

Dialogue4Health Web Forum

Policies and Efforts to Prevent and Respond to Childhood Lead Exposure

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Remote CART Captioning

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>> Dave Clark: Greetings and welcome to today's Dialogue4Health web forum on Policies and Efforts to Prevent and Respond to Childhood Lead Exposure.

Brought to you by Trust for America's Health, Health Impact Project, National Center for Healthy Housing and the public health institute. My name is Dave Clark, host for today's event. Before we get started there are just a couple of things I would like you to know about. Concerning the audio, today's forum is listen only. That means you can hear us but we can't hear you. Most of you are probably listening over computer speakers today which is great. If at any point you lose audio there is a way to dial into the web forum using your telephone. You'll find that information under the event info tab. That can be found at the top left of your screen.

I also want you to know that realtime captioning is available for today's web forum. This is provided by Home Team Captions. The captioning panel is located on the right side of your screen, can be toggled on and off by clicking the multimedia viewer on the screen. If you're on a Mac on the bottom right of your screen. If you would like to use captioning, you'll see links that say show/hide header and show/hide chat. If you click those you will be able to see the captioning will more easily. If the captioning disappears, click on that multimedia I can't icon to bring bit back again.

Regarding interactivity. We want today's forum to be interactive. We will have a Q&A session at the end of the forum. Feel free to type your questions in the Q&A panel, that is also located on the right side of your clean, toggled by clicking the icon on the top right of your screen. Again if you're on a Mac, you'll see that icon to the bottom of the screen.

This is important. In the Q&A panel, make sure all panelists is selected from the dropdown option. Choose that option. That's the only way we can ensure that your question will be sent to the right place and we'll be able to answer it today. Make sure that all panelists is selected from the dropdown menu before you submit a question. You can use the Q&A panel to communicate with me and my colleagues Laura Burr, behind the scenes today. Let us know what your problem is and we'll help you out. We are interested in your thoughts and questions on this important topics. Be sure to get all of that into the Q&A panel and we'll answer as many of your questions today as we can, I promise.

In fact, why don't we get interactive right now. We thought we would bring your voice into the conversation right at the start of the forum. We would like to know who you are attending today's webinar with. We brought up a poll. When you get a chance, let us know who you are attending today's web forum with. Make one of the four choices. Don't forget to submit the submit button, down at the bottom right of the screen. Your choice won't be submitted unless you click that button. Let us know, who are you attending today's web forum with? All by yourself? Are you attending in a say a small group of two to five people? Maybe you're in a medium sized group of six to ten people? Perhaps you're with all of your colleagues today, more than ten people. Let us know who are you attending the web forum with?

Let's take a look at the results. We will have more polls later in the web forum so this is a good practice poll for you to see how the works.

If you don't see the results right away on the screen. Sometimes it takes a few seconds to populate.

If you didn't click submit, it is probably giving you that option right now.

Not surprisingly a good relatively high percentage of you are attending alone today. About 76 percent. 19 percent of you are attending in a small group of 2 to 5 people. And virtually none of you are attending in groups larger than ten people.

If you are in a group today you may want to assign a single person the responsibility of submitting questions on behalf of the group or on behalf of individual group members. That might make things go easier for you today. On the other hand if you are attending alone we don't want you to feel you're there all by yourself. We want this to be a very interactive group event today. Like I explained earlier, make sure to get all of your questions into the Q&A panel today and join in on the conversation.

All right. Let's get started with today's presentation on policies and efforts to prevent and respond to child lead exposure. Our moderator today is Richard Hamburg, Executive Vice-president and COO at Trust for America's Health. He oversees public policy initiatives, advocacy campaigns, and internal operations at TFAH. He has more than 30 years of experience as a leading health policy advocate. He helped lead the efforts to ensure disease prevention at TFAH is a centerpiece of health reform. He has been instrumental in TFAH's work on obesity, prevention, building national pandemic flu, and public health emergency response capabilities and increasing support for public health programs.

Prior to TFAH Richard served in a number of roles with the American Heart Association, including as National Director of Government Relations.

As our moderator today Rich will be leading us through the rest of today's event. Rich, over to you.

>> Richard Hamburg: Thank you very much, Dave. And thank you, everyone in our audience, for joining us today for our web forum.

Promoting and protecting health starts with our children and TFAH has made it a priority to focus on major childhood health problems. Recent crises in Flint, Michigan, and Chicago, Illinois, demonstrate the need for continued attention and action to prevent the harmful effects of lead in children.

We have been privileged to work with the Robert Wood Johnson Foundation, the Health Impact Project at Pew Charitable Trusts, the National Center for Healthy Housing, and others on contributing to and showcasing this important new report, 10 Policies to Prevent and Respond to Childhood Lead Exposure, which found that billions in public spending could be saved by preventing and mitigating the effects of lead poisoning, markedly improving the lives

of communities and families.

Today's web forum will highlight the report, as well as offer attendees the opportunity to hear from professionals doing lead prevention and remediation work on the ground, followed by a Q&A session.

It is now my pleasure to introduce our panel. We've assembled an incredibly top rate panel for the discussion today and I want to thank them for their time and for joining us.

Here are the pictures first.

First, I want to introduce, Dr. Mary Jean Brown who is an Adjunct Assistant Professor of Social and Behavioral Sciences at the Harvard Chan School of Public Health and the former Chief of the Healthy Homes and Lead Poisoning Prevention Branch at the Centers for Disease Control and Prevention. She is an internationally recognized expert and leader in the field of childhood lead poisoning prevention.

Next we have Rebecca Morley, a consultant for Robert Wood Johnson Foundation and a passionate advocate for and expert in improving the health of underserved places and populations. Most recently, Rebecca was Director of the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

Starting off our community examples, we have Aurora Saucedo who is the Community Coordinator for Latinos United for Flint, a collaboration of local organizations working to enhance the lives of the Hispanic/Latino community during and beyond the Flint Water Crisis.

And finally on our panel today, Colleen McCauley. Colleen is the Health Policy Director at Public Citizens for Children and Youth - the Greater Philadelphia region's leading child advocacy organization that influences elected officials by combining useful research, practical solution-oriented policy recommendations with the mobilization of citizens who advance the organization's work on behalf of children.

So, thank you to all of our panelists. Before I hand it over to Mary Jean, I want to bring up on your screens poll two:

What sector/industry best represents your work.

Check all that apply.

