

MODERATOR:

Welcome to today's Coffee Break presented by the Applied Research and Evaluation Branch in the Division for Heart Disease and Stroke Prevention at the Centers for Disease Control and Prevention.

We are fortunate to have **Colleen Barbero and Siobhan Gilchrist** as today's presenters, they are both from the CDC's Division for Heart Disease and Stroke Prevention on the Applied Research and Translation Team. Colleen is an Associate Service Fellow and Siobhan is a health policy researcher on the team.


My name is **Amara Ugwu** and I am today's moderator. I am on the Applied Research and Translation team within the **Applied Research and Evaluation Branch**.

Before we begin

All phones have been placed in SILENT mode.

Issues or questions:

- Q & A box on your screen
- AREBheartinfo@cdc.gov



MODERATOR:

Before we begin we have a few housekeeping items.

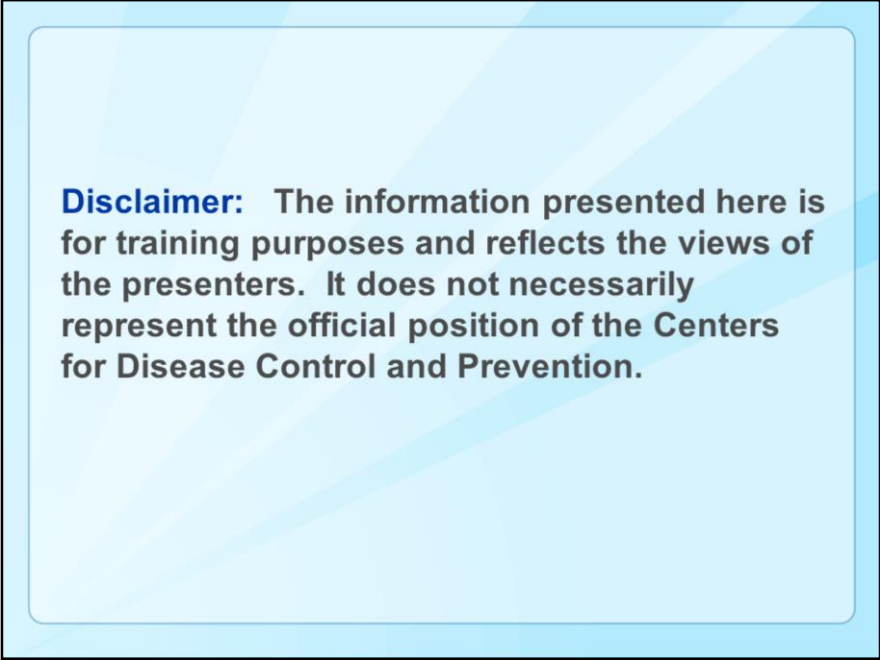
All participants on the phone, please place your phones on mute.

All participants listening through your computer, you have been muted.

If you are having issues with audio or seeing the presentation, please message us using the Q & A box or send us an email at AREBheartinfo@cdc.gov

If you have questions during the presentation, please enter it on the Q & A box on your screen. We will address your questions at the end of the session.

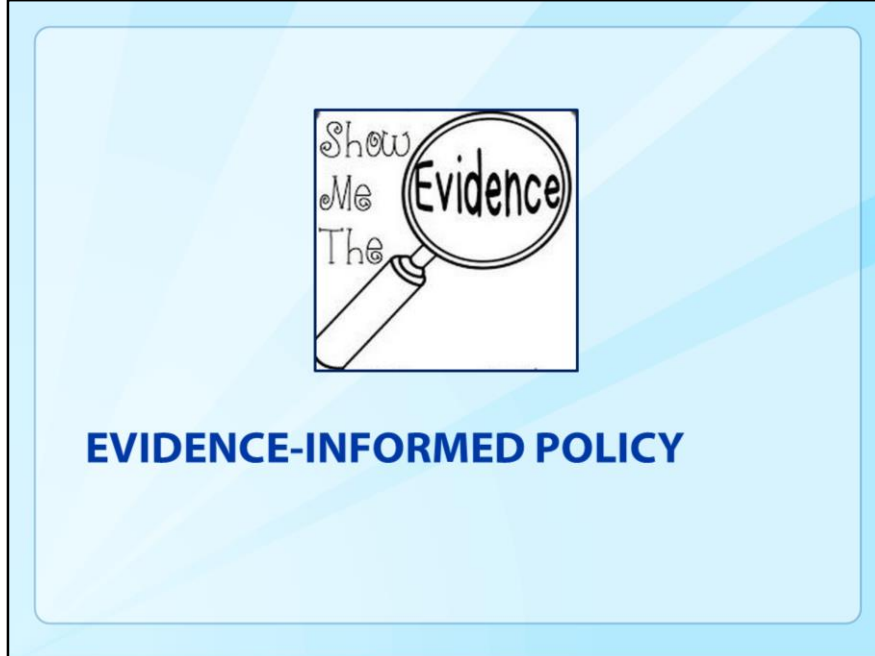
Since this is a training series on applied research and evaluation, we do hope you will complete the poll and provide us with your feedback.



