."

23 Once our analyses are completed, we will
24 draft a manuscript for publication.

25 Thank you, again, for the opportunity to

1 share our findings with you and this committee.
2 I will be happy to answer any questions that you
3 might have. Thank you, again.

4 **MS. RUCKART:** This is Perri. Excuse me.
5 This is Perri Ruckart. I've gotten a message
6 from our transcriber that he's having some
7 internet connectivity issues. So let's just
8 pause so he can restart his computer and that way
9 he, hopefully, will not miss any of the meeting.

10 And we were scheduled at 1:15 to begin our
11 committee member discussion on the Community
12 Guide presentation. Let's just take a
13 five-minute break to let our transcriber
14 reconnect, and we can begin that discussion at
15 1:05, a few minutes early so we can have a really
16 robust discussion. Thank you.

17 **MR. REYNOLDS:** Thank you.

18 (Break taken, 1:00 till 1:05 p.m.)

19 **MS. RUCKART:** Okay. It's now five after
20 one. It's been five minutes but the transcriber
21 is not reconnected yet. Since we're ahead of
22 schedule, I'm just going to give him another few
23 minutes to see if we can get him connected.

24 Thank you.

25 (pause)

1 **MS. RUCKART:** Okay. I've just gotten word
2 that our transcriber is reconnected.

3 So, Ray, can you hear me? Can you confirm?
4 (no response)

5 **MS. RUCKART:** Okay. I'm getting a message
6 that he is in the process of connecting. I
7 apologize. It's a little challenging with the
8 technology and not all being in the same room,
9 but just please bear with me.
10 (pause)

11 **THE COURT REPORTER:** Hello, Perri?

12 **MS. RUCKART:** Yes.

13 **THE COURT REPORTER:** Okay. I'm sorry that
14 took so long, but I have rebooted. I've
15 reconnected, so I'm hoping we're good to go.

16 I apologize to everybody.

17 **MS. RUCKART:** Okay. Thank you.

18 Okay. We're back up and running.

19 Let's begin the committee member discussion
20 on Jeff's Community Guide presentation, and I'll
21 turn it over to Jana Telfer to lead that. Thank
22 you.

23 (no response)

24 **MS. RUCKART:** Jana, are you there? You may
25 be muted.

1 **MS. TELFER:** I'm sorry. Is this better?

2 Hello?

3 **MS. RUCKART:** Yes. I had muted myself to
4 allow you to speak, then I had to unmute. Yes, I
5 can hear you. Thank you.

6 **COMMITTEE MEMBER DISCUSSION ON COMMUNITY GUIDE**
7 **PRESENTATION**

8 **MS. TELFER:** Okay. Great. Thanks.

9 All right. Thank you very much. I'm glad
10 everybody made it back, particularly glad that
11 our transcriber is back online because the
12 comments have been very useful so far.

13 So what we're going to do is do the one
14 thing that I didn't do -- have enough discussions
15 to do, and that is we're going to start with the
16 federal members of the committee.

17 And so, Donna Johnson-Bailey, do you have
18 comments on the presentation and any insights
19 that you'd like to share with the group?

20 **MS. JOHNSON-BAILEY:** No. I can just say
21 that I definitely welcomed seeing the high number
22 of research studies that have been completed in
23 the past 10 years.

24 One piece that sort of stood out for me is
25 the fact that a lot of the conversation today has

1 been around the fact that the interventions are
2 local, the activity is local. But oftentimes at
3 the local level the research is not necessarily
4 done or supported. And so it would be wonderful
5 if there were ways to reach out to community
6 organizations to identify, perhaps, additional
7 ways that interventions could be included in this
8 scoping process.

9 I also say that because many of the programs
10 such as WIC are at the local level. That's where
11 the actual work occurs, and so to see that
12 represented in this effort would be good to see.
13 Thank you.

14 **MS. TELFER:** Thank you. It's always
15 encouraging to be -- as a communications person,
16 when we hear our federal partners talking about
17 the importance of paying attention to the
18 community level.

19 So thank you for bringing that back front
20 and center.

21 Michael Focazio, would you like to
22 contribute something?

23 **DR. FOCAZIO:** Sorry. I wasn't raising my
24 hand.

25 **MS. TELFER:** Okay.

1 So we'll move on to Tiffany DeFoe.

2 **MS. DEFOE:** Hi. Yeah. So on the
3 occupational take-home interventions front, you
4 know, in terms of being a research gap,
5 unfortunately, that -- I mean, that's been my
6 experience also. And trying to look at the
7 evidence base for evaluating our written policy
8 choices about things such as migration,
9 prevention strategies, I would agree that that's
10 a big research gap.

11 I was curious in terms of the study design.
12 So I saw that occupational -- so that exposure to
13 workers, per se, was excluded from the scoping
14 project and that the take-home was included. And
15 I was curious how the boundary was drawn there.
16 In particular, were you looking at -- when you
17 were looking at -- or looking for studies of
18 efforts to prevent take-home exposure -- or to
19 prevent exposure in the home from take-home
20 exposure, were you looking only at methods of
21 kind of checking and cleaning the house following
22 the return of the worker? Or did you incorporate
23 any search for studies that looked at what was
24 going on in the work site, such as hygiene areas
25 and practices or protective equipment practices,

1 to start there to prevent take-home?

2 I was just curious if it's possible to
3 discuss the -- how the line was drawn there.

4 **MS. TELFER:** Thank you.

5 Jeff, are you able to respond to that
6 question?

7 **MR. REYNOLDS:** Yes. So we were actually
8 open to all of the occupational studies, but
9 you're correct, it was -- only the ones that we
10 included were ones that had a home intervention.
11 We do, though -- we have collected all of those
12 that would have been in the workplace, but those
13 would have been a low intervention of interest.
14 But we did code and collect for all that.

15 So to note, does this group think that it's
16 also an important category, though it's
17 occupational interventions in the workplace?

18 **MS. DEFOE:** Well, I mean, of course, I do.
19 And, you know, and I understand the reasons for
20 scoping out exposures to workers at the work
21 site, but in terms of preventing take-home, I
22 would say that looking at the policies in the
23 workplace that started there to prevent take-home
24 would be a very important aspect.

25 **MR. REYNOLDS:** Yeah. The coordination team

1 was interested in that, in the home. Yeah,
2 occupational exposure intervention. So that's
3 what we focused on in the scoping.

4 **MS. DEFOE:** Understood. Thank you.

5 **MS. TELFER:** Okay. Thank you both. That
6 was very helpful.

7 Jeanne Briskin, would you like to contribute
8 something? And remember to unmute yourselves.

9 I'm the --

10 **MS. BRISKIN:** Hello?

11 **MS. RUCKART:** Jeanne?

12 **MS. BRISKIN:** Yes.

13 **MS. RUCKART:** I can hear you. I think we
14 may have lost Jana.

15 **MS. TELFER:** No, I'm sorry. I was muted. I
16 can hear now.

17 **MS. RUCKART:** Thank you.

18 **MS. BRISKIN:** Yeah, sorry. I thought I
19 disconnected.

20 The thing that strikes me -- I really
21 appreciated hearing, you know, the systematic
22 approach to identifying studies for further, more
23 detailed assessment. I'm aware at EPA, for
24 example, of studies that we're doing that kind of
25 break off parts of the problem but don't kind of

1 go to from A to Z -- you know, from the -- you
2 know, all the way to impacts on people or
3 populations, starting with lead in the
4 environment or something in that end of the
5 analysis chain.

6 And so what that does is causes me to ask
7 the question outside the scope of the
8 presentation, which is: Are there ways that we
9 can kind of take the systematic approach and
10 understand where we can join different studies
11 that take different pieces of the problem
12 together to build a bigger picture?

13 I know that kind of thing has been done, but
14 I don't know to what extent. If understanding
15 what the limitations of doing that maybe could
16 help people when they are doing more limited
17 studies, design them so that they can be looked
18 at together.

19 Thank you.

20 **MS. TELFER:** Thank you.

21 Jeff, from the perspective of the Community
22 Guide Office, have you a response or some
23 guidance as they -- as we move forward with this?

24 **MR. REYNOLDS:** Yeah. So as of now, we have
25 stopped at the scoping review portion.

1 Obviously, if we went to a full systematic
2 review, we would (sound interruption) assessment
3 of the evidence. Yeah. So, yeah.

4 So as of now, with the scoping review, I
5 believe that's about where we have stopped.

6 But I was trying to think if anybody else
7 had any other ideas about how you would pull in
8 those together?

9 **MS. TELFER:** Okay. If someone has an idea
10 about that, if you could raise your hand, using
11 the little hand-raising function, that would be
12 terrific, and we will be able to call on you.

13 And in the meantime, let's move to Tammy
14 Proctor to see if you have a question for Jeff or
15 a comment on the report.

16 **MS. PROCTOR:** Hi. No. I just find it
17 interesting just learning (indiscernible) amount
18 of all of the research that has been completed.

19 **MS. TELFER:** Okay. Thank you.

20 And not to have any disrespect for our
21 chair, but he is the last on the federal list
22 right now.

23 So, Matthew Ammon, would you like to comment
24 or have a question for our speaker?

25 **MR. AMMON:** Yeah. So, you know, I'm always

1 thinking of -- so what are we going to do with
2 this information? You know, so how can we take
3 this and then, you know, the importance of
4 scaling up interventions I think is --
5 community-based interventions, I think, is really
6 key. You know, what actions are -- can we deploy
7 that shown -- that are shown to be defective. I
8 mean, how do we scale up the work that is shown
9 to be effective and how is that, you know,
10 translated at the local level? I mean, I -- when
11 -- I don't want something to become so abstract
12 that, you know, deploying it locally becomes a
13 burden.

14 And I'm always thinking of okay, when we
15 learn something that works, then how do we work
16 with the communities to get that done? And if
17 somebody said, too, about look -- Jeanne said
18 about looking at, you know, this study and other
19 studies.

20 You know, I'm always looking at ways to do a
21 broad-based approach. So, you know, do a
22 broad-based approach that is comprehensive, both
23 on the education side, which we've talked about a
24 lot, but also matching that with, you know, the
25 health and housing intervention side as well as

1 follow-up and working, you know, just beyond, you
2 know, those immediate (indiscernible) wanting to
3 do the work but broadening out into other
4 partnerships.

5 So I'm always, again, looking to see how we
6 can use this type of information to have a much
7 broader application on the ground as people work,
8 you know, to not only eliminate the sources, but
9 also focus on protection of kids and doing the
10 testing. Those have to be married. And so when
11 I'm looking at the applicability considerations
12 and looking at evidence of temporary
13 interventions.

14 You know, home-cleaning interventions, you
15 know, you know, again, you know, we've done a lot
16 of research on cleaning versus the applicability
17 of interim controls, you know, the applicability
18 of abatement -- a higher level abatement, and
19 evidence of high-risk communities. But I would
20 also throw in high-risk communities. I know you
21 have in here mining and smelter communities and
22 Superfund sites, but you know those have a high
23 pre-40 housing stock as well as, you know, below
24 80 percent area median income. I mean, those, to
25 me, are high-risk neighborhoods.

1 You (indiscernible) just do a drive-through
2 of communities based on those two factors to know
3 which homes need abatement, which homes are going
4 to have high lead in homes, high lead in soil.

5 So, again, I'm always trying to figure out
6 if we're going to develop something and deploy
7 it, it's applicability on the ground to make it
8 as most useful to communities who at the end of
9 the day have to use this information for
10 targeting their scarce resources.

11 **MS. TELFER:** Thank you. That reminds us all
12 of the essence of public health which is it's the
13 public part as well as the health part. Let's
14 turn to the non-federal advisory committee
15 members and begin with Dr. Wallace Chambers.

16 **MR. CHAMBERS:** I had a question for
17 clarification. Maybe you can answer this or not.
18 But I was just wondering, where did childcare
19 facilities fit in this, or does it?

20 **MS. TELFER:** Okay. Jeff, have you a
21 response or insight on that?

22 **MR. REYNOLDS:** For childcare facilities, I
23 don't think we gathered much information on that.
24 I'm not sure if it was in the available evidence.
25 Do you have any insights on that?

1 **MR. CHAMBERS:** No. I was just curious what
2 -- when you said school interventions, at what
3 level were you talking about? Were you talking
4 about kindergarten and up? I was just trying to
5 get a sense of --

6 **MR. REYNOLDS:** Yes. So there was nothing on
7 childcare facilities. Some of it was like
8 interventions for the fountains in the school and
9 different interventions like that for the school.

10 **MR. CHAMBERS:** Oh. Okay. I just was
11 curious.

12 **MR. REYNOLDS:** Yeah. We didn't have the --
13 that would have been an interesting one, some
14 evidence. But, yeah.

15 **MS. RUCKART:** Jeff, this is Perri. But they
16 were not specifically excluded, correct?

17 **MR. REYNOLDS:** Yeah. So we were open, yeah,
18 for any. Yeah.

19 **MS. TELFER:** Thank you very much. So that
20 sounds like a hold-this-thought for this
21 afternoon's discussion about research gaps.

22 **MR. REYNOLDS:** Uh-huh.

23 **MS. TELFER:** Okay. Dr. Mielke, further
24 comment or question?

25 **DR. MIELKE:** Yes, I did. I looked at air

1 lead and the puzzle to me is why the -- there
2 were tremendous interventions that were done.
3 These were back in the '70s. Actually, it
4 started in the '70s by EPA, and they had enormous
5 community influence. And there should be quite a
6 bit -- and I think there's a -- quite a bit of
7 literature on that. But I don't see that in the
8 outline that you have. Just a very few articles
9 that are on air lead because air lead drives soil
10 lead, it drives interior lead, it drives a lot of
11 things.

12 **MR. REYNOLDS:** Yeah.

13 **DR. MIELKE:** The interventions that were
14 involved were phenomenal.

15 **MR. REYNOLDS:** Yeah.

16 **MS. TELFER:** Okay. So there were wasn't a
17 date range or limitation on the review, Jeff?

18 **MR. REYNOLDS:** So we do have -- as you can
19 see in the publications slide, we did have some
20 older studies. But, however, I mean, we didn't
21 capture, I believe, many of these air lead
22 studies then. At least, if they were
23 interventions, intervention-specific studies.

24 **DR. MIELKE:** Well, the interventions
25 included, you know, adding the catalytic

1 converter to --

2 **MR. REYNOLDS:** Yeah.

3 **DR. MIELKE:** -- automobiles in 1975. And
4 the follow-up of changing -- those were really
5 important to the community, and it -- I just
6 wonder how this is fitting together. I'm
7 thinking in terms of the metabolism of the city.

8 **MR. REYNOLDS:** Uh-huh.

9 **DR. MIELKE:** And the inputs,
10 transformations, outputs, and materials in the
11 city.

12 Anyway, you know, just a thought.

13 **MR. REYNOLDS:** Thanks.

14 **MS. TELFER:** Thank you very much. That was
15 an insightful and informative discussion.

16 Let's move next to Nathan Graber, please.

17 And Nathan do you have a comment or question
18 for our (inaudible)?

19 **DR. GRABER:** So I actually have a couple of
20 questions. First, I just wanted to say that I
21 find that Community Guide is really an amazing
22 and excellent resource. It's -- I know how it's
23 used on the public health problematic side, and I
24 think the work you're doing here is really
25 terrific and important.

1 One of the -- my first question has to do
2 with sort of how you included it in articles and
3 talk. It's not clear to me that, you know, that
4 things didn't get missed. Because often when we
5 carry out public health programs, the data that
6 we collect doesn't necessarily reach the degree
7 of scientific rigor of an academic study. And I
8 know that you only excluded, it looks like, three
9 studies for not having a comparison group, but
10 I'm just wondering, like, why -- like, why was it
11 -- what were these -- how did you decide on
12 the -- sort of the exclusions and did -- and were
13 you able to include things that wouldn't
14 necessarily, you know, meet like a very high
15 level of scientific rigor? But we know that they
16 work, and you have an excellent group of advisors
17 on the project who can help to understand that.
18 And along with that, any consideration of using
19 sort of government literature, things that didn't
20 make it into publication through peer-review
21 journals but are -- are known to be very rigorous
22 in their approach?

23 **MR. REYNOLDS:** Yeah. So the second one,
24 your last question first. So, yeah, that was a
25 limitation. We didn't use those large government

1 studies. So that would be something we would
2 have to explore.

3 And then for the inclusion/exclusion, as you
4 allude to, we work with the coordination team to
5 decide what was included and excluded. However,
6 we were open to most comparisons and most other
7 exclusions as you can see on the slide 10.