The choices are:

- a. Advocacy
- b. Government
- c. Community-based
- d. Environment
- e. Early Childhood
- f. Education
- g. Faith-based
- h. Health
- i. Housing
- j. Non-profit
- k. Public health
- l. Other.

Again, the question is, what sector/industry best represents your work?

We'll look for the results of the poll now. Wait a couple of seconds until this comes up.

(Pause.)

>> Richard Hamburg: In the meantime, look and see where you fit.

- a. Advocacy

- b. Government
- c. Community-based
- d. Environment
- e. Early Childhood
- f. Education
- g. Faith-based
- h. Health
- i. Housing
- j. Non-profit
- k. Public health
- l. Other.

Of results, biggest amount, government, 31 percent. We have health, second on that list, followed by advocacy, environment, community-based is also a big category as well. So we've got a good selection here. Certainly nonprofit is well represented.

So just wanted you to get a better idea of who is on the line.

Final reminder

the audio and slides for this web forum will be available to download on the Dialoge4Health website following the web forum.

With that, it's my pleasure to hand it over to Mary Jean. Mary take it away.

>> Mary Jean Brown: Good afternoon, everyone. We are delighted that you could join us today to learn about ten policies to prevent and respond to child lead exposure.

The basic premise for this document and for the policies is that it is grounded in the belief that the finding and fixing approach to children with elevated blood lead levels is really not getting the job done. We have not been able to identify a blood lead level that is safe in children. As a result, just allowing our children to meet some threshold before interventions can be done for them has not, is not going to eliminate all of the adverse consequences that are related to lead exposure.

We see these as a comprehensive package to control and eliminate lead exposure before children are exposed. We have used the models that I'll go over in a minute to estimate the benefits of preventing blood lead level greater than zero for a cohort of children born in 2018. So we have three different methods that we used. We first did qualitative research and conducted interviews, literature review, looked for case studies. That was the National Center for Healthy Housing and TFAH. Performed national listening sessions and 16 focus groups. We contacted experts, community members, and parents. The literature review was hundreds of articles, to fine out what works and probably as importantly, what doesn't work.

The quantitative methods that we used were modeling. We used two different kinds of models. The first model is the child trends and urban institute Social Genome Model. The Social Genome Model looks at factors in early childhood and then how those factors cascade through a person's lifetime.

So we know that children who have high blood lead levels are more likely to have poor school performance. How does poor school performance affect adult outcomes like graduation rates? Crime? The amount of money people make.

The second one is the Altarum Institute Value of Prevention Tool. The Value of Prevention Tool looks at the, estimates the impact on people's IQ of blood lead levels of particular value. Then looks at the changes in lifetime earnings and also the health and social service costs of having people who have these outcomes. So then we had project oversight. We had many

subject matter experts and an advisory committee and folks at both Pew and Robert Wood Johnson, who made sure that everything was done and vetted, all of the modeling, all of the processes and the decisions that were made about which policies to highlight.

So we are using the hypothetical case of no measurable lead. What are the costs and impacts of these policies on a cohort of children born in 2018? Those are the oxygen costs and benefits that you'll see monetized. However, we expect at least in the near term that successive generations of children would have similar benefits. So this is just for one year's worth of children.

The first thing that we looked at was removing leaded drinking water service lines from the homes of these children. It would protect more than 350,000 children. It would yield \$2.7 billion in future benefits, or you get about a dollar 33 cents back on every dollar invested. So that's a pretty good return rate. The focus groups findings were that people were very -- people thought it was very importance to reduce lead in drinking water in homes built before 1986 which is when the ban on lead solder and other forms of pipes and fixtures were in place and other places where children frequent.

The parents and other people that we brought together and listened to were well aware of the dangers of water and want the to see that happen.

The second thing that we looked at was eradicating lead paint hazards from older houses only of low income children. If we were to do that for the entire country, that would provide about \$3.5 billion in future benefits for the hypothetical cohort of children born in 2018. Or approximately a dollar 39 per dollar invested and protect more than 311,000 children.

In the focus group, the folks came back and said, both parents and property owners, cited lack of funding to make and keep housing lead safe as a major barrier. It is not just to go in and do the repairs. We don't take all the lead paint out of a house when it is made lead safe. We take care of the lead hazard. There is some lead there. Without routine maintenance which in some situations is very difficult to pay for, it will not stay lead safe forever.

The third of the policies that were quantified was the renovation and repair rule from EPA.

This is the rule that says that contractors doing work in housing built before 1978 have to take specific precautions, the biggest one being that they have to clean up the site when they are done with their work.

Sharing that contracts comply with these rules would protect 211 children born in 2018, provide future benefits of 4.5 billion, or savings of about \$3.10 per dollar spent. The rein reason why the return on this investment is so much higher than the other two is because it's pretty cheap to do this.

The focus groups finals, parents of children with high blood lead level often cited thighs activities as the, renovations activities as lead source for their children.

Families where this happened were very, the whole thing is very tragic.

Finally, the final one that was quantified we looked at eliminating lead from airplane fuel.

There is no lead in the jet engines, the big airplanes, but the little airplanes that have piston engines still use leaded gasoline. Taking leaded gasoline, taking the lead out of this fuel would protect more than 226,000 children born in 2018, who live near these airports. These are small county airports. It would generate \$262 million in future benefits and remove roughly 450-tons of lead from the environment every year.

So there are specific places where this policy resonates. That would be places where people are living close to these small airports. People in Los Angeles in particular were concerned about what they call Av gas and as were people living near other point sources that also

contaminate air. We are concerned about these sources of lead.

So the economic gains by avoiding blood lead levels in the number of children, so most children have blood lead levels below, that are 2 or below. That's why the big benefit goes to that group of children. But all children will benefit if blood lead levels are held at zero. Most of the gains are for children -- most of the benefits shall derived from increased earnings that result from having a higher IQ.

There were several other policies that are recommended that were not quantified. The first one is providing targeted evidence-based academic and behavioral interventions to the roughly 1.8 million children in school who have a history of lead exposure when they were toddlers.

This could increase family, lifetime family incomes and likelihood of graduating from high school and college and decrease likelihood for teen parenthood and criminal conviction.

Lots of these costs are listed in the report. This is an emerging area of interest and certainly one that needs considerably more research in exactly how and what kinds of educational supports and systems need to be in place to support these children. But the group felt that this was really an important area.

Then finally there were other recommendations. Some of these are in the category of it just makes sense. So you want to reduce lead in food and consumer products.