Disclaimer: The information presented here is for training purposes and reflects the views of the presenters. It does not necessarily represent the official position of the Centers for Disease Control and Prevention.

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So, without further delay. Let's get started. Colleen and Siobhan, the floor is yours.



Thank you, Amara. Hello everyone, we are here today to talk with you about evidence-informed public health policy. First we will share challenges to evidence-informed policy. Then we'll present a new method we have developed to assess early evidence for public health policies. Lastly, we will explain how you could use our evidence assessments to inform policy development.

Policies such as state laws and regulations can serve as an important tool in improving public health. Heart disease and stroke are among the leading causes of death, disability, and health expenditures in the United States. An understanding of policy options could help states to develop a supportive infrastructure to scale up and implement effective public health interventions and reduce the burden of heart disease and stroke.

If you are working in public health there is a pretty strong chance that you have heard that public health interventions including policies should be evidence-informed. However, there are several important challenges we face when trying to bridge the gap between evidence and policy.

One challenge is that there currently aren't enough scientific studies of policies. This is

due in part to the nature of the policy itself. Policies are often complex and/or have multiple components and policies occur on the macro level. Both of these factors make policies difficult to study with experimental methods.

Many policies have multiple components

State policies to support public access defibrillation could address:

1. Specified locations
2. Training anticipated rescuers in CPR & AED use
3. Maintenance and testing of AEDs by acquirers
4. Notification or registration of AEDs with state or local EMS
5. Activation of 9-1-1 EMS
6. Reporting clinical use of AEDs to EMS
7. Oversight of PAD programs by a licensed physician or medical authority
8. Written emergency response plans
9. Plans to evaluate all out-of-hospital cardiac arrest events
10. Good Samaritan or civil immunity for lay responders
11. Good Samaritan or civil immunity for AED acquirers
12. Good Samaritan or civil immunity for AED program directors
13. Good Samaritan or civil immunity for owner of premises with AED

Source: Aufderheide, T., et al. (2006). Community lay rescuer automated external defibrillator programs: Key state legislative components. *Circulation*, 113, 1260-1270.

Public health policies often include multiple components to authorize a variety of interventions that together are expected to lead to improved health outcomes for target populations at the lowest possible cost. This slide shows the American Heart Association's recommendations for 13 different state policy components to support public access defibrillation programs. Each of these components could be expected to contribute differently to the effectiveness of a state's policy as a whole, but as of 2010 we did not have data to study every component's independent outcomes so we don't know which ones are the most important.

Many policies have multiple components

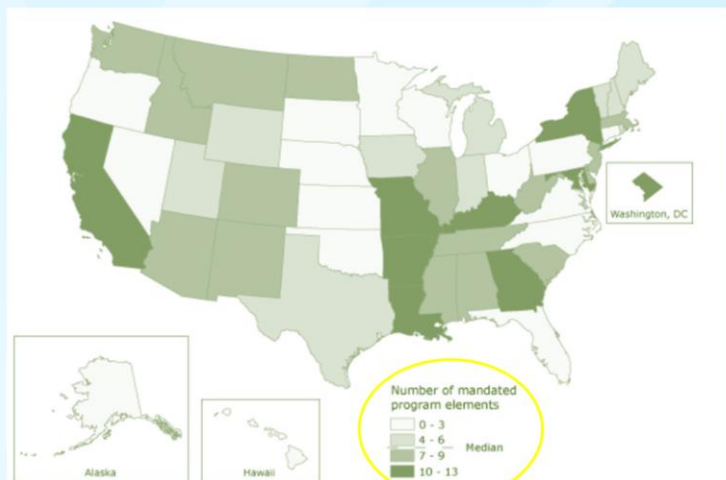


Figure. Summary of mandated public access defibrillation program elements in the United States as of January 1, 2010.