8 Was there any other specific questions
9 related to that?

10 **DR. GRABER:** Yeah. I mean, like, just give
11 me an example. Just -- I'm just trying to
12 understand it a little bit. When you talk about
13 comparison groups, like a before and after --

14 **MR. REYNOLDS:** Uh-huh.

15 **DR. GRABER:** -- comparison group? Or was
16 there was one group that got an intervention and
17 another that didn't, which I would think wouldn't
18 be something possible to do?

19 **MR. REYNOLDS:** Yeah. So we didn't exclude
20 on any of those inter -- study design. So if it
21 was an intervention study, if you see slide 14, I
22 mean, we included it. I mean, there was a large
23 group of uncontrollable before or after
24 observational studies.

25 **DR. GRABER:** Yeah. Yeah. And so my next

1 question is just -- so when you go through this
2 process, there's a number of research gaps that
3 you identify.

4 **MR. REYNOLDS:** Uh-huh.

5 **DR. GRABER:** Do you have a way to feed that
6 into the funding mechanisms for research?

7 **MR. REYNOLDS:** Oh. So we usually, if there
8 is -- in a full review, we would work with our
9 partners on that through our implementation and
10 dissemination.

11 **MS. RUCKART:** Jeff, you're going in and out.
12 Can you please try to speak more directly into
13 the microphone and louder? I don't think we're
14 catching everything you're saying. Thank you.

15 **MR. REYNOLDS:** Okay. Sorry. My mic keeps
16 cutting out here. I apologize.

17 **MS. TELFER:** Okay. Would you be kind enough
18 to just repeat or summarize your last response so
19 we're sure we have that for the record, Jeff?
20 Thanks.

21 **MR. REYNOLDS:** Okay. Sorry. I'm cutting
22 out again.

23 **MS. TELFER:** Okay. So while you're dealing
24 with technical issues for which both Perri and I
25 are extremely empathetic, we'll proceed so that

1 we can keep the discussion going within the time
2 frame, and turn to Karla Johnson.

3 If you have a question or comment on the
4 presentation.

5 **MS. JOHNSON:** Thank you. I don't have any
6 questions or any further comments on it, but I
7 did appreciate it and it was very enlightening
8 for me. So I want to just pass on that, but I
9 don't -- I have nothing else. But thank you for
10 calling on me.

11 **MS. TELFER:** Thank you. We appreciate that.

12 And Donna Johnson-Bailey -- oops. I'm
13 sorry, Donna, we had already called upon you.

14 Let's move to Erika Marquez.

15 **DR. MARQUEZ:** No. I just want to say thank
16 you. I don't have any additional comments or
17 questions at this point.

18 **MS. TELFER:** All right. Thank you.

19 Howard Mielke. Dr. Mielke, any question or
20 comment for our presenter?

21 **DR. MIELKE:** (inaudible) Oops. Yes. I just
22 provided some comments about air lead and the
23 impact of interventions and their impact on the
24 community, I mean, actually the nation, the world
25 once we started dealing with air lead. And that

1 intervention had enormous impact, and it -- you
2 know, it is reflected in the change that is
3 taking place in blood lead levels since the 19 --
4 oh, '80s, '86 -- January 1, 1986, the rapid
5 phasedown through the total phasedown by EPA.

6 And those were interventions that provided
7 insight -- excuse me -- provided insight into a
8 number of different issues that we are all
9 dealing with.

10 **MS. TELFER:** Super. Thank you for
11 refreshing your moderator. I, obviously, erred
12 in -- in being able to manage my own system.

13 So, Anshu Mohllajee, any comment or question
14 for our presenter?

15 **DR. MOHLLAJEE:** Yes. I think this will be
16 really helpful for everyone, and I was just
17 wondering when -- when would the manuscript kind
18 of be -- what's the time timeline for the
19 manuscript to be available to the general public?
20 Do you have any idea?

21 **MR. REYNOLDS:** I've switched to a headset.
22 Can you hear me better now? Can you all hear me?

23 **DR. MOHLLAJEE:** Yes. I can hear you.

24 **MS. RUCKART:** Yes, much better. Thank you.

25 **MS. TELFER:** Yes. Super. Thank you.

1 **MR. REYNOLDS:** Sorry about that tech
2 problem.

3 Yeah. It usually takes at least a year or
4 more for the manuscript to be -- go through
5 clearance and go to peer-review publishing. So
6 it'd be at least a year-long process, if not
7 longer.

8 **DR. MOHLLAJEE:** Thank you.

9 **MR. REYNOLDS:** And, of course, if we can, we
10 like to expedite and get to the project as
11 quickly as possible.

12 **DR. MOHLLAJEE:** Thank you.

13 **MS. TELFER:** Okay. Thank you.

14 And, Jill Ryer-Powder, any comment or
15 question for our speaker?

16 **DR. RYER-POWDER:** Oh. Sorry about that. I
17 forgot to unmute.

18 No. I -- thank you -- excuse me. Thank you
19 for the presentation, and I don't have any
20 questions.

21 **MS. TELFER:** Thank you, all. As the mod --
22 or as the facilitator for this, I am a little bit
23 excited to see how well we could actually have a
24 discussion. So I look forward to this
25 afternoon's session and want to return to Perri

1 and see if the members of the staff or from the
2 center might have any further comments.

3 **MS. RUCKART:** Yes. Thank you, Jana.

4 I would like to see if Dr. Breysse had any
5 comments he wanted to make at this time.

6 **DR. BREYSSE:** I guess my only comment is
7 about the air levels. That was -- you know, the
8 intervention that was mentioned was reducing --
9 eliminating lead from gasoline. And, you know,
10 while that truly was an intervention, a great
11 intervention, I don't think it was the kind of
12 thing we're looking at in this review. So
13 that's, perhaps, why it didn't appear.

14 But other than that, I don't have anything
15 else to say.

16 **MS. RUCKART:** Okay. I wanted to see, Jana,
17 if you would maybe quickly go through the list
18 again and see if anyone from the panel -- any of
19 the LEPAC members would like to further elaborate
20 since we were limiting the first round of
21 comments to just a minute or two?

22 **MS. TELFER:** Sure.

23 **MS. RUCKART:** Thank you.

24 **MS. TELFER:** That sounds like a terrific
25 idea.

1 So let me do that and we will start with our
2 chair, Matthew Ammon.

3 **MR. AMMON:** Yep. One additional --

4 **MS. TELFER:** Do you have any further
5 comment?

6 **MR. AMMON:** Yes. One additional thing I
7 forgot to mention. I was reminded by my
8 wonderful staff.

9 The issue of childcare centers came up, and
10 I know that Dr. Warren Friedman is included in
11 this project, and we had worked with Westat in
12 issuing a final report in two thousand -- 2003,
13 I'm sorry, on a national environmental survey of
14 childcare centers.

15 So we have looked at that, and I am sure
16 that that information, through Dr. Friedman on my
17 staff, will be included as part of the scoping of
18 the community work.

19 **DR. BREYSSE:** If I could touch on that also.
20 This is Pat.

21 So ATSDR has a program for safe siting of
22 childcare facilities. There's a legacy of bad
23 siting decisions across the country of early
24 childhood educational facilities and early
25 childhood facilities being located, as somebody

1 mentioned earlier, at hazardous waste sites,
2 something.

3 So through our cooperative agreement program
4 with the states, we're actually trying to get
5 states to look at more carefully about when they
6 license these centers and where they're located,
7 and certainly avoid any legacies of hazardous
8 waste sites or any other facility.

9 You know, the classic example we talked
10 about is the daycare facility that was sited in
11 an old thermometer manufacturing plant at one
12 point, and it resulted in huge mercury exposure.
13 So there's a potential for a lot of exposure
14 concerns in these facilities, not just lead but
15 certainly lead is one of them. So I'd just
16 mention that also.

17 **MS. TELFER:** Thanks, Pat.

18 And back to Matthew.

19 **MR. AMMON:** No. That was my only comment
20 that I wanted to make. Just adding that.

21 **MS. TELFER:** Okay. Super. Thank you.

22 Tammy Proctor, any further comment, question
23 or discussion?

24 **MS. PROCTOR:** Oh. I'd just like to comment.
25 I think Matthew brought it up about taking some

1 of this research and some of the positive
2 responses in research and how do we scale it and
3 actually help communities use that as a guide for
4 how they do practice in the community.

5 I think that was a very -- a good idea and
6 something I think that we need to explore. So
7 often we do a lot of research and we have a lot
8 of -- a lot of direction from research and
9 recommendations, but how do we actually take that
10 and scale it so that communities have
11 (indiscernible).

12 **MS. TELFER:** Super. Thank you.

13 Jeanne Briskin.

14 **DR. MIELKE:** I do have a comment also, not
15 only on childcare centers, but on playgrounds in
16 the city. In New Orleans we discovered that the
17 playgrounds had CCA-treated wood, which is
18 arsenic- , copper- , and chromate-treated wood.
19 And we could predict where high arsenic would be
20 just by going -- looking at a map, going to
21 playgrounds, and then going to the bottom of the
22 slide or underneath the swings and that would be
23 where the highest arsenic levels were being
24 found.

25 And that particular work that we did, that

1 triggered interventions throughout the city to
2 change all the playgrounds. And I am sure that
3 other cities have found the same type of thing.

4 **MS. TELFER:** Very interesting. Thank you.

5 (indiscernible), that was Howard Mielke for purposes of
6 the transcript.

7 So, Ms. Briskin, any comment or question --
8 additional question for our presenter?

9 **MS. BRISKIN:** No additional comments or
10 questions. Thanks for the opportunity.

11 **MS. TELFER:** Thank you.

12 I'm sorry, going to page 2, Wallace
13 Chambers, further comment or question?

14 **MR. CHAMBERS:** No. I don't have any further
15 comments. Thank you.

16 **MS. TELFER:** Thank you. Tiffany DeFoe?

17 **MS. DEFOE:** None from me. Thank you.

18 **MS. TELFER:** Thank you. I appreciate that.
19 Michael Focazio.

20 Okay. Remember to unmute yourselves, and he
21 may have taken a break himself.

22 Nathan Graber, any further comment or
23 question?

24 **DR. GRABER:** You may be surprised, but I'll
25 refrain from further comment right now.

1 **MS. TELFER:** All right. We'll be ready for
2 you in this afternoon's session then.

3 Karla Johnson.

4 **MS. JOHNSON:** No, I don't. Thank you very
5 much.

6 **MS. TELFER:** Thank you.

7 And Donna Johnson-Bailey, any further
8 comment or question?

9 **MS. JOHNSON-BAILEY:** No additional comments.
10 Thanks so much though.

11 **MS. TELFER:** Thank you.

12 Erika Marquez, anything further?

13 **DR. MARQUEZ:** Nothing additional at this
14 time.

15 **MS. TELFER:** Thank you. Dr. Mielke, any
16 further comment? Thank you for the playground
17 insight.

18 **DR. MIELKE:** No. Thank you for the
19 opportunity, but I have no more comments at this
20 time.

21 **MS. TELFER:** Thank you.

22 Anshu Mohllajee, any additional comment?

23 **DR. MOHLLAJEE:** No additional comments,
24 thanks.

25 **MS. TELFER:** All right. Thanks.

1 And, finally, Jill Ryer-Powder, additional
2 question or comment for our speaker?

3 **DR. RYER-POWDER:** Yeah. Actually, two
4 comments.

5 First, I appreciate this kind of -- this
6 kind of publication and this kind of evaluation
7 because if it can be used as evidenced-based
8 information to put together interventions that
9 work.

10 And then the other thing is we could
11 somehow encourage the programs or facilitators of
12 the interventions to publish their work so they
13 can be included in future publications like this
14 one.

15 **MS. TELFER:** Thank you. That's very
16 helpful.

17 I think for those people who are in the
18 trenches, as you know, working day to day, it's
19 sometimes difficult to pull back and publish.
20 But that's an important part of sharing
21 information.

22 **MS. RUCKART:** This is Perri Ruckart. It's
23 1:40. We have the public comment portion of the
24 meeting starting at 1:45, and I really want to
25 stick to that schedule in case there are people

1 who will be joining us just for that specific
2 portion. I don't want them to miss it.

3 So if there's no further comments at this
4 time, I propose that we just take a very quick
5 four-minute break now, and at 1:45 we will start
6 the public comment period. Thank you.

7 (Break taken, 1:41 till 1:44 p.m.)

8 **MS. RUCKART:** Okay. It's 1:44. We are
9 going to get started in just one minute. Please
10 stand by. Thank you.

11 (pause)

12 **PUBLIC COMMENT**

13 **MS. RUCKART:** Okay. It's now 1:45. This is
14 Perri Ruckart. I want to open up the public
15 comment section of our agenda.

16 Anyone who wished to make a public comment
17 needed to preregister. We have two people who
18 did so, and I will call on Michael Kosnett,
19 first. Thank you.

20 **DR. KOSNETT:** Hi. This is Michael Kosnett.
21 Can you hear me, Perri?

22 **MS. RUCKART:** Yes. Thank you.

23 **DR. KOSNETT:** Great. I am pleased to
24 address the committee this morning. I'm an
25 associate adjunct professor at the Colorado

1 School of Public Health and the Division of
2 Environmental and Occupational Health.

3 I wanted to emphasize to the committee that
4 LEPAC is directed to address the health hazards
5 of exposure of lead to adults as well as
6 children. You heard a lot this morning about the
7 Federal Lead Action Plan. It has very laudable
8 elements, but it's entirely devoted to childhood
9 risks. And exclusive focus on preventing
10 childhood lead exposure was not the intent of
11 Congress in establishing LEPAC.

12 In fact, if you look at the (indiscernible)
13 language establishing LEPAC's responsibilities,
14 it actually doesn't mention the word child or
15 children. It refers to individuals exposed to
16 lead.

17 And the same is true for the LEPAC charter
18 which you all have with you. Under description
19 of duties, it doesn't specify children. And this
20 wasn't by accident. This was intentional. In
21 fact, it's very notable that Tiffany DeFoe from
22 OSHA is a member of the LEPAC committee, and I'm
23 glad that she expressed an interest in this
24 topic.

25 As a medical toxicologist and an

1 occupational health physician myself with a long
2 interest in the prevention and management of lead
3 intoxication, I'd like to call on the committee
4 to include occupational health hazards of lead
5 exposure as one of the key focuses of the LEPAC.

6 Please consider the following. Current OSHA
7 standards regarding lead on both the federal and
8 state basis are mainly based on federal OSHA
9 standards for general industry that were
10 introduced almost 50 years ago in 1977. These
11 OSHA standards do not require medical removal
12 from lead exposure until blood lead exceeds 50 or
13 60. There is no one in the country who doubts --
14 even the lead industry, who doubts that this is
15 outdated.

16 And on the contrary, high quality research
17 over the past two decades, based on very high
18 quality, large perspective cohort studies has
19 observed that chronic blood lead concentrations
20 among adults in the range of 10 to 25 micrograms
21 per deciliter are associated with a significant
22 risk of death from cardiovascular disease.

23 And we're talking about death. There's no
24 end point more severe. In public health, we do a
25 lot of things when people have some changes in

1 liver function tests or slight decreases in their
2 hematocrit. This is death.

3 NIOSH has had a long program, ABLES, that
4 has tracked adult lead exposure in the workplace.
5 Dr. Breysee noted that LEPAC's primary focus
6 should be to advise CDC when you're all aware
7 that NIOSH is a (indiscernible) component of CDC.

8 And also note that this committee is
9 required by legislation to report annually to
10 multiple committees in congress, not just to
11 ATSDR or CDC. And I can assure you that these
12 congressional committees will want to hear from
13 LEPAC about adult lead exposure and they will be
14 asking for that information. I can assure you
15 that.

16 Another branch of the federal government,
17 the Department of Defense, has actually
18 established recently new rules on occupational
19 lead exposure that require medical removal
20 protection at blood leads that are greater than
21 20 or 30. And it's now developing a new
22 occupational exposure limit.

23 I was a consultant to these actions, and I
24 can be an important model for other parts of the
25 federal government moving forward.

1 Now, the current LEPAC does not have any
2 members who are occupational medicine specialists
3 or industrial hygienists who have a lot of
4 expertise in occupational lead exposure, but
5 there is a solution. If you look at the LEPAC
6 charter at the bottom, it calls for the creation
7 of a subcommittee that can include not only LEPAC
8 members but also nonmembers to join -- to address
9 this issue.

10 And I urge LEPAC to establish a subcommittee
11 on occupational lead exposure to address this
12 issue now. You can vote to do this today. You
13 can vote this as one of the things you want to
14 look at, and I really encourage you to do this
15 and to consider inviting additional specialists
16 to assist you in this important effort.