There's lead -- there is no reason to put lead into food or other consumer products. We should avoid that.

We want to clean up contaminated soil, however it got there, whether from paint or fall out from lead contaminated air.

We want to improve blood lead testing among children at high risk and use the data to make sure that children are all right right now, but to also use the data in aggregate to find and remediate the sources of their exposure. This will involve improving public access to local data. The surveillance data that is collected by the CDC and state and local health departments has not really been able to get down to the neighborhood level where people are most interested in hearing about what is the -- what does the data say about where I live. Not about my county or state, but what is happening where I live.

We need these data to better fill in gaps in research to target better local, state response efforts.

With that I'll close-up here. I think there's another polling question and Rebecca Morley will talk to us about next steps. Thank you.

Thank you, Mary, for that presentation. I would like to bring up poll three and encourage you all to respond: Is your organization doing work around lead prevention in the following areas?

- a. Lead paint
- b. Lead in soil
- c. Lead in water
- d. Lead in consumer products -- food, jewelry
- e. Lead in homes
- f. Lead in schools or childcare settings
- g. Screenings
- h. Awareness and education
- i. Advocacy and policy development.

>> Richard Hamburg: Please complete that survey as quickly as possible and we'll read you the results. Again, the question is: Is your organization doing work in around lead prevention in the following areas?

- a. Lead paint
- b. Lead in soil
- c. Lead in water
- d. Lead in consumer products
- e. Lead in homes
- f. Lead in schools or childcare settings
- g. Screenings
- h. Awareness and education
- i. Advocacy and policy development.

Now we're just waiting for the poll results to come up.

We see the results here. The highest amount of organizational work done around awareness and education, followed by lead in homes, lead paint, and screenings also. More than 50 percent responded to that. Lead until water, lead in soil are the next couple of highest. Of course, a large number of individuals involved in advocacy and policy development. So let move on to Rebecca Morley from Robert Wood Johnson Foundation.

>> Rebecca Morley: Thanks, Richard and to F factor for bringing us together today.

I'm interested in talking to you about next steps. When Robert Wood Johnson initially came to point of view to talk about this report I remember thinking: There's no way we need to do more research on lead. It has been studied on decades, centuries. What more will we learn? It turned out it had been a long time since the research had been consolidated in one place. Well felt with the activity around lead policy, decision makers in communities needed all of the evidence in one place to help them with the local advocacy efforts and decision making. Now, last week I was at a meeting and we were accused of focusing too much on the dollars and cents of the matter and not as much as a human toll. I thought that was a fair point. In our efforts to focus on economic and policy issues we lost sight of the human toll. I want to lead with this picture of the brains of young adults who were lead exposed as children. And just to remind everyone that lead is something that just robs children of opportunity. And it is particularly unfair in that it robs children from low income communes and communities of color disproportionately. Children that are already facing many challenges in terms of unequal opportunity to resources.

So these brain images here show what these children's brains look like later in life. The red and yellow spots indicate areas where there is less brain activity. And it is displayed on a normal brain, which would be all gray.

So these areas with low brain activity are interestingly those related to reading and higher level thinking such as impulse control and judgment. Again, this underscores what Mary Jean said earlier about how lead interferes with the child's ability to do well behaviorally and academically. This ripples through their lives, whether it is in college or the workplace.

So today what I was hoping to do is talk a little bit about some of the gaps and opportunities that emerged during this research work. We had hundreds of conversations with folks. We reviewed 700 research articles, as Mary Jean was saying. Lots of conversations with community members. What I am trying to do here is consolidate what some of the major themes were from that and what I hope will be future work that can be done in this space. So the first area is around policy, regulation. The secondary is around financing and underwriting the massive expense of dealing with the legacy of lead in our infrastructure.

The third area is around data. I think this is particularly ripe now that we have become so much more sophisticated in the use of data.

So as Mary Jean alluded to, the renovation and repair, the EPA regulation requiring lead safe work practices is one of the interventions that delivered the greatest return. That is probably why this girl is shaking her hands as if she is shaking someone. That's how I feel when will I think about the missed opportunity of enforcing this rule which there are about 4.4 million jobs every year subject to the rule, but really only about 100 enforcement actions were taken non-2016 due to even's lack of resource EPA's lack of resources for enforcement.

States can enforce their own programs and 14 states do this. It is a revenue opportunity for states, based on numbers from New York state where there are about 25,000 contractors who would be subject to the rule. The State could raise about 7.5 million in revenue just in the first year of implementing this. This is revenue that would be flowing to EPA otherwise that could be kept in the state to do more on the ground enforcement. One of these areas for opportunity is to get states to pursue their own programs. And just so you have a sense of what that entails, it's a letter from the governor requesting program approval, a statement from the Attorney General that the state laws and regulations provide the legal authority to administer the program. Or one option that is kind of the fast track is to have the certificate signed by the Governor or AG that the program meets all of the criteria for program authorization. This allows for instant authorization by EPA upon receipt.

So my home town, Rochester, New York, when I was growing up there, about 40 percent of kids went to school with a history of lead exposure. The advocates there worked with City Council, with school officials and passed a very progressive ordinance back in 2007 which requires the proactive inspection of homes that are older and this is for rental housing. It is part of, embedded into the city certificate of occupancy process. This is a systematic code enforcement process where they do visual assessments. If you pass the visual, you have to have a lead dust test. Ultimately the rental property owners are required to address all of these hazards prior to occupancy.

There was originally serious concern that this was going to have a serious effect on the rental market there and on the availability of affordable housing. That did not come to pass. Instead, they have seen the quality of the units improve. They've done 14,000 inspections each year. Totally 141,000 homes inspected since the inception of the law. You can see here the dramatic decline in blood lead levels in Monroe county.

Importantly, Monroe county has seen a more dramatic decline than the rest of the state or national declines, indicating that the ordinance may be having an impact.

Massachusetts is home of one of the oldest lead laws in the country. And it requires deleading to, testing and abatement requirements. One of the other unique things about Massachusetts is that they offer several incentives. So they have income tax credits. They also have a trust fund. And the trust fund is based on surcharges, \$25 to \$100 on certain professional licenses like real estate brokers, property and casualty agents, mortgage brokers and lenders.

This revenue creates a pot of about \$2.5 million annually that is used by the Department for lead poisoning prevention efforts. You can see there again a dramatic decline in blood lead levels in the State.