On this next slide you can see how as of 2010 states had enacted multiple but not necessarily the same components from the American Heart Association's list of recommendations. For example, Alaska had only a law that authorized Good Samaritans to apply AEDs with immunity whereas Georgia had law that was more closely aligned with AHA's recommendations, containing many of the components from the list on the previous slide.

Policymakers consider more than just science



Another challenge to evidence-informed policy is that what is considered evidence varies across audiences. We know that policymakers are always going to consider more than just scientific studies when making decisions on behalf of their constituents.

If we are always waiting for scientific policy impact studies, we may waste valuable opportunities to inform policy development. There is a wealth of early evidence that policymakers also value which we could compile and translate for them. This evidence includes subject matter expert opinion, accounts of practice-based knowledge, translational work, and indirect evidence on practices and programs authorized by policies.

How do we get more evidence-informed policy?

Need a quick but credible way to appraise a broader base of evidence from research and practice

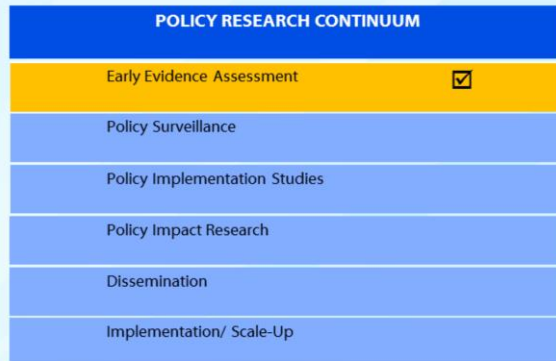
However a third and related challenge is that we lack rigorous tools for assessing the evidence that is available. Public health is in need of a quick but credible way to appraise a broader base of evidence from research and practice. Such an approach must also help policymakers choose among the multiple options that could make up a public health policy. Because we work in heart disease and stroke prevention, my team was particularly interested in assessing early evidence for emerging policies to scale up and implement effective interventions that target cardiovascular disease. These effective interventions include public access defibrillation programs, workplace health promotion programs, and community health workers.



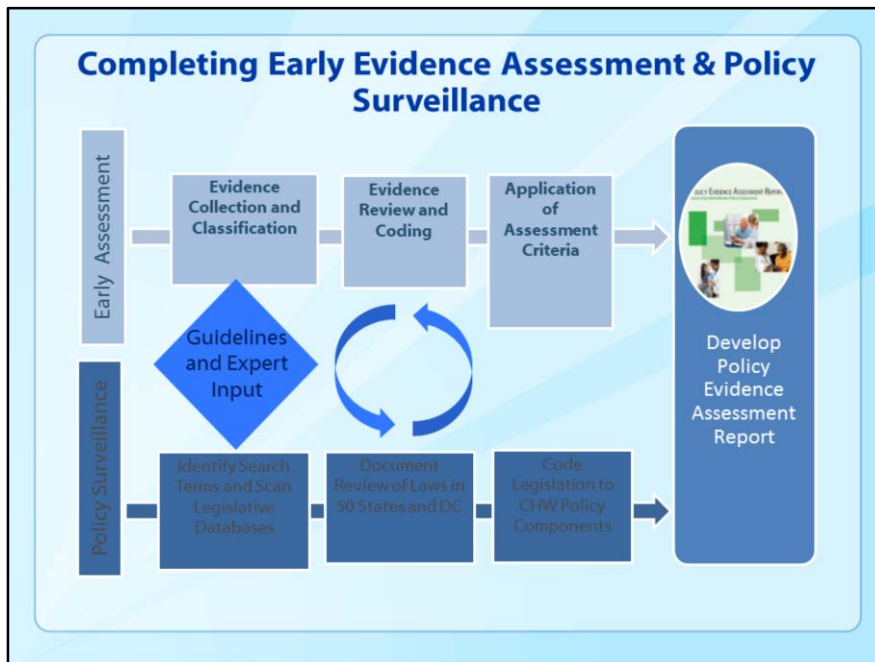
**ASSESSING EARLY EVIDENCE WITH
A NEW APPROACH CALLED QUIC**

To use early evidence for policy development we have developed a new approach which we are going to share with you today called QuIC.