17 And I will look forward to hearing your
18 comments about that. Thank you.

19 **MS. RUCKART:** Okay. Thank you for your
20 comments.

21 I'd like to go to our next commenter, Perry
22 Gottesfeld. Would you please proceed.

23 **MR. GOTTESFELD:** Yes. This is the other
24 Perry. Can you hear me?

25 **MS. RUCKART:** I can. Thank you.

1 **MR. GOTTESFELD:** Very good. I'm Perry
2 Gottesfeld with Occupational Knowledge
3 International, a non-profit organization that
4 focuses on occupational environmental health in
5 the U.S. and around the world.

6 I have submitted written comments but
7 evidently those could not be circulated, so I'll
8 be reading from those. But I'd be glad to share
9 those with committee members after the meeting
10 today if anybody wishes.

11 First, let me congratulate CDC for finally
12 activating this advisory committee to further
13 lead-poisoning prevention efforts. It has been
14 about seven years since the agency has a -- had a
15 committee dedicated to this topic that allows for
16 a dialogue between experts and other federal
17 agencies. And I would note that the charter does
18 encourage the committee to make, you know, any
19 other recommendations -- quote, any other
20 recommendations -- for communities affected by
21 lead exposure, both to Congress and not just to
22 HHS. And I think that's an important role that
23 this committee needs to explore.

24 My comments today are focused on suggestions
25 for setting the agenda for future meetings and to

1 begin to think about setting up subcommittees as
2 needed. There are a few areas where this
3 committee can have the greatest impact in
4 addressing some of the neglected areas of our
5 national response to lead poisoning, and I've
6 outlined five specific areas. And I'll go over
7 it with you now.

8 Number 1, updating the CDC blood lead
9 reference level. As you heard today, excuse me,
10 the CDC's Board of Scientific Counselors
11 recommended in 2017 that the agency adopt a
12 revised blood lead reference value for children
13 based on the most recent NHANES data that would
14 set the level at 3.5 micrograms per deciliter.

15 Since then no action has been taken by the
16 agency. It is important to note that the purpose
17 of the CDC's reference value is not to initiate
18 medical treatment but to identify children,
19 communities, and environments associated with
20 lead-exposure hazards. A failure to update this
21 level will result in a failure to identify and
22 respond to environmental lead hazards going
23 forward.

24 This committee must immediately move to urge
25 the CDC to update the reference value in

1 accordance with the BSC's, the Board of
2 Scientific Counselor's, recommendation.

3 Number 2, blood lead testing. Along with
4 the need to update the reference value is the
5 understanding that improvements in blood lead
6 testing technology will ultimately be needed to
7 improve limits of detection and limits of
8 quantification of point-of-care devices. This
9 need will also serve to increase blood lead
10 testing among exposed workers.

11 The committee should examine opportunities
12 for the federal government to incentivize the
13 research and development needed to modernize
14 testing to accommodate the need to economically
15 test blood lead levels at lower detection limits.

16 Number 3, inconsistent standards for soil
17 and dust should be addressed. Federal
18 regulations and guidance for characterizing soil
19 and dust hazards for clearance after abatement
20 are inconsistent and not protective of public
21 health. EPA soil hazard standards for
22 residential properties were established in 2001
23 to be consistent with CDC's 1991 blood lead level
24 for individual intervention at 15 micrograms per
25 deciliter.

1 Furthermore, the regulation makes a
2 distinction between play areas and other areas of
3 the yard which are regulated at levels that are
4 three times higher, at 1,200 parts per million.

5 At the same time, California is using a
6 screening level of 80 parts per million for soils
7 and in making abatement decisions in some
8 residential properties. Where you live in the
9 U.S., in an arbitrary decision on what
10 constitutes a play area, can determine if a child
11 is protected from contaminated soil today.

12 Similarly, in January, EPA updated the lead
13 dust hazard levels but left in place the older
14 clearance criteria for dust-wipe samples after
15 abatement. As a result, it is now possible to
16 hire an abatement contractor to conduct lead
17 abatement in a home where the dust-wipe samples
18 on floors are allowed to be four times greater
19 when the work is completed than at the outset.
20 However, if the abatement is funded by HUD, HUD
21 grants, than the clearance standard will be the
22 same as the lowered hazard standard.

23 Now, the committee must urge Congress to
24 mandate federal agencies to update soil and dust
25 hazards and abatement standards to be consistent

1 with the current CDC guidelines.

2 Number 4, occupational exposures. Although
3 the Federal Action Plan does mention the need to
4 reduce lead exposures from occupational sources,
5 there've been no noticeable action on the part of
6 federal OSHA to revise the 1970s-era standard.

7 Take-home lead exposures are responsible for
8 approximately 10 to 20 percent of childhood lead
9 poisoning in the U.S. It's a very significant
10 percentage of elevated blood lead levels. There
11 is a consensus among public health experts and
12 industry that the current standard is out-of-date
13 and not protective of workers health.

14 Even lead-using industries have voluntarily
15 moved to reduce blood lead levels to less than
16 half of the limit currently enforced by OSHA.
17 States, including Washington and California, have
18 initiated the process of revising their
19 occupational lead standards. The need for OSHA
20 to initiate a similar process should be a
21 priority of this committee.

22 Number 5, ban lead paint and plastic. The
23 Federal Lead Action Plan addresses the need to
24 enforce regulations on lead in consumer products,
25 and it talks about guidance for cosmetics but

1 fails to call for a ban on lead paint and the use
2 of lead in plastics.

3 As you probably know, since 1978 the
4 Consumer Product Safety Commission restricted the
5 use of lead in paint for specific applications.
6 But lead paint is still allowed in the U.S. for,
7 quote, industrial purposes, including metal
8 structures such as water tanks, elevated subways,
9 bridges, and roadway marking paints, and even in
10 products that are not intended to be used by
11 children, like automobile paint. There are
12 substitutes for all of these applications.

13 In 2009, the U.S. took a leadership role at
14 the U.N.'s International Conference on Chemicals
15 Management and voted along with 120 other
16 countries to eliminate all lead paints and
17 coatings. Since that resolution, countries,
18 including the Philippines and others, have put in
19 place a ban on all lead paint products but the
20 U.S. has not. The inaction on the part of the
21 U.S. has undermined global efforts which are now
22 headed by the World Health Organization and U.N.
23 Environment Programme to eliminate paint.

24 **MS. RUCKART:** Excuse me, Perry. I'm sorry
25 to interrupt you but it's 1:58, and we're

1 scheduled to wrap up in two minutes. I just
2 wanted to see if you thought that would be enough
3 time for you to wrap up?

4 **MR. GOTTESFELD:** I think I only need one
5 more minute. Thank you.

6 **MS. RUCKART:** Excellent. Thank you.

7 **MR. GOTTESFELD:** My final point is that
8 about half of global production of lead chromate
9 and other lead pigments and lead stabilizers are
10 being used in the manufacture of PVC and other
11 plastics. The U.S. has no regulation on the lead
12 content of plastics that are ubiquitous in our
13 society. The committee should address the need
14 to finally eliminate lead paint and lead in
15 plastics in the U.S.

16 As a former member of the ACLPP committee, I
17 wish the new committee good luck in taking on
18 these important challenges to protect public
19 health.

20 If you would like a copy of my comments,
21 you could email me at info@okinternational.org.
22 That's info@okinternational.org. Thank you.

23 **MS. RUCKART:** Thank you so much.

24 I really appreciate everyone sticking to our
25 timeline so that we can make sure we get through

1 everything we need to with our limited time
2 today.

3 Let's take a 15-minute break at which time
4 we'll reconvene at 2:15 for our facilitated
5 discussion of effective services and best
6 practices regarding lead screening and the
7 prevention of lead poisoning.

8 So please check back in 15 minutes. Thank
9 you.

10 (Break taken, 2:00 till 2:15 p.m.)

11 **MS. RUCKART:** Okay. It's 2:12. Just wanted
12 to give you the three-minute warning till we
13 reconvene at 2:15. Thank you.

14 (pause)

15 **MS. RUCKART:** Okay. This is Perri Ruckart.
16 Welcome back. It's 2:15.

17 I would now like to turn it over to Jana
18 Telfer.

19 **MS. TELFER:** Hi, Perri and everyone. Can I
20 be heard okay?

21 **FACILITATED DISCUSSION OF EFFECTIVE SERVICES AND BEST**
22 **PRACTICES REGARDING LEAD SCREENING AND THE PREVENTION**
OF LEAD POISONING

23 **MS. RUCKART:** Yes, Jana. Thank you.

24 **MS. TELFER:** Super. Thank you.

25 All right. So the first discussion this

1 afternoon is going to be on effective services
2 and best practices regarding lead screening and
3 the prevention of lead poisoning.

4 And I'd like to turn to Dr. Pat Breysse to
5 open the discussion and give us some perspective
6 and some framing.

7 Pat, are you ready?

8 **DR. BREYSSE:** Sorry. I had to unmute
9 myself. Yeah.

10 So I think one of the challenges, which I
11 touched on earlier and you have touched on as
12 well, is -- and which some of the public comments
13 were also, were about what our screening
14 reference value is and the role it plays in the
15 screening program.

16 So I'd like to just kick this off by saying
17 that we would like the LEPAC to give us some
18 advice. And let me just give you a little bit of
19 history. As you heard, we -- in 2012, I think it
20 was, the lead committee at the time recommended
21 that we establish a reference value that is tied
22 to the 97.5 percentile of the NHANES
23 distribution. Recognizing that there was --
24 since there's no known safe health threshold that
25 we would -- we tied to a distributional value

1 because we couldn't say it was healthy per se.

2 But the goal still remains to get the blood
3 lead levels lower and lower over time and keep
4 reducing them through a variety of approaches.
5 And so we -- when that policy was adopted and --
6 by the CDC, we lowered the blood lead reference
7 value from ten to five, and they said to do it on
8 a periodic basis, four-year interval.

9 And we looked at the data -- back in 2014 I
10 think we started doing it -- and the 97.5
11 percentile was 3.5 and we asked the work group,
12 as part of a board of scientific counselors, to
13 look at the policy of adopting -- of tying the
14 reference value to the distribution of NHANES and
15 to make recommendation to us.

16 And as you heard, the work group recommended
17 to the full committee that we lower it to 3.5 and
18 that -- then the full committee debated it, and
19 the full committee recommended to us to adopt it.
20 We initiated the process to adopt it, and a
21 number of issues were raised through a variety of
22 sources, including some interagency reviews. And
23 some of these issues I think we talked about also
24 as well.

25 And one of the biggest issues was the

1 (indiscernible) sensitivity of measuring lower levels of
2 lead with sufficient precision and accuracy to be
3 useful. And it was tied care -- closely into the
4 use of point-of-care lead-measuring devices
5 because the accuracy and the precision of those
6 devices are not as accurate and precise as a
7 laboratory and local method would be.

8 So it talked -- also talked about the issues
9 of costs, then. And Nathan Graber raised the
10 issue about do you want to do more screening,
11 having the lab -- having the doctor's office be
12 able to do it would greatly improve the number of
13 screens -- children being screened.

14 There was issues about how this -- the
15 reference value is associated with other
16 regulations across the federal government,
17 including EPA and HUD. And there were issues
18 about the numbers of people, the cost, the burden
19 on the states. They were all raised.

20 And so as a result, we're holding back
21 releasing the final reference value. And what
22 we'd like, I think, is to have this group give us
23 some advice as (indiscernible) reviewers
24 recommended about does it still make sense to tie
25 the reference value to the 97.5 value of NHANES,

1 looking at the data and seeing that the
2 distribution of the country are pretty much
3 leveling off. They're no longer in that,
4 certainly in that steep declining phase.

5 And some people raised concern that, well,
6 what would you do if in a few years the 97.5
7 value went up? Would you raise your reference
8 value? And so that needs to be considered. And
9 if that's the case, the policy might simply say
10 that, you know, we will not raise it. We'll only
11 lower it if the 97.5 distributional value
12 suggests we do so.

13 And so there was -- there's a number of
14 challenges to this effort from a number of fronts
15 that we were in the process of trying to address
16 when Congress asked us to establish a new LEPAC
17 -- the new LEPAC, and we thought we could use you
18 as a sounding board and give us some advice on
19 that, recognizing that also what you have to
20 think about, what role does it play in the --
21 broadly in the whole surveillance scheme, what
22 services are tied to being above the reference
23 value.

24 And to look at kind of all the distribution
25 of best practices regarding, you know, what this

1 would trigger and at what point would it trigger?
2 When do we do case management? Is it case
3 management above the reference value or at some
4 other point above the reference value?

5 We're also recognizing that the world we
6 live in and the government we live in, we only
7 recommend things to the states and the states are
8 free to adopt our recommendation or not. And
9 there was a -- it took a while for the states to
10 transfer -- transition from ten to five.

11 And so, you know, what role do the states
12 play at this point if they don't have the
13 resources to be more aggressive or if they don't
14 want to adopt it? We have a hodgepodge, then, of
15 the situations which we have had in the past of
16 going forward.

17 So these are all issues that I think, you
18 know, are important to address as part of giving
19 some advice on how do we manage this surveillance
20 system, this screening system, and how do we use
21 it to keep lowering the blood lead values across
22 the country.

23 And so I think it's probably time to
24 reconsider as a starting point whether tying the
25 reference value to the distributional value of

1 NHANES is still appropriate, and then what is the
2 reference value used for and how do we define and
3 explain that very clearly so that we don't, you
4 know, give -- it is -- it isn't being used
5 inappropriately and being used as a regulatory or
6 a standard value.

7 So I think I'll just stop there and see if
8 we can open it up for discussion. So that's kind
9 of the lay of the land, if you don't mind my
10 saying so. If there's something else you'd like
11 me to elaborate on, please let me know.

12 **MS. TELFER:** Perri or Monica, any additional
13 comments before we turn to the advisory committee
14 members?

15 **MS. RUCKART:** This is Perri. None from me.
16 I'd like to reserve this time for discussion
17 among the members since it's so limited, but
18 thank you.

19 **MS. TELFER:** Okay. Super. So as you
20 recall, what we're going to do -- and,
21 particularly in light of Pat's question, I feel
22 as though I may have been just a tiny bit
23 prescient in setting this first discussion up so
24 that we will begin with the nonfederal members of
25 the advisory committee.

1 And I'd like to start with Dr. -- or with
2 Wallace Chambers, if we may, and -- to comment on
3 Pat's question.

4 And if you would, please limit yourself to
5 about three minutes. You already know that I
6 will be running a stopwatch on everybody, and
7 that way we'll have additional time at the end to
8 be able to go back and have another round or
9 another discussion.

10 But the first time we're just going to do a
11 round robin and beginning with Mr. Chambers, if
12 we can.

13 **MR. CHAMBERS:** Yes. How are you doing, Pat?
14 I was just trying to process everything you said.
15 You said a lot but I just had a question because
16 I always like to make sure I'm clear on what
17 we're trying to do.

18 Now, the reference value of 3.5 is a
19 policy-related value not a medical value. Is
20 that correct or am I incorrect?

21 **DR. BREYSSE:** So the reference value --
22 right now the reference value is 5. So we have
23 not lowered it to 3.5 as the commenters commented
24 on. That has not happened yet. But it's not --
25 I'd say it's not a health-based number because we

1 didn't do a literature search in trying to
2 identify health threshold and establish a
3 reference value that we think is health
4 protective.

5 And in part that's difficult to do because
6 you don't know if there's a safe level of lead
7 exposure, and, in fact, you know, the -- usually
8 the state admits if there isn't one. And if we
9 did do that, I think we'd find that the health
10 threshold is probably even below 3.5 if you look
11 at some of the data going forward.

12 So the challenge now is how do you set a
13 reference -- so first of all, to set that, you
14 can't do a screening -- do a blood measurement
15 without having something to anchor it to, right?
16 If you just did -- we just tell people to measure
17 blood lead levels, then say what to do about a
18 number if it's above something or other. There's
19 no value in that.

20 So you have to have some number, and when
21 you can't establish a health-based framework for
22 that -- and the physicians on the committee
23 will -- I'm sure will have some thoughts on this.
24 You know, the recommendation was -- and this was
25 before I came here, was that to anchor it to a

1 97.5 distribution.

2 So what you're essentially doing is you're
3 identifying the top two-and-a-half percent
4 exposed population as people being most at risk.
5 And you're saying those are the people we want to
6 target and those are the people we want to begin
7 to lower their blood lead level and that by doing
8 that, I think the theory was that we will shift
9 the distribution to the left. And then, when we
10 do that, the 97.5 percentile value will shift and
11 we'll reestablish the value at that.