While some of the strategies I've talked about so far will seem not new especially for people doing lead poisoning prevention for a long time, that is true. In the report we tried to surface some things that were tried, true and proven. We tried to surface things that are innovative. Here is an example of one of those. On the heels of the Flint tragedy, policymakers, advocates and others got together and figured out that the children's health insurance program can be used for remediation. In what is a little known clause. They can pay the, the

amendment was developed under a provision that allows the state to access special federal CHIP, a matching fund for certain noncoverage related expenditures. Those expenditures can have a value of no more than 10 percent of the state's payment for benefits.

Under the state plan amendment, properties in Flint with contaminated water will receive first priority. Any property in the state with a resident under 19 who is either qualified for Medicaid or CHIP is also eligible. Michigan will spend 333,000 on this effort in 2017. That is going to be matched by 23.5 million in federal funds. So you are getting then enhanced federal match. Over the five years, the state plans to spend about 119 million. Also noteworthy, lead paint hazard control was also an eligible expense statewide for eligible residences.

One of the things that I have found particularly challenging working in this space for a long time, a lot of the remediation efforts are focused on individual houses or individual sources the you'll find a program focused on lead paint, one cleaning up soil. You might have a program focused on lead pipes but rare to find the point of exposure or block by block. It's units that are enrolled in a scattered approach.

So I stumbled upon this Camden example recently and thought about its application to lead hazard control work and here the Cooper university hospital which is operated by the Cooper foundation and is located in a neighborhood of Camden that is suffering from high levels of disinvestment and poverty, they acquired and renovated properties in a ten square block around the campus and sold them to local residence who under went financial training. They were able to recycle the proceeds from the home sales into other community investment efforts. This offers one potential opportunity for us to consider for lead hazard control. It builds capacity and wealth for the residents who are able to get the better asset after it has been renovated. It deals with the entire block and deals with it holistically, all sources of lead in one home.

I'll move swiftly through the next slides having to do with data gaps. In conversations with community members, they express frustration that they can't get their hands on data. Lots of different types of data. They don't know what the sources of exposure are in their communities. They don't know how many children have elevated blood lead levels. It was frustrating to them not to have information they can use to take action on behalf of themselves or their communities.

So what are the innovations in this space? One that I would like to tell you about is the Cincinnati lead service line lookup. Now, this is a really easy to access and very clear, I think, website that allows people in Cincinnati to figure out whether they have a lead service line. The green boxes tell you if you don't have a lead service line. It is a lead-free line. The yellow indicates that you do. You can see there's two boxes side-by-side. One for the public side. One is for the private side. Very clear.

What this site doesn't do and wasn't intended to do is tell you whether the home has lead paint or whether the soil is contaminated. I haven't come across, if anyone on the line knows of one, get in touch with me, that integrates all of these sources into one easy look up at the address level.

Another thing that has become more popular as of late is the idea of predicted risk. So rather than taking blood lead data from actual children who have been screened, modelers are taking indicators of risk, poverty, age of housing in this case, to predict at the census tract level an individual risk.

Here you can see Washington State's tool, a phenomenal tool that VOX has taken and taken nationwide. You can actually go to VOX.com, look up lead poisoning and you can identify the

risk in your census tracts nationwide. Congratulations to Rad Cunningham and the folks, epidemiologists and teams at the Washington State Department of Health.

In Chicago they have done something very innovative. Linking the predictive risk up to the electronic health record. As a clinician, you would be able to see your individual client's risk. There's a screening questionnaire included in the EHR. They also then can use the EHR to refer the client, patient to services for an inspection. Or for remediation. And the gentleman who described this program to me expressed they only have eight inspectors at the Chicago Department of Health to do lead inspections. They partnered with local community-based organizations who go in and do preliminary visual inspections. For units that require a full inspection, they send them to the health department. So they've got a really nice back end to this data tool as well.

Finally, last slide, I just wanted to mention that this is kind of what the data look like in the Pew report on costs and benefits. And while a lot of folks commented this was very helpful to have at the national level for all of interest interventions we examined, they also expressed they need state and local information to make a good case to mayors or governors. We do intend to take the analysis to the next level and provide state level estimates as well as estimates for some locales. So stay tuned for that forthcoming work.

I'll end with this slide which is my favorite picture from the women's march. Both the content of the, it's the sign that the woman was raising and brought her young son to see democracy in action inspired me.

Thank you very much. I'll turn back to Rich now.

>> Richard Hamburg: Thanks so much, Rebecca. That was terrific, as always.

We are going to hear impact full state and local examples. Also if you have examples of things that are working, areas that you think perhaps need improvement or challenges that you have had as well as successes, please use the Q&A feature. It's on the right hand side of your screen. Send in your examples as well as questions for the panel as you're hearing the conversation today.

Please send in examples and while you are hearing the conversation going on.

And now I am going to turn it over to Aurora Saucedo, the Community Coordinator for Latinos United for Flint. Aurora the mic is yours.

>> Aurora Saucedo: Thank you. I'm going to start my presentation with a story of a young mom who is pregnant and drank the poisoned water. So like many in Flint Latino immigrant community, the mom said she didn't learn until late January 2016 that Flint's drinking water was lead poisoned. She is a U.S. citizen said that she drank tap water while she was pregnant. As she began breast feeding her daughter who now suffers from lead poisoning. Jacqueline knew she needed to stay hydrated while pregnant but the tap water on Flint's east side made her ill. Keep drinking it, she remembers her doctor telling her. That will help the baby.

When the Flint residents were told to stop drinking the water after the state confirmed it was poisoned by the lead leaching from pipes in the city's water supply. Over the months that followed, for a variety of reasons, Jacqueline and her father said they did not become aware of the threat until January of 2016. Only a few weeks before Jacqueline became aware -- or after a few weeks after Jacqueline's infant daughter would be diagnosed with lead poisoning. She says now I feel responsible for hurting my daughter. We had no idea.

Stories like -- Jackies are not uncommon in Flint's Latino community, including many undocumented residents. Where the news of the poisoned water created outrage. No other

community was affected more than the Latino residents. The missed connections in Flint also carry lessons for policymakers, first responders and community activists about how to more effectively reach hard to reach groups during a crisis. In Flint, the National Guard distributed Spanish language fliers door to door after the lead crisis broke publicly. Some worried civil -- some were afraid of deportation rates and didn't read them or didn't trust what was writing. Inaccurate early announcements that residents would have to show ID to receive bottled water. The media didn't help. This picture on the left is Jacqueline, her daughter and dad sitting to her far right. The middle picture is some attendees at one of the hearings held by the Michigan Department of Civil Rights and the third is a painting on the wall at the his span I can tech center, a member of Latinos united.