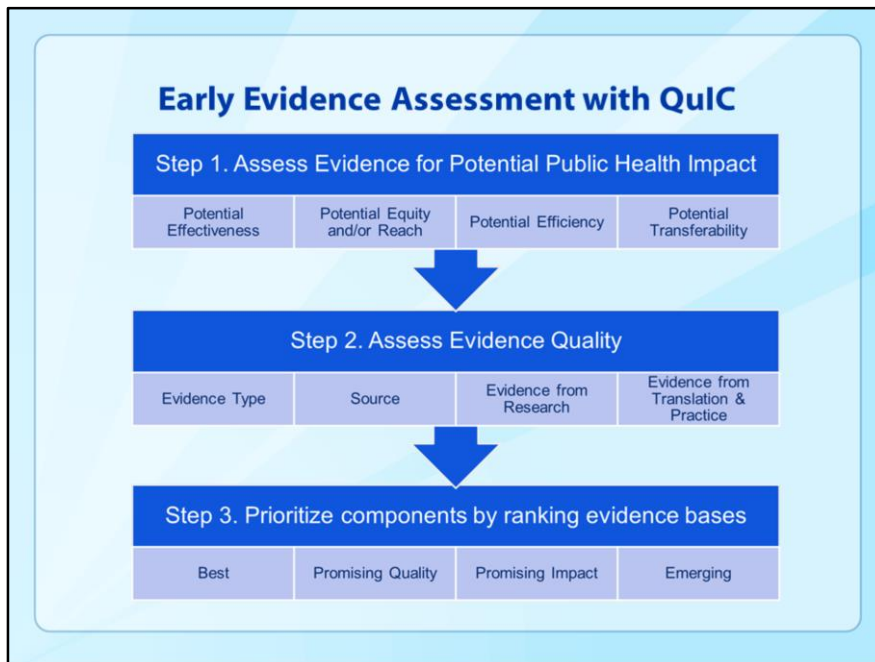
Early Evidence Assessment in Policy Research



Before learning about the QuIC, it is first important to understand that we conceptualize Early Evidence Assessments like QuIC as the first step in a longer process of studying, disseminating, and implementing policies. This slide shows our policy research continuum. In practice, early evidence assessment occurs almost simultaneously with policy surveillance. Together, these steps help us to determine the extent that existing state laws align with best available evidence.



Here we have the steps involved in completing an Early Evidence Assessment as well as Policy Surveillance. Both are informed by existing guidelines and recommendations as well as input from subject matter experts. These processes are complementary and help to inform each other.



To complete an Early Evidence Assessment, we use the tool we developed specifically for this purpose called the Quality and Impact of Component or QuIC Evidence Assessment. QuIC assesses early evidence for interventions in order to prioritize components that could make up a multi-component public health policy.

QuIC involves a 3 step process to assess evidence bases. First we assess Evidence for Potential Public Health Impact and second Evidence Quality. We use the potential impact and quality assessment results to then prioritize policy components. This is done by ranking evidence bases as emerging, promising impact, promising quality, or best. These four categories tell us which policy components align with interventions that have stronger and higher quality early evidence.

Evidence for Potential Public Health Impact Criteria

- ❑ **Effectiveness – outcomes relevant to health**
- ❑ **Equity and Reach – reach to target populations including those experiencing disparities**
- ❑ **Efficiency – outcomes from economic evaluations and assessments of quality and value**
- ❑ **Transferability – effectiveness across diverse settings**



To assess Evidence for Potential Public Health Impact we use four criteria. The first is Effectiveness which looks at outcomes relevant to health. Next we consider Equity and Reach by assessing reach to target populations and effectiveness for populations experiencing disparities. Third we look at Efficiency by reviewing outcomes from economic evaluations and assessments of quality and value. Finally we consider Transferability by looking at effectiveness across diverse settings.



To assess evidence quality we look at the rigor of the designs used in the evidence base. Remember that we include more than just empirical studies, so this is not just about the study design.

The second thing we look at is the credibility of the sources of evidence. A third criterion for quality is the amount of evidence that is from research. This evidence has higher internal validity. We also want a large amount of evidence from translation and practice. This evidence helps confirm external validity.