12 Again, what we're always looking at is what
13 are the really -- what's the upper end of the
14 distribution and if we can effectually address
15 those. The theory was that the whole
16 distribution of the country will keep shifting to
17 lower and lower values.

18 And so that's what we've been operating on
19 for a while now, and that's what I think
20 conceptually what you should think about, as well
21 as operationally what does it mean at this point
22 when you -- when we can't measure things as
23 accurately and as precisely as we'd like to. Is
24 that clear?

25 **MR. CHAMBERS:** Yes. My next question is

1 that 3.5 -- because I'm a former risk assessor,
2 so excuse me -- will that 3.5 level initiate a
3 risk assessment, or is that a totally different
4 value?

5 **DR. BREYSSE:** So we haven't done a risk
6 assessment in that sense at all, and that was the
7 policy that was adopted a while ago, was the
8 types and just the -- just the distribution.

9 So the reference value's always supposed --
10 well, it was the recommended that we tie it to a
11 97.5 of the NHANES data. So there was -- there's
12 no attempt to kind of establish what health -- a
13 health basis for that number.

14 **MS. RUCKART:** Pat, this is Perri. Can I add
15 something?

16 **DR. BREYSSE:** Sure. If I misspeak, just
17 correct me.

18 **MS. TELFER:** Yeah. And --

19 **MS. RUCKART:** No. No, no. I just wanted
20 to further clarify as was mentioned before. CDC
21 is not a regulatory agency. We just make
22 recommendations and then the states adopt the
23 various levels at which they're going to
24 implement their actions --

25 **MR. CHAMBERS:** Okay.

1 **MS. RUCKART:** -- and their follow-up. So we
2 make a recommendation, then it's up to the states
3 how they want to proceed.

4 **CDR LEONARD:** Hi, Perri. This is Monica
5 Leonard. Can I also chime in just a little bit?
6 And so this always varies, as Perri indicated, by
7 state to take on additional case management
8 guidelines in terms of how they want to do home
9 visits and additional environmental
10 investigations, and I just want to get back just
11 quickly to the blood lead reference value and
12 then for the committee members to continue to go
13 around.

14 As Pat has mentioned, it's a
15 population-based screening tool to help identify
16 children who have been exposed to lead, and it's
17 more so to help enable healthcare providers and
18 public health professionals to identify the most
19 highly-exposed children for intervention and
20 follow-up.

21 **MR. CHAMBERS:** Thank you for that
22 clarification.

23 One final thought. And you mentioned the
24 cost. Is the cost associated with the
25 sensitivity of the lab equipment? What do you

1 estimate those costs? Are they -- you have a
2 range of the increase of costs that are placed on
3 the burden of the laboratories by chance, or you
4 may not have that information?

5 **DR. BREYSSE:** So we have not done that, but
6 that -- I'm just -- that was just one of the
7 issues that people raised as to what we should
8 consider and when we make our recommendations.

9 So the costs can be associated with doing
10 the -- running the tests and work -- and reaching
11 out to the families and communicating the results
12 to the families and whatever other activities
13 would trigger as a result of being above the
14 reference value, and, once again, would be state
15 specific.

16 But, you know, they could follow our
17 recommendations or they could develop their own.
18 And there's -- there's, in fact, probably a
19 hodgepodge of activities and actions that are
20 required as a result of exceeding the reference
21 value, and that would depend on what the state
22 value is -- I mean the state practice.

23 **MR. CHAMBERS:** Thank you. That's all the
24 questions I have for now.

25 **MS. TELFER:** Thank you. Any comments or

1 other observations, Mr. Chambers, as a result of
2 your experience that you'd like to share at this
3 point?

4 **MR. CHAMBERS:** No. I just think when people
5 hear the 3.5, they just naturally think in some
6 cases it may be not appropriately that's the
7 value in which they go out and do risk
8 assessments.

9 So I was just trying to get a clarification
10 on that because sometimes people get confused on
11 that number, and they're not really clear on what
12 that means. That's all.

13 **MS. TELFER:** Super.

14 **DR. BREYSSE:** I just want to be clear about
15 something though. It doesn't trigger a risk
16 assessment, but it will trigger some actions,
17 depending on what the states do and how they use
18 their reference value.

19 **MR. CHAMBERS:** Thank you.

20 **MS. TELFER:** Great. Thank you. Those were
21 terrific clarifying questions, and thank you for
22 contributing to the quality of the discussion by
23 calling those questions.

24 Nathan Graber, you're next up and remember
25 to unmute yourself.

1 **DR. GRABER:** So I'm going to have to start
2 off by just saying that I don't think three
3 minutes is enough time to have a discussion. So
4 if the LEPAC is considering developing
5 subcommittees or work groups, that'd probably be
6 a hot topic for us to work on together.

7 Okay. From a perspective of a physician,
8 following the reference value down becomes less
9 and less practical, especially when you get down
10 to 3.5. I don't think that the majority of us
11 who were using LeadCare II products could even
12 say that that is an elevated blood lead level
13 because of the standards that are around the
14 tests.

15 And we're not going to necessarily subject
16 those patients to confirmatory blood lead levels
17 using a venous sample. If we find it, we may
18 simply, you know, repeat it a week or two or
19 three weeks or a month or two months or three
20 months later, depending on each individual
21 clinical decision.

22 That being said, the use of the reference
23 value or the switch to the reference value was a
24 very wise decision. I think the issue is is how
25 it's been interpreted. It's prob -- it was

1 developed to drive primary prevention efforts to
2 communities where there are a higher prevalence
3 of -- or of children with blood lead levels
4 outside of -- or at the highest levels of
5 exposure in the United States.

6 And I -- one of the things that CDC might be
7 interested in looking at is how it's been used,
8 where are those communities with the highest
9 prevalence of these elevated blood lead levels,
10 and actually what's been happening within those
11 communities in terms of the defined blood lead
12 levels over time and whether they mirror, match,
13 or are even close to what we see in the NHANES
14 data, which isn't necessarily reflective of those
15 highest risk communities.

16 You know, it's interesting -- another
17 interesting thing to look at is that here in New
18 York state, the legislature actually adopted the
19 5 reference value into an action level. And
20 that became law and local health departments are
21 now required to conduct risk assessments and
22 environmental investigations when a child is
23 identified with a blood lead level of 5 or
24 greater. And they're doing that with limited
25 resources, and it would be helpful as more and

1 more data comes out to see what that does in
2 terms of helping to identify the relative
3 contribution of various sources.

4 When the environmental investigation levels
5 were higher, you could identify a lot of times
6 one particular source or maybe one major source
7 and then some contributing sources. But what
8 happens when you get to the children with the
9 lower and lower blood lead levels and what are
10 the relative sources and what's the practicality
11 of addressing those, and then how can you do it?
12 And can you do it on a community-wide level to
13 lower exposures across the board?

14 And -- oh, I had another point related to
15 that. The -- oh, yeah. The other thing is is
16 one of the other thoughts is that, you know, when
17 you're using a blood lead level of 10, I think as
18 -- as the action level, as it was previously
19 done, there's -- as your level, numbers of kids
20 with levels above 10 get lower and lower, is
21 there a degree of complacency, and it tend -- and
22 then not as much of a drive to continue to lower
23 their blood lead levels because we know there is
24 no safe level of lead in children's blood. So
25 will lower -- using the reference value as a

1 driver in this way, will that actually result in
2 a low -- a more rapid lowering of blood lead
3 levels across the population?

4 So I think those are interesting questions
5 that -- to look into. I don't think we have
6 answers to those things yet, but I think they're
7 interesting to look at.

8 **MS. TELFER:** Thank you. Those are terrific
9 insights from the practitioner perspective, and I
10 absolutely concur with your stress over the
11 limitation of three minutes. I am equally
12 stressed, and I thank you for your courtesy in
13 being aware of the time constraints that we're
14 working in.

15 Pat, did you have an additional comment?
16 Sorry, I didn't mean to override you.

17 **DR. BREYSSE:** Nope. Nope. Nope. You know,
18 Nathan's got a great perspective, and he's
19 actually right. But I just -- actually, I --
20 having said no, no, now I have a comment.

21 So I just want people to think about if
22 there's value in knowing what a child's blood
23 lead is, there's value in measuring it accurately
24 and precisely. And if it costs a little bit more
25 and it takes more time, if that's a public health

1 need, I think that's something that needs to be
2 debated about. We shouldn't let the measurement
3 device drive the policy, and -- which is -- in
4 some cases I think what people are proposing is
5 that we can't lower it because the LeadCare can't
6 measure it. The LeadCare can't measure it, but
7 as Nathan said, a venous sample could. And
8 sending it off to an analytical laboratory could
9 easily measure well below 3.5 with sufficient
10 accuracy and precision to take action.

11 So just -- that's part of the debate. We're
12 not going to answer that question today, but I
13 think we're going to spend this next time just
14 framing the debate. And we'll talk about how to
15 proceed in the future.

16 **MS. TELFER:** Thank you.

17 So for the county health perspective, we
18 will move to Karla Johnson.

19 **MS. JOHNSON:** Okay. I got myself off mute,
20 sorry. You caught me a little quicker than I
21 thought you were going to get to my name.

22 I have a couple of thoughts. When it comes
23 to the blood lead level and the -- what I have
24 found, at least, from the health -- county health
25 perspective is that we -- again, I'm going to get

1 back to my original message of messaging. We
2 tell families and -- well, we tell families that,
3 you know, 5 is -- we're working with the level
4 of 5, that 5 is the level that which we're
5 going to take action. We try to really get the
6 message out there that there is no safe level,
7 but 5 is the level in which we're going to
8 take action.

9 I often hear, you know, when I'm talking to
10 a family: Well, the test was negative. Well, I
11 -- and so I -- but they'll follow-up, will ask:
12 What do you mean by negative? Well, it wasn't
13 high. Well, the child had a measurable blood
14 lead level, it just wasn't above 5. And so
15 the information that they're getting, either from
16 the physician or whomever else they're talking
17 to, is that they're fine. Their child is okay
18 and they're not going to do anything about that.
19 If we can finally get them to -- convince them
20 that 5 is the level that they -- in which they
21 should be concerned, it will -- but they should
22 be concerned at any level, but 5 is the number
23 we're going to take action on. Then keep
24 lowering that number and we're going to lose an
25 audience. We're going to -- I don't think we're

1 going to be as effective.

2 So I have to go back to the issue of
3 messaging. If we're going to say that there is
4 no safe level, then why are we allowing children
5 then to have a level for which we will do nothing
6 about? So maybe the message can be that there is
7 no safe level and we will do something at any
8 measurable level. You know, I don't know. I
9 have this -- there's lots of things that come to
10 mind.

11 The last point I'll make is that when we
12 talk about doing a venous blood draw, there's so
13 many disjointed or maybe disconnected pieces that
14 really need to be shored up to make this a good
15 comprehensive program. One of them is going to
16 be laboratory reporting. At least in Indiana, we
17 have a lot of trouble with labs reporting that
18 information to the state.

19 So we have a lot of missing information or
20 the information that we get is incomplete,
21 missing name, missing -- there's just a lot of
22 other things that need to come together that
23 should be addressed. If whatever -- whatever we
24 decide, we should make sure that all of those
25 other ancillary pieces of it are also shored up

1 through policy, through recommendations, whatever
2 you want to call it so that this program can move
3 forward comprehensively and, you know,
4 effectively.

5 **MS. TELFER:** Thank you. Thanks very much.

6 I think we're far from done because you've
7 posed some hard questions and some important
8 things for all of us to consider.

9 Pat, any comment or shall we proceed?

10 **DR. BREYSSE:** Just proceed, please.

11 **MS. TELFER:** Thank you.

12 All right. We're going to turn to Erika
13 Marquez.

14 **DR. MARQUEZ:** Hi. Thank you. So I think
15 Karla presented a really interesting point here
16 where it says if we -- if our messaging is that
17 there is no safe level, then what really is our
18 approach? And I think also one of the things
19 that we need to consider in any final
20 recommendation is the practicality.

21 Like I understand the importance of the
22 precision of the data, of the need for that
23 precise measurement, but I know on the ground
24 what happens in our community, in our clinics is
25 that if I -- we order a blood test for a family,

1 they're less likely to get it done. If there's a
2 point-of-care system at that clinic, then we're
3 able to actually get a completed test.

4 So I think we need to think about the
5 practicalities of some of these recommendations
6 and how this is going to look like on the ground.

7 And in terms of the state responses, in our
8 state we have a variety of different responses
9 depending on the locale. In the southern portion
10 of our state, we have responses but they don't
11 occur until 10 micrograms per deciliter for a
12 lead risk assessment. But from 5 to 9,
13 they at least get a phone call. In other parts
14 of our state that are largely rural, all they get
15 is a phone call regardless of what their blood
16 lead level is unless it's severely elevated.

17 So I think those -- our states are going to
18 adapt based on whatever recommendations that we
19 make. I think we just need to think about how --
20 what the practicality of some of our
21 recommendations may be moving forward.

22 **MS. TELFER:** Thank you. That's a really
23 important reminder.

24 Okay. We'll move to Howard Mielke.

25 **DR. MIELKE:** Yes. I've been thinking about,

1 you know, the first kind of approach or worry is
2 that we're using blood lead. It's secondary.
3 It's not primary prevention. And the question
4 then is how do we balance blood lead surveillance
5 versus environmental surveillance to try to go
6 towards primary prevention.

7 And primary prevention is now -- if you're
8 thinking in terms of the amount of material,
9 lead, that has arrived at the soil as a long-term
10 problem, we now have available XRF, which are
11 hand-held and very easy to use and very easy to
12 get an understanding of the amount of lead in the
13 environment where children are playing.

14 Now, we're using this a lot. It's very
15 sensitive and it may be able -- we may be able to
16 balance -- make a good balance between blood lead
17 surveillance and actual environmental
18 surveillance. And I would be concerned about
19 moving into a system where it's much more
20 expensive to do the blood lead surveillance which
21 would then take away some possibility of doing
22 the environmental surveillance.

23 Measuring lead in soil, there's no crying,
24 you know, it doesn't -- it isn't squeamish,
25 it's -- you know, you can get a good measurement

1 very easily, and you get a good idea of what the
2 environment's like, and we have a pretty good
3 idea of what would be safe and what would not be
4 safe. So that's my major issue.

5 Bruce Lanphear raises the question of,
6 again, the primary prevention. Do we attempt to
7 only work with the children with the highest
8 blood lead levels, or do we look at the
9 population -- a larger population, the other 97.5
10 percent of the population that if we would lower
11 their blood lead level, everybody would come
12 down, and if we found some techniques to do that?

13 So those are really my two comments -- or
14 three comments.

15 **MS. TELFER:** Thank you. That certainly adds
16 to the discussion.

17 Let's move to Anshu Mohllajee.

18 **DR. MOHLLAJEE:** Yes. So when the question
19 was first proposed to us, what I did is I quickly
20 went to the childhood lead poisoning prevention
21 page of the CDC and looked at the recommended
22 actions based on blood lead level. And for us,
23 you know, what CDC states really kind of guides
24 what we're trying to accomplish. And so in order
25 -- I agree with Nathan. It seems like there's a

1 real need to have a whole subcommittee meeting to
2 talk about this and to -- because there are so
3 many issues involved because this -- there's a
4 whole package.

5 So changing a number, as we all know, isn't
6 all that simple, but there's a whole package.
7 And so, for example, you know, the actions that
8 would have to occur, just looking on our -- on
9 the website, you know, what do we expect will
10 occur for the 3.5 to 5 range? Is that different?
11 And there is a lot of focus on the follow-up
12 blood lead testing as well. And so changes would
13 have to occur as well to the recommended schedule
14 for obtaining the confirmatory venous sample.

15 And then the schedule for the follow-up
16 blood lead testing at a public health level,
17 people would need to be aware of this, but
18 definitely at the level of the provider.

19 And I do think that messaging is so
20 important and thank Karla for bringing that up
21 and then Erika for re-echoing that. But this
22 could also be an opportunity of kind of
23 rebranding everything or kind of getting lead --
24 you know, it is in the limelight because of
25 Flint, but really how do you explain to people

1 that there is no safe level of lead?

2 And yet we can't necessarily act on every
3 level, so we use certain guidelines -- you know,
4 we'd start at 3.5 or 5 and then -- but you can
5 see it's very nuanced and so there's going to be
6 a lot of intention that we need to think about in
7 the messaging of all of this.

8 So those are my thoughts for the moment.
9 Thank you.

10 **MS. TELFER:** Thank you. We appreciate those
11 insights.