So how did we become involved? We started out by building coalitions to promote equitable access to information and services to all residences in language they understand. Latinos United for Flint was formed of agencies, nonprofits and faith-based institutions who started to and continued to work together to assist the Hispanic Latino community, including the undocumented during this current water crisis. Our goal is to assist in areas of health services, nutrition, education, housing issues, employment, and cultural awareness through language, art, music and dance.

The Hispanic technology center and community center and Martus/Luna food pantry are two LUFF members. It is located on the east side of the city under direction of the interest trim director who volunteered since early 2016. It provides ESL, Spanish classes and translations. They have several computers that can be used for job searches, resume writing, et cetera. The center and Martus/Luna food pantry distributes food to local and surrounding area residents. Last month a on loan we handed out morphine hundred boxes of food. They have a community garden that produces dozens of different types of vegetables given to local residents at no charge.

Technical assistance and support has been key in being able to receive funds to do our work. Therefore, some of the staff of the Michigan Department of Civil Rights have been gracious in assisting with grant writing. This be began in May of 2016 when the Latino community lost trust in the city because they knew hardly anything that was going on with the water until late January 2016. It is because the news went national and they were being informed through Spanish speaking media in other parts of the media and Spanish speaking countries. In June of 2016 Latino united received a grant of \$3,000 for capacity building in response to the water crisis. And in November of 2016 community foundation of greater Flint granted us a grant of 70,000 for food distribution project and continued capacity development, which will end at the end of this month.

The second grant has allowed us to hire community coordinator, volunteer coordinators, translators, a couple community young people to do the work of rebuilding trust and provide other services that otherwise would not be available due to the language barrier.

Most currently, the Latinos United for Flint received a grant of \$5,000 from nationality center for healthy housing.

Latinos United for Flint is also an active partner with one of the grants called nutrition in community which we just completed three weeks ago. The foundation was granted by a very generous grant by the Mitch health endowment funnel. This is a research based pilot which included four undocumented moms who shared their traditional recipes with four registered dieticians. They then converted the recipe into a healthier version. It was a ten week program. None of the moms missed one single session. At the end we celebrated with a fiesta, food

and awards. These are pictures of some of the NIC partners from different agencies or organizations. Including Michigan Department of Civil Rights, center for civil justice, the church, the national kidney foundation, area hospital, University of Michigan and Genesee County Health Department.

Moving on from local to state involvement, these pictures were taken at the Kellogg center in Lansing where we were invited to attend the annual Latino commission of Michigan banquet. We got to meet and talk to good people from around the State. Since networking is another key component of capacity building, this was necessary for future contacts.

Now, moving back to local, these are pictures -- I'm sorry.

Technology not working, okay.

Moving back to local. These are pictures are our involvement with law enforcement. One of the coalitions, Latinos United for Flint has become part of is LPAC, advocates and Latinos for community trust. These meetings are monthly and by invitation only. In 2016 the invitation was extended to Latino representatives. We have been attending ever since then. You will see a wide representation of leaders from all across the city and state here.

In October 2016, some community residents met at Our Lady of Guadalupe church with law enforcement. It was women attended, rich dialogue took place. The youth subcommittee was also in attendance and made a presentation there. The event created a relationship between the community and law enforcement. And since then we have formed a law enforcement committee that is headed by the secretary of the church and also a representative of the Genesee County Hispanic Collaborative.

Faith is a big thing in our community. Most of the individuals we work with have ties to the local Catholic Church, Our Lady of Guadalupe. The vision is to impact and renew the city. This church is a safe haven for most of the Hispanic Latino community, documented and undocumented. The service at 9:00 a.m. is in Spanish and is very well attended which reflects the growth in our community, the Latino community.

The membership is approximately 400, not counting those not registered. The church has been designated to be the house of the Latino community. This is where Flint residents would go to when the water crisis began to get questions and get their filters, baby wipes, bottled water, and water pitchers.

The church currently houses a caseworker there every Tuesday from 10:00 a.m. to 4:00 p.m. to process intakes and offer any other resources available.

Latinos united was able to coordinate with the University of Michigan nursing students to provide basic health services to any Latino families at the church. It would take them a long time to heal, the church is a very big part of their lives.

This past summer the church sponsored a summer youth program through Catholic charities. The program was well attended allowing students to engage in cultural and physical activity. One of the coordinators was another Latino united member and they taught classes in music and dance.

The ballet under the direction of a member is a nonprofit organization focused on preserving the Mexican culture, enriching children's lives through dance, music and education.

For over 25 years the ballet has been the leader in providing Hispanic cultural programs to Michigan. The dance program teaches students the art industry of folklore I can dance originating from Mexico. This ballet also offers instrumental instruction for beginners and intermediate musicians. The students learn technique and musician ship through classical repertoire and mariachi. The instructor works at the local academy where many Hispanic

children attend.

Okay. Nutrition and healthcare is so very important in our community. That's why for the second year Latinos United for Flint hosted a health fair at the church with the participation of many wonderful doctors, in yours and other health professionals. Many from our community received direct service such as teeth cleaning, glucose testing, flu shots, acupuncture, massage and much more. They also disseminated information on lead poisoning. And Martus/Luna distributed food to all those who attended and we are looking forward to next year's event.

Latinos United for Flint holds an open meeting every month where members from any organizations are invited to share their information. We share a meal. Then open up to the public. The second part of the meeting is to address issues within the membership. These meetings take up to two hours as we have gained many friends along the way and enjoy seeing even other during these meetings.

Besides capacity building, we have been able to accomplish we have also continued to build the trust in the community by visiting families and listening to their concerns. I cannot thank Dr. Roxanne Martos for all the endless hours she put into reach out to families that we are currently working with.

Okay. Latinos United for Flint is involved in gathering and sharing information every cans we get. There are so many activities and involvement that Latinos United for Flint have been a part of, all for the purpose of gaining trust in our community. We realize that we still have a long way to go, but we believe we have made a difference.

And so. Why must we continue to do our work? This is Santi, one of the children we started to visit last summer to start making one-on-one contacts in the communities. Since then we have made hundreds of contacts. We have discovered that the best way to lose trust is by losing that personal contact. By not informing them. It doesn't take much to lose trust. It takes a lot to gain or regain it.