QuIC results for workplace health promotion policies

Figure. Health interventions that could be encouraged through a multi-component state workplace health promotion policy

	Lower Evidence Quality	Higher Evidence Quality		
Stronger Evidence for Potential Public Health Impact	<p>Promising Evidence for Potential Impact</p> <ul style="list-style-type: none"> • Workplace offers public access defibrillation program/activity 	<p>Best Evidence</p> <table border="0"> <tr> <td style="vertical-align: top;"> <p>QuIC</p> <ul style="list-style-type: none"> • Workplace offers diabetes program/activity • Workplace offers high blood pressure program/activity • Workplace offers high cholesterol program/activity • Workplace offers depression and stress program/activity </td> <td style="vertical-align: top;"> <p>Community Guide</p> <ul style="list-style-type: none"> • Workplace offers obesity program/activity • Workplace offers tobacco cessation program/activity • Workplace offers skin cancer prevention program/activity </td> </tr> </table>	<p>QuIC</p> <ul style="list-style-type: none"> • Workplace offers diabetes program/activity • Workplace offers high blood pressure program/activity • Workplace offers high cholesterol program/activity • Workplace offers depression and stress program/activity 	<p>Community Guide</p> <ul style="list-style-type: none"> • Workplace offers obesity program/activity • Workplace offers tobacco cessation program/activity • Workplace offers skin cancer prevention program/activity
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Weaker Evidence for Potential Public Health Impact	<p>Emerging Evidence</p> <ul style="list-style-type: none"> • Workplace offers education about the signs of heart attack and stroke 	<p>Promising Evidence Quality</p> <ul style="list-style-type: none"> • Workplace offers lactation support program/activity 		

On this slide are QuIC results for 10 workplace health promotion interventions that could be encouraged through a multi-component state law. For example, a state could encourage workplaces to offer diabetes interventions by requiring this program element in order to receive funding.

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Note that the Best policy components in the upper right quadrant align with the interventions we found to have the stronger and higher quality evidence bases. There were 3 interventions in this example recommended by the Community Guide and 4 that we found to have the best evidence bases through the QuIC assessment.

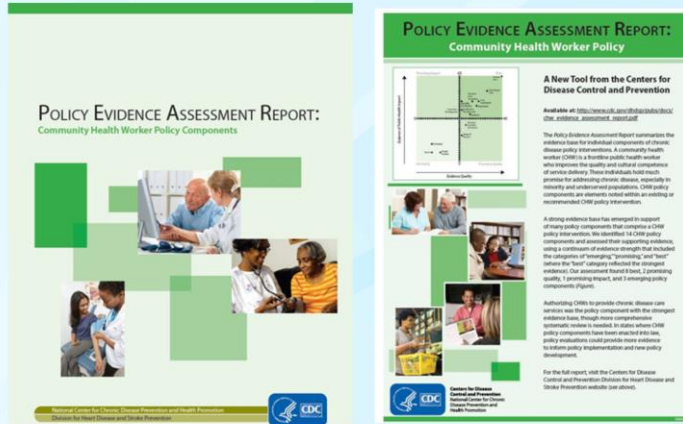
Can you see how such a prioritized list could be helpful to policymakers in the short-term? Later as data become available we could confirm that these policies are effective through implementation and impact studies, which are the 3rd and 4th steps of our policy research continuum.



**USING EARLY EVIDENCE
ASSESSMENT TO INFORM POLICY**

Next we'll explain how our early evidence assessment results could be used to inform policy.

Translation and dissemination of QuIC results in PEAR



QuIC results are disseminated in a report called the Policy Evidence Assessment Report or PEAR. Here you see our first PEAR for community health worker policy components and a 1 page summary of this report.

Using QuIC results to educate and inform policymakers

- **QuIC results can be used to educate & inform policymakers how existing state laws align with policy components linked to stronger evidence for potential impact & higher evidence quality**
- **Audiences interested in this information may include:**
 - State task forces
 - State health policy director
 - Legislature
 - State regulatory agency staff
 - Relevant local non-profit/voluntary health organizations

QuIC results can be used to educate and inform policymakers how existing state laws align with policy components linked to stronger evidence for potential impact and higher evidence quality. Audiences interested in this information may include state task forces, the state health policy director, the state legislature, state regulatory agency staff, and relevant local non-profit or voluntary health organizations.