12 Jill Ryer-Powder.

13 **DR. RYER-POWDER:** Okay. So I -- two things.
14 First, as a risk assessor, having just that value
15 of 3.5 -- and this kind of echoes what Wallace
16 Chambers was talking about with the confusion,
17 just having that reference level makes it
18 difficult to try and communicate or get across
19 the point that we're trying to clean up a site to
20 a soil level that is representative of a blood
21 lead level -- of a target blood lead level. So
22 it -- what I'm trying to say, I understand that
23 there is -- CDC says there is no safe blood lead
24 level, but in California we use one microgram per
25 deciliter as the amount that's going to lower IQ

1 by one point.

2 So I'm wondering if there's a way that CDC
3 can make it clear that that 3 -- and I know
4 they try, that that three point -- or that 5
5 is currently just a reference value. But in the
6 absence of a known safe level, you can use this
7 value, one, as your target level for a soil
8 cleanup or a water cleanup or whatnot. So that
9 was my -- actually, yeah, that was my first
10 thought.

11 And then, again, just to reiterate, I'm not
12 sure why the US EPA still cites on their Superfund
13 website CDC from 1991 that says that 10 is the
14 presumed safe level or the threshold level, 10
15 micrograms per deciliter.

16 So, you know, kind of in summary, I think
17 it's really important to put, A) a level out
18 there so we can target remediation levels. And,
19 B, make it clear that it's apples and oranges
20 when you're talking about that 5 level as a
21 reference value versus what is a target level for
22 a safe level in the blood.

23 And then another point that I wanted to
24 make, Dr. Graber was talking about trying to
25 figure out what the sources of the blood lead

1 level -- the increase in blood lead level might
2 be, and I was wondering if at this -- during this
3 -- or at the surveillance point or as a part of
4 those programs if there are questionnaires that
5 address potential exposures, and, you know, when
6 that child goes in to get his blood tested, if
7 there's some way that the physician, or whoever
8 is measuring the blood, could have access to that
9 questionnaire to try and figure out where the
10 exposure is coming from and help advise the
11 child's family as to how to decrease the
12 exposure.

13 So that's all I have.

14 **MS. TELFER:** Super. Thank you. Those are
15 important and pragmatic considerations for us as
16 you all move forward.

17 We're going to shift to the federal members
18 of the committee and begin, if we may, with Donna
19 Johnson-Bailey.

20 **MS. JOHNSON-BAILEY:** I would just note that
21 it seems that there is a striving for some
22 consistency. And the challenges that I've heard,
23 particularly from those who are actually working
24 at the state and local level, is that each state
25 has some ability to use these recommendations at

1 their discretion.

2 From a broad view, I think it would be
3 helpful to understand how well the reference
4 value has been adopted. If there's some belief
5 that there's a bit of a hodgepodge, then,
6 perhaps, there should be a subcommittee or some
7 discussion around the relationships that the
8 states have in reporting this information with
9 some consistency with the CDC reference values.

10 I also have a question about how successful
11 the primary prevention sort of emphasis might be,
12 given some of the kind of structural challenges
13 that exist. I think if there are issues around
14 regulation in terms of the use of lead -- and
15 some of the key areas that were discussed include
16 those exposures that might be in the home, an
17 example might be plastics -- it does seem like it
18 would be a challenge for the states to implement
19 very low levels -- very low reference value,
20 given that the exposure is to some degree going
21 to be there.

22 And I guess I would emphasize, once again,
23 to really look at the health systems and the
24 relationship and influence that CDC has in those
25 relationships, particularly in terms of

1 influencing the state policy, given that states
2 do seem to have a great deal of autonomy.

3 **MS. TELFER:** Super. Thank you for calling
4 to mind all of the intricacies of the system that
5 are necessary to consider to make this all work.

6 We'll move now to Michael Focazio if we may.

7 **DR. FOCAZIO:** Hi. Can you hear me?

8 **MS. TELFER:** Yes, we can. Hello?

9 **DR. FOCAZIO:** Hello?

10 **MS. TELFER:** There. I can hear you now.

11 **DR. FOCAZIO:** It's really strange. I'm
12 sorry. I must be having trouble with connection
13 here. I'll try to be quick. So I would just
14 point out, back to -- I think it was Howard made
15 the point about kind of the environmental side
16 versus kind of what he was calling the secondary,
17 so the primary exposure in the environment and
18 then kind of the secondary things like blood
19 levels.

20 And the conversation has focused a lot on
21 benchmarks. So reference levels, we could talk
22 about drinking water standards, all these things
23 that are very important from a health
24 perspective, and, frankly, way out of my
25 wheelhouse, but I think -- might be -- I actually

1 have a question for the group. Is this council
2 going to focus on things like benchmarks and
3 reference levels, or are we going to focus on
4 exposures, relative exposure pathways, and
5 prevention of exposures, period? And I think if
6 you think about it that way, we don't get into
7 the challenge of well, what's the right benchmark
8 to associate it with.

9 I understand there's a whole -- there's a
10 lot of reasons for benchmarking from public
11 health perspectives to cleanups. Absolutely.
12 That needs to be part of any discussion on how to
13 mitigate lead and protect people's health from
14 lead. But if we could focus on exposures and
15 prevention of exposures, I think you're more on
16 that -- what I think Howard was saying, on that
17 primary -- the exposure pathway, and that's a
18 little different.

19 So the question is: What are -- which are
20 we? Are we both? Can we focus more on the
21 primary?

22 **MS. TELFER:** Super. Thank you. Very, very
23 cleanly articulated. And I think, if we may,
24 we'll hold any discussion or response from the
25 CDC team or from the -- your fellow committee

1 members until the second round which we hope we
2 will be able to get to and you guys are doing
3 great.

4 So let's turn to Tiffany DeFoe if we may.

5 **MS. DEFOE:** Hi. Okay. So at the risk of
6 bringing the conversation -- well, flow a little
7 bit, my comments were on the broader topic of the
8 best practices for screening and prevention.

9 First, you know, I was surprised in the
10 systematic reviews to see the finding that the
11 questionnaires were not having a lot of success
12 in targeting screening based on the fact -- even
13 though they were including, you know, the
14 questionnaire, both exposure through work and
15 hobbies and the blood lead -- the elevated blood
16 lead levels already found.

17 And, I guess, that brings me back to the
18 idea that I expressed earlier, that it could be
19 fruitful to try to integrate information from
20 screenings with information from site visits to
21 kind of build on the referral programs that have
22 -- that exist in some states between regional
23 OSHA and us and ABLES and state health
24 departments to try to expand the models that
25 exist there and work to integrate them with the

1 childhood screening more. And that may help.

2 And I also wanted to say along the issues of
3 prevention and screening and partly in response
4 to our public commenters earlier, so at OSHA we
5 are working on an advance notice of proposed
6 rulemaking which is focused primarily on the
7 issue of blood lead levels to trigger medical
8 removal and return to work.

9 However, the request for public comment will
10 be open for all aspects for the rule that folks
11 want to comment on. So that also includes
12 screenings, like the rules for who gets screened
13 and when, methods of exposure control. And this
14 would be a good time if we are considering a
15 subcommittee on occupational issues and
16 developing best practices for us. Since we're in
17 this process that would be a very good time for
18 us to have the benefit of a subcommittee like
19 that.

20 Thank you.

21 **MS. TELFER:** Thank you. That's an important
22 element to consider as well.

23 We'll move now, if we may, to Jeanne
24 Briskin.

25 **MS. BRISKIN:** Hi. This is Jeanne. So I've

1 been listening to a lot of this conversation from
2 the point of view of the use of the screening
3 level as an anchor point because that's where it
4 often gets used in policymaking and setting in
5 guidances. So that's the opposite side of
6 actually working directly with communities in the
7 field to screen patients, for example.

8 And I guess my interest is in a
9 conversation, again, about communicating what the
10 anchor point means. I think that there is often
11 not understanding about the distribution of blood
12 leads, the -- and that leads to a potential
13 implicit discounting of the value of shifting the
14 curve of distribution of exposures.

15 You know, people in various programs attempt
16 to do very detailed cost-benefit analyses based
17 off of the anchor points. And so, you know, in
18 -- I think it's inevitable that that will happen.
19 And so, I guess, it goes back to the whole
20 communication around it.

21 And the point that I mentioned earlier is to
22 help inform decisions, such as soil lead cleanups
23 and cost-benefit analyses for different
24 regulations. How can we better educate
25 policymakers about what this means in the field?

1 Because it becomes -- it -- going back to the
2 question about, you know, are we looking at
3 screening children, or are we looking at, you
4 know, using this as a benchmark?

5 Using it as a benchmark comes back to the
6 ultimate exposure of populations, children, and
7 others. So I think helping people understand
8 those linkages is -- would be helpful.

9 That's all. Thank you.

10 **MS. TELFER:** Super. Thank you. That helps
11 integrate the problem or make it more complex. I
12 am not sure which.

13 But let's move to Tammy Proctor.

14 **MS. PROCTOR:** Hi. I just want to say I can
15 just totally appreciate all the rich
16 conversations that are being held today and just
17 wanting (indiscernible). That's one plus.

18 I was thinking about -- it goes back to the
19 messaging. How do we -- it seems like we have a
20 challenge of how do we streamline the message
21 across the agencies so that the message going out
22 to state and local communities is consistent and
23 that that consistent message will signal a blood
24 level -- a surveillance blood level that all
25 would adhere to that would trigger mitigation of

1 activities to decrease, you know, and pull for
2 some intervention.

3 So that's the first thing that I keep
4 hearing. Keep hearing. (indiscernible) this
5 message is one -- one message was this family's
6 level was at 10, one message (indiscernible), and
7 one is 3.5. So think about a state. Think about
8 a community hearing the different messages coming
9 out of the different federal agencies that should
10 have a hold on the surveillance levels in lead,
11 especially when you think about -- you tend to
12 think about CDC being one of the leading agencies
13 for that. That's my first comment.

14 My second comment that is resonating
15 (indiscernible), in this group, we talk about are
16 we putting more policy or recommendations for how
17 we would like to see states and communities move
18 forward on identifying -- identification of
19 children and degradation of the reason -- of the
20 exposure -- exposure points -- the exposure
21 factors.

22 So I think we have to think about a balance
23 or how we do policy because policy with
24 regulation, understanding that some of the
25 federal agencies are not regulatory, the CDC is

1 not a regulatory agency.

2 So how do we balance that in a way that the
3 state and local communities can implement the
4 practices that will allow them to -- again,
5 identify the exposure factors and then mitigate
6 against those and in turn identifying those
7 children and families who are exposed and
8 decreasing the exposure levels.

9 So those are the things that are resonating
10 with me right now.

11 **MS. TELFER:** Super. Thank you very much for
12 those insights.

13 We'll shift now to our chair, Matthew Ammon,
14 to provide his input and, perhaps, summarize, and
15 then I believe we may have a little bit of time
16 remaining to be able to have some further
17 discussion.

18 So, Matthew, can we move to you?

19 **MR. AMMON:** Absolutely. You know, I think a
20 lot in that we've talked about messaging in the
21 broad sense, and I think there are a couple
22 aspects of it that I want to raise.

23 One, you know, is the, you know, agency that
24 we rely on to focus on guidance and screening
25 tools and things of that nature, you know, and

1 obviously, that's CDC's bailiwick. And, you
2 know, I think it is very important that when
3 issues of knowledge about improved science,
4 issues related to how can we have statements on
5 additional protections, I think it is important
6 that as a messaging tool that we continue to help
7 define what is the best science out there, just
8 like we did with lowering dust lead and things of
9 that nature.

10 I mean, I think, again, as a messaging tool,
11 I think it is important to continue the work in
12 terms of saying what does the best science say in
13 terms of protections and in terms of what we need
14 to focus on as goals.

15 So I do think it's important that that work
16 continue, and, you know, that as we know more,
17 you know, we can relate what we know, and in
18 terms of it, that means lowering numbers to offer
19 evidence that, you know, what we know in better
20 science offers more protection. I think it's
21 important for us to continue that.

22 The other, I think, aspect of messaging -- I
23 think people have mentioned it -- is really that
24 under -- and Jeanne mentioned it, too, from
25 EPA -- is that understanding of what does this

1 mean. So is it translatable? Like, do people
2 understand -- and we face this a lot at HUD when
3 we go talk to our appropriators and having them
4 understand this, because, you know, all of us
5 kind of refer back to that as the guiding point
6 of well, here's what we're trying to get to,
7 here's what we're trying to get to.

8 So any way that we can improve how we
9 message that is a really important aspect of
10 people understanding what we're doing and the
11 outcomes that we're getting.

12 So how are we going to measure the outcomes
13 in communities based on all the collective work
14 that we are doing? Using something like this and
15 expanding it, I think, needs to be better defined
16 for all of us as a use tool.

17 And in terms of its applicability to our
18 programs, we will -- and in terms of our lead
19 hazard control programs all around the country,
20 you know, we will always defer to CDC's guidance,
21 and we'll be doing work in the units regardless.
22 Like, we'll be doing work in -- in work -- in the
23 units regardless of whether it's a 5 or whether
24 it's a 3.5, we're doing work in those units. So
25 I do want to make that clear that at the end of

1 the day, the work has to get done in those units
2 and with our lead hazard control dollars they are
3 being done.

4 And so that will continue, you know, as
5 whatever is decided, you know, regarding the
6 lowering.

7 But, again, you know, I just get back to the
8 important messaging, the planting that flag and
9 saying, you know, based on what we know and the
10 evidence of what we know, this is a statement
11 about what we know.

12 And I think in many times in what we're
13 seeing, that is an important tool, important
14 planting of the flag for a lot of these programs
15 and a lot of these communities to rally around.

16 **MS. TELFER:** Thank you very much. That's a
17 terrific place to wrap up the discussion, and
18 certainly we're seeing the challenge that we're
19 facing as a nation with -- as we're learning
20 about something about which we know much less
21 than we do about lead, how important it is to
22 explain that clearly. So thank you for bringing
23 that up.

24 I believe, if I'm correct, Perri, we have
25 about five minutes remaining in this section.

1 Would you like for us to turn back to Pat to gain
2 his reflections on the comments that have been
3 made thus far?

4 **MS. RUCKART:** Yes, that would be fine.
5 Thank you, Jana.

6 **MS. TELFER:** All right. So Dr. Breysse,
7 we'll invite you, if you are willing, to close
8 out this session with about five minutes of
9 observation, not to exceed five minutes of
10 observation on what you've heard.

11 Okay. And remember to unmute.

12 **DR. BREYSSE:** I'm sorry. I'm trying -- I'm
13 multi-tasking here.

14 So these are all wonderful comments. These
15 are all big-ticket items. This is a very complex
16 issue as the discussion just showed, right? And
17 so I think this just illustrates why we're going
18 to turn to you for advice on how to navigate all
19 these troubled waters.

20 And I just have a text actually from Celeste
21 Phillip, my boss, and she'd like to make a
22 comment.

23 Can we open the floor to her for a minute
24 while we have another second?

25 **MS. TELFER:** Absolutely.

1 **DR. BREYSSE:** If that's possible?

2 **MS. TELFER:** Certainly. If it's able to be
3 done --

4 **MS. RUCKART:** Yes, Jana. I see that --

5 **MS. TELFER:** -- through the system?

6 **MS. RUCKART:** Excuse me. She's been
7 unmuted. This is Perri. So she should be able
8 to speak now.

9 **DR. BREYSSE:** Dr. Phillip?

10 **DR. PHILIP:** Yes. Thank you. Can you hear
11 me?

12 **DR. BREYSSE:** Yes.

13 **MS. TELFER:** Yes, ma'am.

14 **DR. PHILIP:** Okay. Okay. Great. Thank
15 you.

16 Nothing like saying your boss is asking to
17 make a comment to a ... (indiscernible) --

18 **DR. BREYSSE:** Sorry.

19 **DR. PHILIP:** I've been back at CDC for
20 about a month now, but my -- I've spent the last
21 decade in state and local public health. So
22 that's really where some of my comments are --
23 are going to come from. And I just want to first
24 say thank you to everyone. I've been trying not
25 to jump in because there's just so much to learn

1 from all of you.

2 But as we're getting close to the end of the
3 day, I just wanted to thank the comments
4 regarding the importance of involving
5 communities, having flexibility to meet different
6 cultural needs, understanding the difference in
7 exposures that might occur because of those
8 differences based on geography, based on who
9 lives there, rural versus urban, et cetera.

10 So I think that's a really good place to
11 have a lot of those discussions. You know,
12 having just come from being a local health
13 officer, working with a team in a California
14 county responsible for some of this work, in most
15 local jurisdictions this is not going to be the
16 only thing that anyone does. And as we're
17 looking at all of our competing priorities,
18 and -- you know, I think opening hearing that
19 this is an area where we've made a lot of
20 progress and you hear of the top 10 public health
21 accomplishments.