For this reason I was given the honor last week to attend a truth, racial healing and transformation seminar to start the process. I look forward to learning all that I can and passing it on to my community.

Thank you.

>> Richard Hamburg: Thanks so much, Aurora, that was terrific. Thanks for sharing Latinos United for Flint efforts. Again as a reminder, we have a Q&A. We'll have some good time after that. So after the next presentation. Please continue to submit questions.

Now we'll hear from Colleen McCauley, the health policy director at Public Citizens for Children and Youth. Colleen, over to you.

>> Colleen McCauley: Thanks very much. I really appreciate this opportunity to share our experience in Philadelphia and learn from folks on this call. I work at Public Citizens for Children and Youth. And we are a nonprofit that works to improve the lives and life chances of kids in the southeast corner of Pennsylvania in the Philadelphia region through advocacy and policy work. So this is one of my favorite graphics. It reminds us that kids don't vote. They can't join a special interest group. They can't hire lobbyists. We have to give voice to their needs. And the remedies to fulfill those needs. Advocacy is essential. For two decades PCCY has worked to reduce lead poisoning in Philly and the region. We've done that through conducting some research. We've published a number of reports on the status of lead poisoned kids and efforts to eliminate lead poisoning. We've convened coalitions. We educate local, state, and federal policymakers. And we help to initiate, draft, and advocate for

the passage of Philadelphia's current lead paint disclosure law.

PCCY and our other partners have the ambitious goal of making Philly the lead safest city in the country, which is requiring very ambitious and audacious action. The release of the ten policies report was great timing for Philadelphia. So was the opportunity to apply for the mini grants through the national center for healthy housing. Why is that? This summer an advisory group to the mayor in Philadelphia on lead poisoning prevention issued a report with updated recommendations to eliminate lead poisoning. We believe we were stalled in our efforts to drive down lead poisoning. We asked the mayor to create a time limited advisory group with representation from the city and private sector to kick start new efforts. After six months, a report was published that you see here.

One of the top recommendations of the group was to expand the city's lead paint disclosure law to all pre-1978 rental properties because enforcing the law as it is is challenging. I'm going to tell you more about the law in just a moment.

But expanding the law would impact many different groups: Families, landlords, the city, housing and health entities, just to name a few. Everyone agrees that children should not be poisoned, but there are differing points of view about how to best protect kids. Our best chance at expanding the law would require a collaborative effort among many groups. The national center for healthy housing was our ability to kick start that group and form a coalition. So in November, just last month, we held the Philly lead summit with the goals of building knowledge about the primary prevention recommends advanced by the city's advisory group. And while we had this convening to get everyone to think about additional action steps we may be able to take both on the public and private side to advance these primary prevention strategies, and then as I said to launch a new cross sector coalition to implement these strategies very soon.

The city's advisory group identified several primary prevention strategies, but the summit focused on expanding the law. And so what is the law? I'll tell you about that.

The lead disclosure law in Philadelphia applies to rental properties because most kids poisoned in Philadelphia live in rental properties. So the law requires landlords of properties built before 1978 in which a child 6 or under lives to test the property and certify that it is either lead safe or if they've done full abatement, lead free. The landlord would provide this certificate to the tenant, so the tenant could see the status of the property and sign the certificate. And the landlord then submits this copy, the certificate to the health department. Then when the landlord goes to renew their rental license, they would attest at that point that they have submitted the necessary lead safe or lead free certification. They would be permitted to renew their license.

As you all know, Philadelphia is an old city. 95 percent of housing units were built before 1978. An estimated 26,000 rental properties are expected to need to comply with this law. Now, some unknown number of these properties don't have the required rental license. Even so, since the law was implemented in 2012 approximately 2500 certifications have been submitted. And that is not very many. One of the main barriers to enforcing the law is not being able to identify which rental properties have kids in them. How does the city know which owners need to comply? One of the main barriers for compliance with the law is the inability of low income rental property owners to afford testing the properties and remediating.

So this is where things stand in Philadelphia. Consequently, the short-term goal we tackled at our lead summit was to form this coalition to work towards expanding the current law to all pre-1978 rental properties.

To help direct our advocacy efforts at this time, we looked to the data and researched in the ten policies report. This is a brilliant report. It is a wonderful advocacy tool, much needed research, data, and best practices are concentrated in one place.

And we used the report to answer the questions: Which other cities have a law similar to Philly's? What are their best practices? How have they overcome some of the barriers we are experiencing?

You know, undoubtedly Philly is a unique city with unique conditions in history. For sure, we don't need to reinvent the wheel. We can learn something from other cities.

So that's how we kicked off our summit. What you are looking at here is a picture of Dr. Dave Jacobs' first slide from his presentation in our summit. He's one of the study partners and chief scientist at the National Center for Healthy Housing. He helped kick off the summit, providing this comparison of Philly with other relevant cities. Dr. Jacobs did a really great job setting the tone and context for the day. Importantly acknowledging the various points of view in the room about how to protect kids, who is accountable for doing so, and the goals shared among us all to work to keep kids safe.

So given what is going on in Philly, we had two priority issues to tackle at the summit.

Focused on code enforcement and funding for remediation. We began by bringing in some national experts. We invited Gary Kirkmeyer, the Executive Director of Building and Zoning in Rochester, New York. You heard Rebecca describe some of their strategies and outcomes. This is a picture of Gary. Why would Philly look at Rochester? Philly has a population six times larger than the City of Rochester.

Well, both cities have a high share of rental housing and high share of families with low incomes. Despite this, as you heard, Rochester made tremendous progress reducing lead poisoning through proactive housing inspection, code enforcement, targeting high risk areas and more. You can read more in the report.

We had much to learn from a place like Rochester and much to learn from a place like New York City. We invited Deborah, the Executive Director of the child lead poisoning program there in the health and mental hygiene department. We also as I stated needed to focus on funding. How do we have the financial resources to remediate homes? We were very interested in learning about what is going on in neighboring New Jersey with their fund, state fund to help property owners, low income property owners afford to do remediation.

So Alice Pivnik joined us from Trenton and Kevin Chan joined us from green and healthy homes initiatives to inform us more about the pay for success funding model. I bet many people on this call are familiar with it. The financial model built on cross sector partnerships in which private investors pay up front for service, like lead hazard remediation in a kid's home. Then government or healthcare or other payers repay that investment if the outcomes were achieved such as fewer kids poisoned by lead. There is good success with this model related to asthma and initial steps have been taken to apply to lead poisoning prevention.