22 It is hard to keep that momentum going when
23 you're trying to balance all of the different
24 responsibilities that public health has. So I'd
25 just like to offer, as we're looking at, you

1 know, should we lower the reference value, you
2 know, how do we communicate this, you know,
3 whatever that answer is, going into it still
4 thinking about a risk-based approach where areas
5 that -- parts of the country where we see higher
6 numbers of children or adults that have levels
7 above whatever reference value we're using,
8 communicating around the -- those areas first, I
9 think that helps to give some perspective to
10 those responsible for doing the work to say we
11 know you can't do it all at once, but here is a
12 way to start.

13 I mean, thinking through the programming
14 from that perspective, as well as some of the
15 other earlier comments about looking at from
16 testing surveillance, even treatment perspective,
17 where is some of that work already happening
18 where we can tie this work into an existing
19 infrastructure framework personnel system,
20 bringing in other partners so that, again, it
21 doesn't feel overwhelming at the local level.

22 I think there's a lot of potential, and,
23 again, thank you all for all of your comments. I
24 just wanted to share my thoughts, having just
25 left the field about a month ago. Thank you,

1 guys.

2 **DR. BREYSSE:** Great. Thank you, Celeste.

3 **MS. RUCKART:** Okay. It's three -- excuse
4 me. This is Perri. It's 3:13 and we're
5 scheduled to begin the next facilitated
6 discussion at 3:15.

7 So, Jana, why don't we just go ahead and get
8 started. Thank you.

9 **FACILITATED DISCUSSION OF RESEARCH GAPS AND ADDITIONAL**
10 **RESEARCH NEEDS**

11 **MS. TELFER:** Okay. Thank you, all.

12 What I'm going to ask you to do right now is
13 the same thing I would be asking you to do if we
14 were face-to-face. And if you're already doing
15 this, extra credit to you, but everyone has been
16 tied to the computer for much of the day, so I'm
17 going to invite you to just stand up and stretch
18 your arms out to the side as though you're
19 verifying that you can be six feet away from the
20 closest person. And then stretch your arms up
21 overhead -- and I hope you're all doing this. It
22 really does have a purpose -- and then lock your
23 hands behind you and pull your hands up as high
24 as you can so you can really stretch your arms
25 out and get some feeling back. All right. Thank

1 you all very much. That helped me, and I hope it
2 may have been useful for those of you who chose
3 to participate.

4 I think if it's okay with everyone, I would
5 like to start this discussion with Matt Ammon
6 since we have made him last in two separate
7 rounds.

8 And the question is to discuss the research
9 gaps and additional research needs.

10 And so, Matt, if -- as our chair, if you
11 would like to frame that up a bit and then we
12 will do the round robin from the back of the
13 roster to the front of the roster.

14 **MR. AMMON:** Yeah. Thanks.

15 As I mentioned in my opening statement, just
16 as a reference point, some folks have mentioned
17 the December lead workshop summary. So I do
18 think that we can provide the -- you know, what
19 was talked about during that meeting and some
20 specific things that they're already looking at
21 that way we don't have to reinvent the wheel.

22 Again, this is regarding the lead action
23 plan, sorry. There is a lead research
24 working-group committee.

25 (multiple speakers)

1 **MR. AMMON:** So we can hopefully
2 (indiscernible) and provide that to the group,
3 and there's a bunch of things I'm looking at here
4 that I think would be certainly good for, not
5 only areas and topic areas that are potential for
6 discussion, but also they do -- and they have
7 identified gaps already.

8 So it's good that we don't have to reinvent
9 the wheel. If you were a part of that, you know,
10 I'll let you speak on that, if you guys wanted to
11 raise some of the specific things that were
12 discussed. But that's a good starting point.

13 But one of the things I wanted to mention
14 too in -- you know, obviously, we do a tremendous
15 amount of research and all of us probably have
16 been a part of research, and we do a fair number
17 of funding -- excuse me -- and we have funding
18 available all the times in terms of research.

19 But some of the -- so expanding research, to
20 me, also includes demonstrations. And a lot of
21 what we are asked to do in terms of communities
22 and also in terms of Congress is to think about,
23 you know, demonstration projects on the ground
24 where we have programs that may be working
25 separately, but looking to combine or add value

1 to one other's program.

2 So let me just give you a couple of
3 examples. So we've been asked to look in terms
4 of working with -- doing a demonstration pilot,
5 you know, combining our work, lead hazard control
6 and also weatherization. Again, these are two
7 programs on the ground, and what can we do in
8 terms of adding value. What are the cost
9 effective and cost benefits of combining the
10 work? And at the end of the day, you know, what
11 could we report out on adding value to either of
12 our programs, either in terms of effectiveness or
13 operation, but also asking programs to take on
14 more? So whether that's our program on
15 weatherization, you know, things of that nature.

16 And so I'm always looking to find what could
17 we do within the existing funding structures or
18 existing programs at the federal and state level
19 to combine them for demonstrations. And we see a
20 lot of that demonstration work, obviously, with
21 Medicaid and some of their innovation fund too
22 that they are providing funding for those type of
23 innovative pilots as well.

24 Again, outside of pure research, I mean, I
25 think, you know, one of the ways that we need to

1 break through in getting this work done
2 locally -- and I'll keep driving that -- is to
3 look through -- look at existing programs,
4 existing activities, existing streams of funding
5 and looking at ways that we can combine those and
6 add value to those and that we can work at each
7 other's purpose.

8 I mean, all of us do different things, but
9 all of us sound like we are -- have very, very
10 common outcomes, you know, which is reducing,
11 eliminating lead exposures whether that's child
12 or whether that's adult. So I look at in
13 thinking of ways that we can expand and just do
14 more than research but also to fund pilot
15 demonstrations on the ground.

16 **MS. TELFER:** Super. Thank you.

17 I've lost sound, so I don't know if Matt is
18 still speaking.

19 **MR. AMMON:** Oh. No worries (indiscernible).
20 I was going to hand it over, sorry.

21 **MS. TELFER:** Thank you. The hazard of not
22 having a visual connection, right?

23 **MR. AMMON:** I'm just sitting here, trust me
24 looking at my computer.

25 **MS. TELFER:** ... to continue our discussion,

1 starting at the end of the roster and turn to
2 Jill Ryer-Powder, if we could, for your insights
3 on research gaps and additional research.

4 **DR. RYER-POWDER:** Oops. Okay. So kind of
5 continuing on as to what I was saying before, I
6 think the biggest research gap is trying to
7 figure out what the blood lead level of concern
8 is, and then figuring out -- I mean, I know
9 there's the IEUBK model out there, but verifying
10 that model to make sure that the soil
11 concentration that you're putting into the model
12 and all of the other parameters are valid in
13 terms of coming up with a target blood lead
14 level. That's it.

15 **MS. TELFER:** Super. Okay. Thank you. Yes.
16 Precision would be a wonderful addition to the
17 process.

18 Anshu Mohllajee.

19 **DR. MOHLLAJEE:** Yes. I kind of want to
20 build upon, you know, Jeff's talk. And really
21 for me and for what I think we're grappling with,
22 the state is just really understanding what
23 interventions are we doing right now that are
24 working. You know, how effective are our home
25 visits and our environmental visits? Do they

1 need to occur with an environmental professional?
2 What's the use of a community health worker?
3 Going along with those lines, you know, the work
4 that some people have been doing of proactive
5 visual assessments with the use of community
6 health workers instead of someone maybe a little
7 bit more highly trained.

8 You know, kind of looking at those type of
9 research and interventions, I think, are really
10 valuable and just trying to figure out, you know,
11 if -- as we're shifting to prevention, what does
12 that look like? What are the interventions out
13 there that we can get started with and using
14 information that other people already have.

15 So those are some of my thoughts. Thanks.

16 **MS. TELFER:** Super. Thank you. Evaluation
17 research is so often undervalued. And from the
18 CDC perspective, our chief evaluator is retiring,
19 so it brings to mind the importance of that
20 activity.

21 Howard Mielke, if you have a comment on
22 research gaps -- research gaps.

23 **DR. MIELKE:** I do.

24 **MS. TELFER:** Thanks.

25 **DR. MIELKE:** I've been thinking a lot about

1 COVID-19, like everybody else, and one of the
2 problems that we've certainly faced in New
3 Orleans is that there's a group of
4 African-American patients who have had a very
5 high death rate compared to everybody else. And
6 my question then relates to the idea that lead
7 exposure is a -- becomes converted into -- or
8 transforms into a chronic disease that has a
9 number of characteristics that are very similar
10 to the characteristics of people who are dying.
11 Hypertension, kidney disorders, include -- and
12 dialysis relating -- or needed dialysis. Same
13 characteristics for lead poisoning as we are
14 seeing for the excess of the additional number of
15 people who are dying from COVID-19.

16 So that would be one area of research that I
17 think could be pursued, and we'd have to find a
18 better way to measure the lead exposure. And
19 actually, we have good ways of doing it by
20 measuring bone and figuring that out.

21 My second comment is, again, primary -- we
22 certainly need to address the leaded avgas, and
23 not just because of the leaded avgas -- this is
24 the fuel that's being used in reciprocal engines
25 for a small aircraft in general aviation -- but

1 the problem is deeper than that because when you
2 have leaded avgas, there is a little secret known
3 only to a very few people that as a result of the
4 fact that you have to move avgas through the same
5 pipelines as unleaded gasoline for (indiscernible) gas, you --
6 there is an allowance for lead in (indiscernible) gas or lead
7 in unleaded gasoline. And that could be a very
8 large multiplier in the amount of lead that's
9 going back into the atmosphere, beyond simply the
10 use of avgas. And that really is very low
11 hanging for -- because we know an enormous amount
12 about what happens when you remove lead aerosols
13 in terms of the population exposure.

14 And the third point is a real -- it's -- I
15 guess, it's a sensitive issue for me, it's -- I
16 was doing research on gun smoke, and it's a very
17 large source of lead dust for shooters and their
18 families, and this involves both children and
19 adults. There are well over 20 million U.S.
20 citizens who regularly shoot, and they're
21 shooting a -- bullets that are driven by primary
22 -- the primary substance or primer is lead-based
23 and the bullets themselves are lead. And it's an
24 extraordinary amount of lead entering into the
25 environment, but specifically in the breathing

1 range of the people who are doing shooting. And
2 there's a very large literature on this topic.

3 The -- in the case of NATO, for example,
4 they realized that their --

5 **UNIDENTIFIED SPEAKER:** (indiscernible)

6 **DR. MIELKE:** -- soldiers were being
7 poisoned. And so they -- they changed from a
8 leaded primary to a non-leaded primary and
9 nonleaded bullets. It's available, but we're not
10 using it in the U.S. Those are my comments.
11 Primary.

12 **MS. TELFER:** Thank you very much. Very
13 interesting and introducing topics that may not
14 have been top of mind for some of us. I
15 appreciate that.

16 Erika Marquez.

17 **DR. MARQUEZ:** All right. I think, you know,
18 focusing on research areas that also that can
19 drive policy and even resources are a key thing,
20 and I think some of this has been touched upon,
21 particularly looking at intervention services and
22 looking at early intervention services and how
23 those can mitigate outcomes of lead exposure.

24 So thinking along the lines of not only the
25 effectiveness but those using the

1 cost-benefit-effectiveness approach as well to
2 kind of help drive policy decisions and
3 resources. And I think that's one that hasn't
4 already been mentioned specifically that I think
5 sticks out for me in terms of an area of research
6 that we could still pursue a little further.

7 **MS. TELFER:** Super. Thank you very much.

8 We'll turn to page 2 of our roster, and if
9 we may begin with Donna Johnson-Bailey.

10 **MS. JOHNSON-BAILEY:** Well, I think in my
11 head right now there's just more questions. And
12 so, you know, some of the questions that are
13 bubbling up for me are: How can we better
14 promote assessment of the quality on the ground
15 efforts that are happening in states?

16 I think really taking a strong look at how
17 states have effectively accomplished lead
18 prevention and mitigation efforts and documenting
19 that in a way that it provides not just the
20 research but the practical efforts that have
21 occurred, you know, within a defined time period.

22 So more looking at the best practices and
23 making that more clear to audiences. And I guess
24 it also leads back to the communication piece.
25 If we can better communicate what exists and what

1 has been successful, particularly among the
2 higher-risk audiences in the higher-risk
3 communities to encourage adoption of those better
4 practices.

5 So I think some of those are -- some of
6 those items are top of mind right now, for me, in
7 terms of looking for additional gaps.

8 **MS. TELFER:** Great. Thank you very much for
9 calling those forward.

10 We'll move to Karla Johnson, please.

11 **MS. JOHNSON:** Yes. Thank you. I feel -- I
12 think that a lot of my professional questions
13 people have sort of touched upon throughout this
14 day, so I'm going to ask -- and I'm going to
15 approach this from a mother of a lead-poisoned
16 son, and I think you all remember that I had
17 talked about my 22-year-old -- at this point, he
18 just turned 22 -- was lead-poisoned when he was a
19 year. And there wasn't a lot of information out
20 there for me as a mother trying to navigate what
21 was going on with him.

22 And so -- well, I -- let me back up. There
23 is plenty of information about what goes on with
24 a young child up until the point that we dropped
25 him off at school. And then there's -- seems to

1 be this void, at least from a parental
2 perspective, or something that's marketed or
3 towards a parent or a guardian about what to
4 expect during those years going forward through,
5 you know, elementary, high school, and beyond.

6 I would love to see some information about
7 that, and what can you expect then. What are
8 some things that we can continue to do to help
9 children as they go through, you know, the school
10 years and early adulthood?

11 One of the other speakers -- someone asked a
12 question -- I don't remember who it was -- that
13 talked about adult blood leads in our -- and that
14 this committee is not just supposed to address
15 lead in children but also lead in adults. And I
16 say -- and I agree with that. We address the
17 lead in children, we address the lead in adults,
18 and we should also address what we should be
19 expecting and doing to help children who were
20 lead-poisoned who do become adults.

21 It sounded like that -- we were talking
22 about adult exposure, maybe occupational, maybe
23 through hobbies but not -- there seems to be this
24 missing page of this book where we're not
25 addressing the children from the time we drop

1 them off at school and get them out of case
2 management to the point where they're grown and,
3 perhaps, maybe they're picking up another hobby
4 and they get occupational exposure at that point.

5 So I would like to fill that gap from a
6 mother's perspective or a parent's perspective.
7 There seems to be a lot for public health
8 professionals in the medical community, and all
9 of this conversation that seems to gather around
10 let's talk to professionals, leaving out some of
11 the main players, which are the parents who could
12 be our best allies.

13 So that's what I would like.

14 **MS. TELFER:** Thank you very much for sharing
15 your personal perspective as well as your
16 professional insights. And it seems as though
17 that might be a crucial gap, knowing as -- what
18 we do about how many children have been affected
19 over the years. So thank you again for bringing
20 that forward.

21 Nathan Graber, may we turn to you now?

22 **DR. GRABER:** Sure. So I think a lot of what
23 I wanted to put forward as research gaps have
24 been addressed throughout the day as well as by
25 the other panelists -- and so I just want to kind

1 of re -- sort of review that really quickly and
2 then I'm going to add something.

3 So first of all, we mentioned about the
4 Community Guide and that identifying gaps in
5 literature and using that as a way to develop a
6 research agenda and informing funding sources;
7 the evaluation of interventions, particularly as
8 some places have gone to using the reference
9 level as an intervention level; and what impact
10 that has on identifying sort of the sources but
11 also the relative source contributions.

12 And then what are the effective
13 interventions in lowering the blood lead levels
14 in those communities? And are there novel
15 approaches and less expensive and less
16 complicated approaches that are being used that
17 are as effective or more effective than some of
18 the more traditional heavily regimented
19 approaches?

20 And I bring that up specifically because of
21 a concern about the increased workload for local
22 public health departments without necessarily
23 having the adequate, you know, resources
24 allocated to carry out those entire programs.
25 And maybe there's something there that can be

1 done that's just as effective as well as thinking
2 about some of the maybe culturally specific
3 sources and collecting that in -- those data in a
4 way that is central and readily available and
5 easily turned into maybe a larger pool of data
6 for understanding how to address some of the
7 culturally associated sources.

8 The one thing that I kind of wanted to bring
9 up, I didn't know how to frame it until it was
10 brought up by a couple of other panelists just
11 now, which is this idea around management. When
12 we have patients with blood lead levels above the
13 reference level, we certainly talk to parents
14 about what those levels mean and what they can do
15 to try to address the impacts of the child's lead
16 exposure.