And I will say we had a third area and more minor area that we were focused on at our summit.

That was around eliminating lead hazards at demolition sites. Just at the end of the summer, two City Council members in Philadelphia introduced bills to help eliminate lead hazards at demolition sites. So Dr. Jacobs also helped describe some best practices that are happening in east Baltimore and Chicago and Detroit to reduce lead hazards at demolition sites.

But not only did we have national experts join us. Of course, we have lots of folks locally with great expertise. Two Philadelphia Commissioners spoke about their activities and vision for lead poisoning prevention in their departments. Our health Commissioner and housing code

enforcement Commissioner joined us. A picture of those gentlemen are on your screen now. Other key stakeholders weighed in as well with their ideas about how to expand the law to all pre-1978 rental properties. We had a City Council member. We had a representative from one of the landlord organizations in the city. From the tenants rights group in the city. From private philanthropy, from a foundation all weighing in, all of these stakeholders needed in order to produce a good result.

But we also called on the 55 summit participants in the room as well. All key stakeholders in their work. We wanted to take advantage, bring all these folks together, all these great minds. So for the last part of the summit, we had a working meeting. We broke folks into work groups to strategize our advocacy next steps in expanding our law.

In particular, looking at what is it going to cost to expand? Where are we going to find those revenues? We need financial modeling. We dug in right there at the summit. We looked at what kind of outreach needs to be done to impact the political process. What about couples? What messages do we need to put out there? Who are the best messengers?

Folks in the room represented a wide cross-section of private and public interests that would make for a great lead poisoning prevention coalition. We had folks from the city, a variety of departments. As I mentioned landlord associations and landlords, tenants rights, Medicaid health plans, elected officials and researchers.

I am pleased to report that the outcomes from the summit surpassed our expectations. We set out to form a new coalition and we did that. We had folks sign on the dotted line before they left the meeting committed to taking the next steps to look at how to further prevent kids from being poisoned. We set out to raise awareness about the status of lead poisoning prevention activities, we did that as well. We had a national reporter honest attend and put us on the air. We locally trended our hashtag for the summit locally trended on Twitter that day.

This is a picture of me testifying at City Council two weeks after the summit on the lead demolition bills I mentioned using information and data that I learned at the summit and subsequent to that. The City Council member, main sponsor of the bill, says he intends to include some of our recommendations in implementing the bill. We continue to follow up with his office.

As far as next steps, we strongly believe that government is not necessarily going to activate the recommendations in the ten policies report. That it is up to us. And that activation requires advocacy. Mini grants were a critical opportunity to promote the policy findings and help kick off advocacy, but ongoing support and funding for advocacy is needed to implement the ambitious report recommendations.

In Pennsylvania, for example, we do need a statewide strategy. Philadelphia has the highest number of kids poisoned of all cities, but there are many other cities and states that have a high share of kids poisoned among kids tested. The steps we took after the summit is to start conversations with groups around the country to band together to get ever financing for joint efforts.

There is Partnership for America's Children, an advocacy organization, and my organization, PCCY is a member. At the end of this week we will get on a call with other states to explore joint funding for our common advocacy goals.

And in closing, I just want to urge all of us working in communities on lead to be ambitious. I started out saying that Philly aspires to be the lead safest city in the country. Many localities and participating in this webinar are aiming for this because kids are counting on us. Just like we heard from Aurora. The picture you're looking at right now are boxes on top of

one another with faces of kids. Each represents a kindergarten classroom in Philly. We lined up hundreds of boxes to remind us all at the summit to remind us that each year enough kids in Philly are poisoned by lead to fill 100 boxes.

We have come a long way in Philadelphia, but we still have a ways to go. It's time for us to be as ambitious as we have ever been to keep kids safe from lead and help them achieve their full potential.

>> Richard Hamburg: Okay, great, great. Thanks so much, Colleen, and to all of our speakers. It has been a rich set of presentations.

And we do have time for Q&A, as I mentioned. I want to thank all in the audience so far who sent their comments and questions using the Q&A panel. I want to remind everyone to continue to do that. Before we go to Q&A, we will have about 15 minutes. I do want to bring up the final poll. It is on your screens right now. Look at the right side and click on the response.

As you think about lead prevention and your community, what additional resources or support do you need to increase your work in this area.

Check all that apply.

And the choices are:

- a. Increased understanding among leadership of the importance of lead prevention and the need to partner
- b. Best practices/models/examples of lead prevention approaches that are replicable
- c. Business case/ROI for investment in lead prevention
- d. Ways to engage with other leaders/partners and elected officials around the country.

Please click on the screen now, click submit and in a minute we'll read those results. We want to make sure we hear from all of you. This is very important. Please submit your responses on the poll. One last time, the question is and your community, what additional resources or support do you need to increase your work in this area.

Check all that apply.

The results, the number one answer is increased understanding among leadership of the importance of lead prevention, the need to partner, followed closely by identification of best practices and models and examples of partnerships and then ways to engage other leaders, partners, elected officials and last but not least, business case and return on investment for investment is important. Thank you very much. We want to begin our Q&A now. As you see here, please type your question in the Q&A box and select all panelists and click send. Here is a picture of all of the panelists. Let me start things off with a couple of quick questions.

First, Rebecca, this might be your question. A participant asks: Can local agencies apply to implement the RRP rule? I wonder if you can address that one.

>> Rebecca Morley: Oh, that's a great question. The authority to enforce the RRP law rests with states. But there are things that local organizations or local cities, for example, can do. One simple thing, for example, that Washington, D.C. and others have done is to simply change their permitting process for construction and renovation projects so that when someone comes in to get a certification or certificate to do the permit for any building-related work in older housing, the city would require to see the safe worker certification. You can do things some things on straightforward way on city forms and procedures that can make a big

difference. Thanks for the question.

>> Richard Hamburg: Great, thanks.

And Mary Jean, there was a question around the fuel, the airline fuel and while smaller aircraft use the leaded fuel, it sounded like the concentration of efforts were on small airports. But the question was, is the leaded fuel also a problem at some of the larger airports?

>> Mary Jean Brown: The leaded fuel is a problem at larger airports that have, that allow the small planes to take off. Most of the larger airports have a wider perimeter. Like so the housing is not as close. The small airports, the housing can be right up against the fence. So it is probably more likely to occur to be a problem in those areas. But if we, as we think about lead and things that are -- and things that need to be done, wouldn't it be a good idea just to take the lead out of the Av gas? Nobody wants the planes to fall out of the air, but I am told that there are ways that this could be done. It wouldn't be very expensive.