17 You know, one thing to keep in mind is that
18 the clinical relevance of the blood lead level is
19 very difficult to understand. We can't say to a
20 parent that, oh, your child's going to lose, you
21 know, six IQ points because their blood level was
22 five because it varies patient to patient and
23 individual child to individual child. And there
24 are the -- the outcome -- the -- either their
25 executive function or their behavior as they get

1 older are so multifactorial.

2 It's very hard to communicate to the parent
3 what that number actually means, but we can talk
4 to the parents about what are the things that
5 help to protect and enhance their ability to
6 achieve their maximum potential. And that
7 includes intellectually enriched environments, it
8 includes evaluation in a more detailed way than
9 we do in the pediatric office for their
10 development, for their behavior, and it includes
11 things like nutrition and so on.

12 The question I have -- because the research
13 doesn't address this -- is, you know, what's
14 effective? What shows improvements and outcome?
15 Where would we best be served to put all of our
16 resources and help parents address this in the
17 most effective way?

18 I'll stop there.

19 **MS. TELFER:** Thank you. Thank you. Very
20 thought provoking and to the point. I appreciate
21 your contributions.

22 May we go to Tiffany Defoe?

23 **MS. DEFOE:** Hi. Yes. So I agree with the
24 many commenters throughout the day who have said,
25 you know, we have so much information that there

1 is a need for interventions, including stronger
2 regulation. And I think it's fair to say that
3 for more regulatory agencies, showing a need is
4 one key part of the picture. Showing that what
5 it is that we would require of an industry, for
6 example, is also feasible and effective is
7 typically the tougher part of the evidence base
8 to address.

9 So along those lines yeah, I mean, in the
10 occupational setting, I mean, just to take
11 take-home as an example, not as the only
12 important thing, but looking -- but, you know,
13 addressing the gap about what aspects of hygiene
14 requirements and PPE requirements, for example,
15 in addition to, you know, interventions in the
16 home are most effective in reducing take-home
17 lead. And there's some -- I know there's some
18 work by NIOSH on this, but we definitely need
19 some more along those lines.

20 And also looking at -- for workers'
21 themselves, what are the most effective means of
22 controlling exposures and addressing exposures
23 when they happen? Often it's the case in OSHA
24 standards that because we're required not only to
25 show that we're addressing a significant risk,

1 but that what we are requiring is technologically
2 and economically feasible. It's usually the
3 feasibility part that we run up against. And so
4 either because really reducing -- really
5 eliminating significant risk, either because it's
6 not technologically feasible, or, you know,
7 because we don't have a strong enough evidence
8 base to show that it is.

9 So looking at what the state of the art is
10 capable of doing is always an important factor
11 for us, and looking at the ancillary provisions
12 that when -- when I say ancillary, I mean not
13 just the exposure limits but the whole sort of
14 panoply of other requirements that come into play
15 to help reduce and control workers' exposures
16 such as hygiene and migration and housekeeping
17 and PPE and all those things.

18 Those are -- tend to be the less studied
19 aspects of what's effective in reducing exposures
20 and blood lead levels. And that is a gap that I
21 think is an important one to address. Thank you.

22 **MS. TELFER:** Thank you.

23 Several of you have mentioned things that
24 are very pragmatic, and those seem to be
25 important for all of us in public health to

1 remember are as big a priority as the joy of
2 academic research itself.

3 Can we turn to Wallace Chambers, please.

4 **MR. CHAMBERS:** Yes. So what I was really
5 wanting to say has already been said, but I was
6 also thinking of along the lines of maybe some
7 type of study that examines the benefits or harms
8 of lead hazard control ordinances that are being
9 developed at this point in time. At least in
10 Ohio, they've become unpopular. So I'm just
11 wondering how that impacts the community as far
12 as landlords leaving the area, or is it a benefit
13 or is it a harm in that respect for the
14 cost-benefit analysis, things of that nature.

15 So that was just something I was thinking of
16 as we were going around the room. Thank you.

17 **MS. TELFER:** Thank you.

18 All right. We'll shift to Jeanne Briskin,
19 if we may.

20 **MS. BRISKIN:** Hi. So many of the comments
21 that have been made by others, I would love to
22 concur in. And so the one thing I think I'd like
23 to add, which is really on the microscale
24 compared to the many important points that have
25 already been made, is the value of having

1 systematic methods for state and local
2 governments to collect and process blood lead
3 levels because it helps the research that helps
4 us figure out ultimately things like soil lead
5 targets for clean-up standards.

6 So it's -- in a way it's the tail wagging
7 the dog, but it does help close that loop so that
8 ultimately it can lead towards better prevention.
9 Thank you.

10 **MS. TELFER:** Thank you. And if you would
11 like to mention as well those items that you
12 found salient that others have mentioned, that's
13 fine as well. So just say yay or nay.

14 **MS. BRISKIN:** Sure. So I didn't take
15 detailed notes on the different points by many of
16 the speakers, but one that stood out were the
17 ones from Dr. Graber.

18 **MS. TELFER:** Super. Thank you.

19 All right. Tammy Proctor.

20 **MS. PROCTOR:** Hi. I just don't have a whole
21 lot to say, but I just wanted to -- we need to
22 look at what is effective research, what's the
23 effective research out there. I think that just
24 having the scales -- and then we can't forget
25 that -- we can't forget the costs that go with

1 the intervention and the prevention. Just
2 recognizing that states and communities -- there
3 are costs that go to doing this work and
4 sometimes those costs impede the work moving
5 forward or how much of the work is done.

6 So that's -- that's all I have.

7 **MS. TELFER:** Super. Thank you. That's an
8 important insight as we consider the necessity of
9 implementation.

10 Before -- it looks to me as though we have
11 about half an hour left, but before going back
12 for another round or offering people the
13 opportunity just to raise their hands if you have
14 something else to add, I'd like to turn back to
15 Perri and Monica to see if there are any
16 questions from the program?

17 **MS. RUCKART:** This is Perri. I don't have
18 anything. I would just like to keep the
19 discussion going, but I will check with Monica.

20 Monica?

21 **CDR LEONARD:** I concur with you, Perri. If
22 we can please keep the panel discussion going.
23 This has been great feedback thus far. Thank
24 you.

25 **MS. TELFER:** Absolutely. Thank you both.

1 So let's do this. I want to turn to
2 Matthew, who started us off, to lead us into this
3 second phase. And then if it's amenable with
4 everybody, just raise your hand if you have
5 something to say. And if you're on the chat
6 box -- you are on the attendance box, you will
7 see a little raise-hand function at the bottom,
8 and then a tiny little hand pops up. On the one
9 that says participants, if you click on
10 participants, you can find your name. And if you
11 want to raise your hand, there's a little raise
12 hand at the bottom, and a little blue hand will
13 pop up.

14 So first let's turn to Matthew Ammon, if we
15 may.

16 **MR. AMMON:** Thanks.

17 So one follow-up that was just mentioned by
18 Wallace. He'd asked about studies of lead hazard
19 control ordinances. Just want to relate that,
20 you know, there -- with Rochester, New York, you
21 know, there's been a long history of them
22 implementing a pre-occupancy lead inspection
23 ordinance.

24 And, you know, it's been evaluated for
25 years, it's been posted in environmental health

1 perspectives. And it is what Cleveland used,
2 actually, as the guide for them in terms of them
3 implementing their lead (indiscernible).

4 So I think here's a great example of
5 research being used to implement policy. And
6 also a way that the communities have really
7 connected in terms of understanding what worked
8 in implementing those ordinances. And I think
9 that's a great way to highlight and showcase best
10 practices in communities.

11 And, again, ways that research have been
12 used to affect policy, which is always critical;
13 affect targeting; and, you know, changes. And
14 then, you know, at the end of the day, this is
15 really policy in action about how can we use
16 research to do those things, to do better
17 targeting, to do policy, and with always that
18 intent of why we are doing research.

19 I mean, there has to be some use for it. It
20 can't be just sitting on the shelf. And I think
21 that, like, the applicability of Rochester and
22 that evaluation being used by other communities
23 around the country as they develop, you know,
24 what I think are really, really important local
25 ordinances that are going to expand upon the work

1 that we have done at the federal level.

2 So that's getting deep. Like, that's really
3 using research at its best and going deep and
4 making huge potential changes in communities.
5 That's a huge number of units they're going to be
6 touching in terms of the rental stock.

7 And any way that we can do as well, as we
8 learn about communities wanting to do things
9 which are huge policy shifts that we can help
10 support. You know, again, I think that the more
11 we can look what's out there in terms of what has
12 worked and elevate that and educate other
13 communities in terms of what is out there, what's
14 a possibility, and the struggles that have -- you
15 know, folks have gone through in terms of
16 implementing those things.

17 And then, again, what gaps are out there,
18 and I would imagine that there would be a
19 continuum of the research that was done for
20 Rochester as Cleveland ramps up implementing its
21 ordinances.

22 So that would be -- you know, the important
23 thing for us when we do research is the first
24 thing we ask and do is do a policy implication
25 memo for grantees and saying, okay, here's what

1 we learned, and not only here's what we learned
2 but how is this going to implement -- how can it
3 be implemented at the local level and improve
4 what you're doing local. So we always have that
5 intention in mind. Thanks.

6 **MS. TELFER:** Thank you. I must say that's
7 personally relevant to me, having been a longtime
8 resident of Syracuse, New York and having a son
9 who now lives in Rochester. I was excited to see
10 that bit of research myself.

11 Let's move to Howard Mielke and invite
12 Howard to offer something.

13 **DR. MIELKE:** Yes. Thank you.

14 In Minnesota, back in about 1981, '82, there
15 was some concern about the increasing amount of
16 lead in gasoline that was taking place as a
17 result of changes that occurred at EPA in which
18 older cars -- they've changed the balance so that
19 there was more lead in gasoline. And I had
20 already been paying attention to lead in gasoline
21 as a result of research in Baltimore.

22 So I talked to the people at the legislature
23 and they said they needed some evidence, and so
24 they put together a program which used two state
25 agencies -- one was the health department and the

1 other was the pollution control agency -- to do
2 some field work and for the EP -- the PCA, as
3 they call it, or -- and at the same time, get
4 blood lead samples and they did it throughout the
5 state.

6 So they had big, large cities, interiors of
7 cities, outer areas of cities, small cities,
8 across the state and rural areas and old farm
9 home -- you know, areas with old farm homes,
10 et cetera. And what they realized is that the
11 amount of lead that has been distributed by the
12 automobile in traffic flows was causing a very
13 large difference in the amount of lead in
14 different cities and throughout the state.

15 And so with that information, they decided
16 that they wanted to ban the use of lead in
17 gasoline in Minnesota. Well, that turned out to
18 be illegal, so the legislature turned around and
19 then petitioned Congress to ban lead in gasoline.
20 And the hearings took place in 1984, and the
21 outcome of the hearings was actually the rapid
22 phasedown that took place in 19 -- January 1,
23 1986.

24 Well, Minnesota really has never had any --
25 it was a great model of research, and -- on a

1 specific issue that concerned the state of
2 Minnesota, and they realized the connection
3 between lead exposure and education and then, you
4 know, the quality of the city. And they actually
5 went ahead and succeeded in getting the rapid
6 phasedown, but that model has never been talk --
7 I don't see it discussed anywhere.

8 Most people don't realize that there was a
9 rapid phasedown that took place on January 1,
10 1986. And I just wanted to bring that to
11 attention, that there is also a very good model
12 from the state of Minnesota, actions that were
13 really important in reducing the amount of lead
14 exposure in the United States. And I --

15 **MS. TELFER:** Thank you very much. That's
16 intriguing insight, especially in light of
17 several of the comments that have been made this
18 afternoon. So thank you for bringing that
19 forward.

20 Let's turn to Michael Focazio and invite
21 Michael to share.

22 **DR. FOCAZIO:** Can you hear me?

23 **MS. TELFER:** Yes, we can.

24 (pause)

25 **MS. TELFER:** Although I'm not hearing

1 anything now.

2 **DR. MIELKE:** I don't hear anything.

3 **DR. FOCAZIO:** How about now?

4 **MS. TELFER:** That's great.

5 **DR. FOCAZIO:** Wow. Sorry. I'm not really
6 sure what's going on.

7 But anyway I'm going to just bring it back
8 real quick to the question of has science
9 adequately really defined the relative source
10 contributions in terms of these environmental
11 exposures. And, you know, we're talking about
12 gaps.

13 It seems to me that is a research need, and
14 it's not just about, you know, given acute
15 exposure. What I'm talking about here and has
16 been brought up by other people is that kind of
17 full suite of short- and long-term exposures
18 throughout the life cycle of all of us.

19 Different cohorts in different locations at
20 different times, and it seems to be that is a
21 monumental undertaking, number one, but is also a
22 major research gap that could start to help us
23 understand not just about the exposure pathways
24 and the relative source contributions, but then
25 which ones are the most important to prevent at

1 what time in someone's life and where -- you
2 know, where they're being exposed.

3 So I just wanted to add that back into the
4 discussion.

5 **MS. TELFER:** Very interesting. Thank you.

6 Now, I'm not seeing any other hands raised,
7 and yet I heard a lot of very interesting topics
8 being surfaced during your discussion. And so I
9 would invite you, if you would like to elaborate
10 on one of the proposals that you made, please,
11 now is your time.

12 (pause)

13 All right. I'm not seeing any other hands
14 raised.

15 Howard, do you have something else that you
16 would like to share with us?

17 (no response)

18 **MS. TELFER:** Okay. In that case --

19 **MR. AMMON:** (indiscernible)

20 **MS. TELFER:** Sorry, Matthew. We'll go back
21 to you, if we may.

22 **MR. AMMON:** Hey there. Would it help -- I
23 just have a summary of the lead workshop that was
24 done in December that I mentioned. I have a
25 short summary here. Would it help just to say

1 what that group identified as cross-agency needs
2 and opportunities? Would that be helpful at all?

3 **MS. TELFER:** Sure. I think that -- it
4 sounds like -- since that's been referenced
5 several times, that may be helpful to refresh
6 those people who don't have it right in front of
7 them. That would be super.

8 **MR. AMMON:** And this is a bit choppy because
9 it's just bulleted, but I will do my best to fill
10 in the gaps here.

11 So, again --

12 **MS. RUCKART:** Matt -- excuse me -- Matt,
13 this is Perri. You're cutting in and out. We're
14 only getting every few words.

15 **MR. AMMON:** Okay. Maybe I'll sit closer.

16 **MS. RUCKART:** Thank you.

17 **MR. AMMON:** Is that better?

18 **MS. RUCKART:** You're coming in fine now, but
19 we'll see. Thank you.

20 **MR. AMMON:** Okay. No problem.

21 So these were identified as cross-agency
22 needs and opportunities. They had talked about
23 develop a structure for implementation;
24 topic-specific work groups; lead research working
25 group, like a lead subcommittee. They were

1 looking at methods and models to identify
2 high-risk communities, lead in drinking water.
3 These were -- these are forms -- topic-specific
4 work groups -- mitigating soil lead; occupational
5 take-home lead; multimedia and collaborative
6 exposure; neighborhood-based interventions; lead
7 research communication; and post-exposure
8 intervention research.

9 So, again, those were specific work group
10 areas that were identified. Also larger scale
11 integrated multimedia studies were needed;
12 interagency collaborative case studies and
13 publications; and in particular to identify
14 high-risk communities; forums for interaction
15 between the different goal groups of the lead
16 action group; to identify and address lead
17 research communication challenges; draft a
18 multiagency document outlining key data and
19 technology gaps, including data needed for
20 validating and approving models; data needed for
21 benefit cost analysis; health and cognitive
22 improvements associated with preventive
23 interventions; and interventions following
24 exposure; occupational exposure to take-home
25 lead; improve blood lead analytical methods and

1 technologies; better accuracy; lower levels of
2 detection and the ability to be widely used; and
3 improve capability for sharing blood lead
4 screening data among agencies.

5 That pretty much sounds a lot like what
6 we've been talking about. But, again, I just
7 wanted to relate what that working group was
8 working on. Thank you.

9 **MS. TELFER:** Thank you very much for sharing
10 that, and you may want to chat with Perri about
11 distributing that list to everybody after the
12 fact even though it will be in the report.

13 **MR. AMMON:** Okay.

14 **MS. TELFER:** Dr. Breyse has rejoined us, so
15 I would like to invite Pat to weigh in, if he
16 would.

17 And, Pat, in your absence, if you missed any
18 of the discussion, themes that I noticed were a
19 real focus on evaluation research, what's working
20 now; looking at things that maybe haven't had
21 quite as much attention, like how do we deal with
22 children who have already been exposed as they
23 move through their lives; and how do we look at
24 workers; and what would be a cost-effective and
25 actionable means of intervening in workplace

1 exposures that affect us at home.

2 So Dr. Breysse.

3 **DR. BREYSSE:** Yeah. So, you know,
4 there's -- as I'm sure you're aware -- and I'm
5 sorry I had to duck out -- there's a lot of COVID
6 stuff going on, and I had to deal with something.
7 So I apologize.

8 But, you know, there's more research than we
9 can probably even get our arms around still
10 needed in lead. Even though we know a lot about,
11 you know, the health effects on lead, but I think
12 a lot of the stuff on how do we make it go away
13 and how do we evaluate that and stuff is all the
14 stuff we've talked about before.

15 So I'm -- I was listening kind of with
16 one-half ear as I was working this other thing.
17 So I think you guys have done a good job putting
18 your arm around it. Certainly, the research plan
19 that Matt just kind of reviewed kind of, I think,
20 summarizes it pretty well.

21 So the challenge is going to be -- is what
22 do we need to do to get to where we want to be,
23 and what's the first priority, what's the highest
24 priority, and then how are we going to get there.
25 And that's probably where I think the discussion

1 will be most helpful as we go down this road.

2 So we need to make sure that, you know, we
3 prioritize things appropriately. If our goal is
4 to get to a lead-free society, what do we need to
5 know to get there and what evidence do we need to
6 kind of make sure that we're doing it right or
7 that we're doing it efficiently or we're doing it
8 quickly or that we're not putting people at
9 greater risk in the meantime. Because we all
10 know there's been many cases where we've made
11 decisions about how to make things better, and in
12 the short term we've created things worse. So we
13 don't want to be in that situation.

14 So I think as you think this through, those
15 are just some things I'd like you to keep in
16 mind. Over.

17 **MS. TELFER:** Thank you very much.

18 Would anyone like to respond from your
19 perspective as either a member of a federal
20 agency that deals with this or someone who's in
21 the field working on this day to day?

22 (pause)

23 **MS. TELFER:** Dead air is the bane of radio
24 personalities, but I can assure you as a parent I
25 am perfectly comfortable with dead air. I don't

1 want to shut off discussion but we'll shift back
2 to either --

3 Dr. Mielke. Howard Mielke, please.

4 **DR. MIELKE:** Yeah. I'm certainly familiar
5 and have worked with families who have poisoned
6 themselves with the best intentions of making
7 their house lead-free, and they got sanders --
8 had people come in and sand the whole house down.
9 The dog died and everybody in the family ended up
10 lead-poisoned, and it was just a tragedy to see
11 with the best intentions they ended up poisoning
12 themselves, and it's not an uncommon problem.

13 **MS. TELFER:** Okay. And it certainly speaks
14 to the importance of clarity and communication.

15 Matthew Ammon, please.

16 **MR. AMMON:** I just want to echo what Howard
17 was talking about, that, you know, we see a lot
18 of exposure certainly in people rehabbing their
19 own homes. You know, lead-poisoning occurs at
20 any income level, and so we do see that a lot in
21 certain areas where people are trying to tackle
22 these big older homes on their own and, you know,
23 don't do anything in terms of their own
24 protection or screening off or having protective
25 barriers when they do work, and, you know, they

1 end up making a very bad situation for the entire
2 family. We just see that all too often.

3 So this isn't just a lower income issue. It
4 can be any income since it is blind to poisoning.

5 **MS. TELFER:** Right. Thank you for that
6 sobering reminder.

7 Okay. Perri, it is about five after four on
8 my clock. I'm not seeing other hands raised, and
9 if anyone -- if any do go up, I'll certainly let
10 you know right away.

11 From a facilitator's perspective, I'd like
12 to thank each of the advisory committee members
13 for sharing so willingly and for bearing with the
14 system.

15 I'd like to thank the technical team that
16 put the platform together and made it stable
17 enough that we could all have an all-day meeting.

18 And then, as well, thanks to Perri and
19 Monica and the team at the lead-poisoning
20 prevention branch -- or group because their
21 foresight in putting this together and the work
22 they did up front made it really plug and play
23 for somebody like me.

24 So with sincere thanks to each of you, I
25 would like to turn it back to Perri if that's

1 acceptable.

2 **WRAP UP AND DISCUSS TOPICS FOR NEXT MEETING**

3 **MS. RUCKART:** Yes. Thank you, Jana. I
4 really appreciate all your help today.

5 I echo all of your comments. I am amazed at
6 how smoothly things went with only, you know,
7 relatively few hiccups. I'm also thrilled that
8 my dog did not bark at all during this entire
9 meeting, which is unprecedented.

10 So anyway, I will turn it over to Matt, and
11 we can just begin our wrap-up and discuss topics
12 for the next meeting a few minutes early if
13 that's okay with you.

14 **MR. AMMON:** Yeah. Well, I think I have 20
15 pages of notes, and it's very small writing.
16 Some of the -- you know, some of the themes that
17 we talked about, and, you know, Dr. Breysse
18 talked about this -- the first thing he talked
19 about was, you know, thinking about the shift to
20 eliminating, not managing, sources of lead, and,
21 you know, for us to consider establishing a
22 forecast, you know, and what it would take to
23 eliminate lead-based paint hazards, much as we
24 had seen on the first presentation, some of the
25 foundational work on the 10-year strategy and

1 where we want to go from here in terms of, again,
2 talking about eliminating, not simply managing.

3 So as I looked through the -- the LEPAC
4 charge and reviewing the federal programs and
5 services exposed to lead, you know, I think there
6 is that foundational document, obviously, that we
7 have on reviewing on all the federal programs and
8 services.

9 You know, I think it's certainly -- we
10 talked about improvements to what we're seeing
11 locally on the ground that we can offer in terms
12 of those programs and how they're operating or,
13 you know, how they're being communicated.

14 You know, I think, again, having -- doing a
15 deep dive on those and seeing where there are
16 additional opportunities or needs based on what
17 the community is asking us to do, I think is --
18 we've all touched on that, about the need to be
19 in touch with the community and making sure that
20 what we do is in their benefit, not counter to
21 that.

22 And then the other charge, you know, we
23 talked a lot about research. We just finished up
24 that conversation, and there's ample research
25 that we can do, and I think that there are

1 definitely gaps that we need to look at. And I
2 really like the last part, what Michael was
3 talking about, about exposure studies and
4 exposure pathways. You know, which ones are the
5 most important to control over a lifetime. I
6 think that kind of capsules -- captures a lot of
7 what we had talked about and what those
8 opportunities are, both in terms of the home
9 setting, the environmental, occupational, all of
10 those in terms of exposure pathways and doing
11 what we can to make sure that not only those gaps
12 are filled, but they can translate into
13 actionable policy, actionable policy that lowers
14 and focuses on eliminating sources. I think that
15 is key and we talked a lot about that.

16 Getting to the next charge, you know, we
17 talked about identifying best practices, and we
18 heard a lot about what folks were doing, both in
19 their own lane, but also in terms of the
20 community and -- excuse me -- I think hearing
21 more about what communities are doing to address
22 this issue and what we can learn from those, and
23 that can be amplified and replicated around the
24 country.

25 We talked a lot about lead screening as part

1 of that and things that we need to focus on, both
2 in terms of instruments, but also in terms of
3 ways we could improve screening and expand
4 screening. You know, I know overall, I think in
5 general there's huge opportunity to expand the
6 number of testing going on and what are those
7 opportunity points that we can tap into. So
8 that's a critical aspect.

9 And then we talked, you know, Dr. Breysse
10 talked at length about, you know, deciding on
11 where we go from here and what needs to be done
12 in terms of the reference value and the
13 distributional value and knowing the body of work
14 that was done and where we are right now about
15 discussing that and deciding how we want to move
16 forward and in what fashion, I think, is going to
17 be absolutely critical.

18 And so taking everything that we have heard,
19 you know, making some collective thoughts about
20 how we want to proceed in moving forward. So that
21 was a big part of the discussion and a really,
22 really great conversation.

23 And then, you know, we talked a lot about
24 other services, and there are folks here,
25 obviously, on this committee from areas that talk

1 about education, nutrition, healthcare, a huge
2 part of that was communication and education and
3 how do we take all this and make it relevant not
4 only for practitioners but parents and schools
5 and how we can get the best information that's
6 most relevant and continue the focus of this
7 effort.

8 You know, I think that over the last couple
9 years what -- you know, honestly, I -- while most
10 people thought the issue would be not be talked
11 about anymore, I think it's really the front --
12 it's been front and center now for years where
13 there's a lot happening, but we need to continue
14 working as quickly and as best as we can by
15 continuing the progress that we've made around
16 the country.

17 And I think that having this committee right
18 now is an important part of continuing that work,
19 continuing our progress, and continuing
20 eliminating this issue across the U.S. And, you
21 know, we know that certain areas are ripe for a
22 community-based approach because, you know, of
23 the prevalence of older housing, of the
24 prevalence of soil issues, of certainly the
25 prevalence of income. And we know where those

1 areas are, the jurisdictions know where those
2 areas are, and so focusing on those specific
3 high-risk areas, I think, will make a very big
4 difference. And we talked a lot about that in
5 terms of addressing, you know, where there is
6 most need and where there is the most critical
7 need.

8 So let's see. Reading my notes. I think --
9 again, I think moving forward, this has been a
10 great start in terms of collecting information,
11 and all this obviously will be taken under
12 advisement as we move forward in developing more
13 specifics about what we can focus on.

14 And, again, we all have our unique lanes and
15 our unique informational sources and our own
16 experiences. And, again, at the end of the day,
17 we're very much focused on up to this common
18 outcome -- right? -- in terms eliminating
19 lead-poisoning and its sources.

20 So I think this is a great start. I will
21 pause to see if anybody wants to add anything to
22 that summary.

23 **MS. RUCKART:** Matt, this is Perri.

24 I thought that was an excellent summary and
25 I really appreciate that. I don't see any raised

1 hands among the members, so --

2 **CDR LEONARD:** Perri, this is Monica.

3 Nathan has just raised his hand.

4 **MS. RUCKART:** Oh, okay. I didn't see that.

5 Okay. Let's turn it over to Nathan. Thank
6 you.

7 **DR. GRABER:** Yeah. So I don't want to
8 necessarily add anything. I think it was a great
9 summary, actually.

10 I just want to ask sort of if we can talk
11 about what the next steps are.

12 **MS. RUCKART:** Yes. That's where we are
13 headed now. Yes.

14 So I will turn it back over to Matt. Thank
15 you.

16 **MR. AMMON:** Well, I think the next steps
17 are, again, taking all the information that we
18 have talked about and then looking at areas where
19 we want to focus more on and probably develop
20 some subcommittees on that -- around that.

21 And then working -- I think that would be
22 the most effective way, is identifying topic
23 groups and then subcommittees from that. That
24 would, to me, be the next steps. There's a lot
25 for us to review at this point. I know we've

1 been here all day. So it's going to take a while
2 to work through all that, but that's kind of how
3 I see things proceeding.

4 **DR. BREYSSE:** This is Pat. That makes a lot
5 of sense. You know, we're asking you to do a
6 lot, and you're essentially starting from zero
7 right now because you're -- this is your very
8 first meeting.

9 So from my experience, the work groups is a
10 good way to get some productivity, especially
11 between meetings.

12 And so we'd look forward to seeing some
13 recommendations for what kind of work groups
14 you'd like, and then we can work with Matt and
15 you all to make them happen.

16 **CDR LEONARD:** And, Matt, this is Monica
17 Leonard. Perri and I, we also want to discuss --
18 so we can talk more about the time frame for the
19 next meeting. Given that we're in the midst of
20 the COVID-19 pandemic, that's something that we
21 would also like to talk with you about.

22 **MR. AMMON:** Sure. Now? I mean, I guess
23 it's not quite sure -- I mean, I can't -- I'm not
24 sure what I could commit to at this point. I'm
25 not sure from CDC's perspective what your

1 recommendations are in terms of follow-up and
2 what you guys were thinking in terms of next
3 meetings and things of that nature.

4 **MS. RUCKART:** Yes. This is Perri. So we
5 are practically in May already, and as most
6 people are aware the, you know, federal
7 government is on a fiscal year, so our fiscal
8 year ends September 30th. We had discussed the
9 idea of trying to meet again this fiscal year, so
10 that would be sometime in September. But given
11 the uncertainty with COVID-19, it might make
12 sense to proceed with planning for another
13 virtual meeting at this time. And maybe we can
14 have an in-person meeting in the beginning of
15 fiscal year '20 or at some point -- I'm sorry
16 2021 or at some point in that year.

17 But we will be definitely getting in touch
18 with everyone, all of the panelists, via e-mail.
19 As mentioned, we're going to be reviewing the
20 notes, we're going to be getting the transcript,
21 and then we can from that just see what the
22 common themes were and which -- and then discuss
23 with you which would be most appropriate for a
24 subcommittee or work group.

25 Any questions or any other comments that

1 panelists would like to make?

2 **CDR LEONARD:** This is Monica.

3 We realize that September may be somewhat of
4 an aggressive timeline, but Perri and I and
5 others in our branch are going to be working
6 behind the scenes to work with you as a committee
7 to provide any needed items to help it -- these
8 discussions to continue on and so that we can
9 definitely make sure things are successful --
10 continued success in between for the next
11 meeting.

12 **MS. RUCKART:** Yes. This is Perri, again.

13 Based on the success of our virtual meeting
14 today, I feel really comfortable if we need to
15 proceed with a virtual meeting for our next
16 meeting. So this went as well as we could have
17 hoped for, in my opinion.

18 **DR. MIELKE:** Yeah. I just wanted to thank
19 you for the organization and for bringing us
20 together virtually. And I will be interested in
21 how it breaks out in terms of different
22 committees, subcommittees, and where I can make a
23 contribution towards literature that I have under
24 my belt, if that helps.

25 **MS. RUCKART:** Okay. Thank you, Howard.

1 **MS. JOHNSON:** Hi. This is Karla. I just
2 want to say that it did go exceptionally well.
3 It went a lot better than I thought it might. So
4 it was a good job and I want to thank you for the
5 opportunity.

6 **MS. RUCKART:** Thank you, Karla.

7 **MS. JOHNSON-BAILEY:** This is Donna Johnson.
8 I would echo that. I've also learned about using
9 Zoom, so I appreciate the opportunity to
10 participate.

11 **MS. RUCKART:** Thank you, Donna. Happy to
12 help you with that. Okay. Well --

13 **MS. DEFOE:** This is Tiffany. I
14 just wanted to also say thanks so much for the
15 great facilitation. It was real easy to
16 participate.

17 **MS. RUCKART:** Great. Appreciate that.

18 Okay. It's 4:19. We do have 11 minutes
19 that we can continue meeting if there's any final
20 comments. Otherwise we can give you back 10
21 minutes at this point, and, of course, we'll be
22 in touch.

23 It's been a long day, so I definitely
24 appreciate everyone sticking around. We still
25 have 81 audience members. So thank you to them

1 for sticking with us as well.

2 So this will be the final call for any
3 comments from the panelists.

4 **DR. BREYSSE:** So, Perri, I'd like to also
5 thank Matt, our chair, for running a good
6 meeting, and thanks for his leadership.

7 So thank you, Matt.

8 **MS. RUCKART:** Yes. Definitely agreed.
9 Really appreciate everyone's role today.

10 **CDR LEONARD:** Yes. Thank you.

11 **DR. BREYSSE:** I want to acknowledge -- I
12 want to also acknowledge, you know, Perri and her
13 staff for the work that went into pulling this
14 off today.

15 So thank you, again, for all that work,
16 Perri.

17 **MS. RUCKART:** Thank you, Pat.

18 **UNIDENTIFIED SPEAKER:** Yes. Thank you,
19 Perri. It was very nice.

20 **MS. RUCKART:** Well, thank you. Really, I
21 mean, this just went so well. I'm just so
22 thrilled. Great meeting. And I really
23 appreciate, again, everybody's flexibility and
24 just switching gears to the virtual meeting. I
25 know it's a little bit difficult because we

1 haven't even met in person yet, but I'm just
2 really pleased with how well it went and just the
3 way we were able to stay on track and get a lot
4 accomplished today.

5 So I am not seeing anyone raising their
6 hands. I am going to call the meeting, and we
7 will be in touch and enjoy the rest of your day.
8 I really appreciate it. Thank you so much.

9 **UNIDENTIFIED SPEAKER:** Thank you. Thank
10 you, everyone. Thank you, Perri.

11 (Concluded at 4:21 p.m.)

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