>> Richard Hamburg: Great. Absolutely, absolutely.

Another question was: Who or what group was behind the creation of the Cincinnati map? The lookup map?

>> Rebecca Morley: That was the local utility there. So I think it is called Cincinnati water works. One woman there championed it. I'm sure she brought others along and worked with a team. But Kathy really pushed this and got it done.

And I have more information about that if the questioner wants to follow up with me afterwards.

>> Richard Hamburg: Okay, great, thanks, thanks.

Another question that was posed. What is the lead level -- not sure who would like to answer this one. What is the lead level needed to enter a child into case management?

>> Mary Jean Brown: So let me take that. That varies among localities. So it is a resource issue for many localities. If they are not able to enroll all of their children with blood lead levels of 10 in case management and doing the inspections and the health education, they are not enrolling children with blood lead levels of 5. However, many, many places have adopted the five microgram per deciliter as a time when they will begin to track an individual child and make sure they are retested and that they have health inspections in other localities. There may be a letter sent or some other level of lower intervention.

>> Richard Hamburg: Thanks a lot. Here is a question that came in actually with the registration, I think. A good question. A couple people might want to answer.

We talked about the prevention of lead exposure being critical. But can one or more of you take a little bit of time to explain what can be done to help children who have already been exposed?

>> Mary Jean Brown: Yes, let me start. So the first thing is to remove the lead source. Right? So to prevent children's, with high blood lead levels from going higher. We do that by doing enforcement of paint hazard lead hazard reduction and lead education and going into the homes with people and looking for other sources including water, soil, traditional medicines, teas. There's a list of things that can be looked for. All those things have to be eliminated. We want to make sure that that is successful. So children will have to continue to be tested over a period of time, typically about a year.

And then we are moving, I think, in the direction of making sure that children who have had an elevated blood lead level in the past when they get to school, somebody is watching and paying attention to them to make sure that they are progressing through the academic requirements as should be expected, right? What happens, not every child who has a blood lead level of 5 or even ten micrograms per deciliter will have a problem later in school, but

many of them will. We need to have systems in place. Some places have done this quite well. We need to have systems in place so that if Mary doesn't make the transition from learning to read to reading to learn, which is a third grade expectation, then somebody can intervene and provide the educational interventions that will help her to do that and that we don't wait until she's two years behind grade level before she gets services.

There is, CDC published a document called educational interventions for children affected by lead. It is on their website. And for people who are in the early childhood education field on the line, I recommend you take a look at that.

>> Richard Hamburg: Great. Anybody else on that one?

>> Rebecca Morley: Maybe I'll chime in quick. In the ten policies report, about pages 69 through 78 you can find information on this topic specifically. And so I would send you in that direction, including a couple case studies of states that have done this as well.

>> Richard Hamburg: Great, thanks. Another question or two here. Another question we received is how can we make sure that places where children spend the majority of their days like childcare and school, are free from lead exposure?

>> Mary Jean Brown: Okay, this is Mary Jean, let me take the first crack at that. So in many places, center based day care are required by state or local ordinance to be lead safe and comply with whatever is the definition of lead safe in that particular area. In Massachusetts it's no loose and peeling paint on any surface and no lead paint on friction surfaces, for example. But, but ... family day care may not come under these kinds of requirements in many places. That's an issue because the family day care is usually in the same neighborhood and has the same lead paint and house maintenance status as the other, as the house where the child lives. If it is already, if the neighborhood is high risk for lead hazards, it is probably also in the family based day care.

Trying to organize that has proven to be very difficult and it is -- so I would say that while people may be required to fill out a form that says they don't have any lead based paint hazards in their house before they enroll children in a family based day care, it they may not even understand what that means.

In schools, again it is the childcare facilities that might be in a school which are the biggest problems. Although renovation of old schools has caused problems in the past. That's a local level initiative that has to be undertaken to make sure that any renovation that disturbs lead paint is done safely, hopefully while the kids are not there. Water has been an increasing issue, increasing light on water. Maybe Rebecca can talk about the initiatives going on in the country in terms of lead in school water.

>> Rebecca Morley: I think maybe the only thing I would add, there was a group that came together just last week, children's environmental health advocates, school advocates and others putting together a set of strategies for schools and childcare. Stay tuned. Children's environmental health network and healthy schools network were part of that group. If you want to learn more, reach out to those organizations.

>> Colleen McCauley: This is Colleen and I will say that earlier this year there was an amendment made to the Philadelphia lead paint disclosure law that includes home based childcare providers. They are now, they will have to comply with the law. That doesn't actually happen until early 2018. So we don't have any particular experience with it yet. But it did get rolled into the existing law.

>> Richard Hamburg: Great. And just closing it up, Aurora, any final comments you would like to add?

>> Aurora Saucedo: No.

>> Richard Hamburg: Terrific. We are on time here. We are approaching the end of the web forum. I want to thank all of our panelists. Dr. Mary Jean Brown with Harvard Chan School of Public Health, Rebecca Morley with RWJF, Aurora Saucedo with Latinos United for Flint, and Colleen McCauley with Public Citizens for Children and Youth.

I also want to thank our sponsors for today's Web Forum, the National Center for Healthy Housing, The Pew Charitable Trusts, and Trust for America's Health. We couldn't do this without the tremendous support and background work of colleagues at these organizations. And I want to thank the Dialogue4Health staff, Dave Clark and Laura Burr, for their work behind the scenes for putting this together, incredible work.

This has been Policies and Efforts to Prevent and Respond to Childhood Lead Exposure. You can download a recording of today's web forum and materials online at Dialogue4Health.org. Lastly, I want to kick it back to Dave for final comments.

>> Dave Clark: Thanks so much, Rich. I would like to echo the will thanks to all of our speakers for their insights into today's topics. Thank you to you if you submitted a question. If we cannot answer your question today, we'll follow up by email to make sure you get an answer.

As Rich mentioned today's presentation was recorded. That will be available at Dialogue4Health.org. You will receive a email about that. That will include a link to a survey about not only comments on today's forum but suggestions for future programs. We ask you to take a moment to complete that survey. We enjoy hearing with you. Thank you for being with us today.

That concludes the Dialogue4Health web forum. Have a great day!

(The web forum concluded at 4:00 o'clock p.m. EST.)

(CART captioner signing off.)