QuIC results may be shared in whatever way is most appropriate for the audience. For example, the Policy Evidence Assessment Report or its accompanying 1 page summary could be shared by email; in policy presentations; or in meetings with state and/or local health policy staff with an interest in the policy components reviewed through the QuIC process.



Next steps include publishing the QuIC tool and its applications. Right now our team is finalizing the QuIC Handbook which will be published on the CDC website this fall. Also coming this fall is the Policy Evidence Assessment Report for state workplace health promotion laws. This report prioritizes a list of 21 possible interventions that states could authorize through their laws. We also have QuIC assessments underway for public access defibrillation laws and community health worker laws as well as laws authorizing interventions that promote patient centered medical homes.

After we conduct these evidence assessments, we will conduct policy surveillance to determine the extent that existing state laws align with evidence and help identify opportunities for policymakers to increase the utilization of early evidence in decision making.

For more information

□ **Journal articles:**

- Barbero C, Gilchrist S, Chiqui JF, et al. Do state community health worker laws align with best available evidence? *Journal of Community Health*, 2016; 41(2):315-25.
- Barbero C, Gilchrist S, Schooley MW, et al. Appraising best available evidence with the Quality and Impact of Component Evidence Assessment. *Global Heart*. 2015; 10(1):3-11.

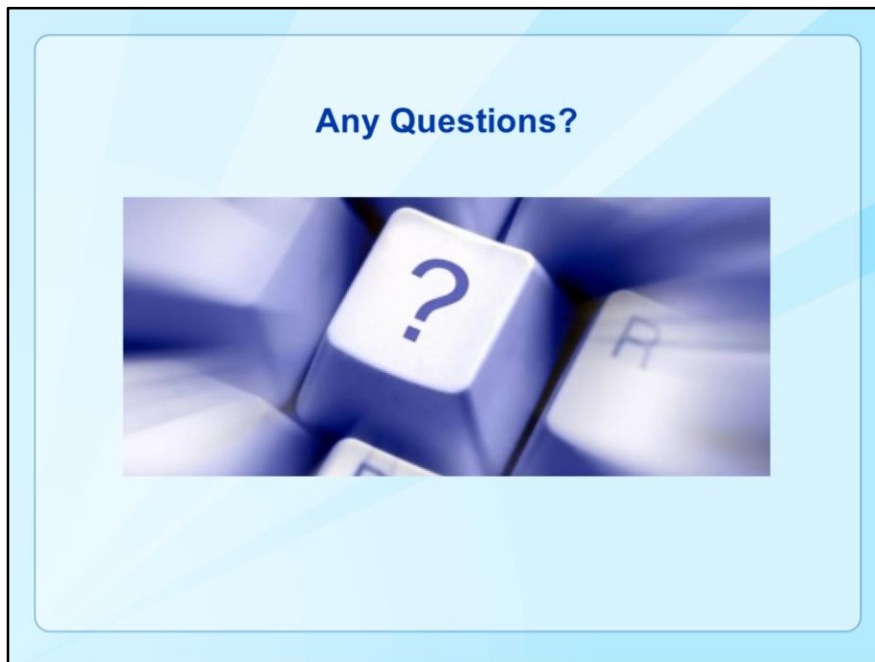
- **Contact Dr. Colleen Barbero at vrm5@cdc.gov**

If you are interested in the background on the QuIC method and an early application to state community health worker laws, please consult the two journal articles provided on this slide. Also provided is Colleen's contact information if you would like to follow up with us after today's webinar.

Together we can impact policy and public health



Thank you for attending our Coffee Break today. You should be aware now of some the challenges to evidence-informed policy. However, you should also now know that there is a broad range evidence available at an early stage as well CDC resources that assess this evidence in a credible way. If public health can work together to collect, translate, and disseminate evidence, we can have a greater impact on policy.



MODERATOR: At this time, we'll take any questions that the audience may have. You may submit questions through the Q&A box.

Here we have a few questions.

ADD 3 MOCK QUESTIONS

1. How do you find early evidence?

We first search the peer-reviewed and published literature using online databases. Then we strategically search sources for grey literature and have conversations with subject matter experts at CDC to help us collect evidence from public health networks.

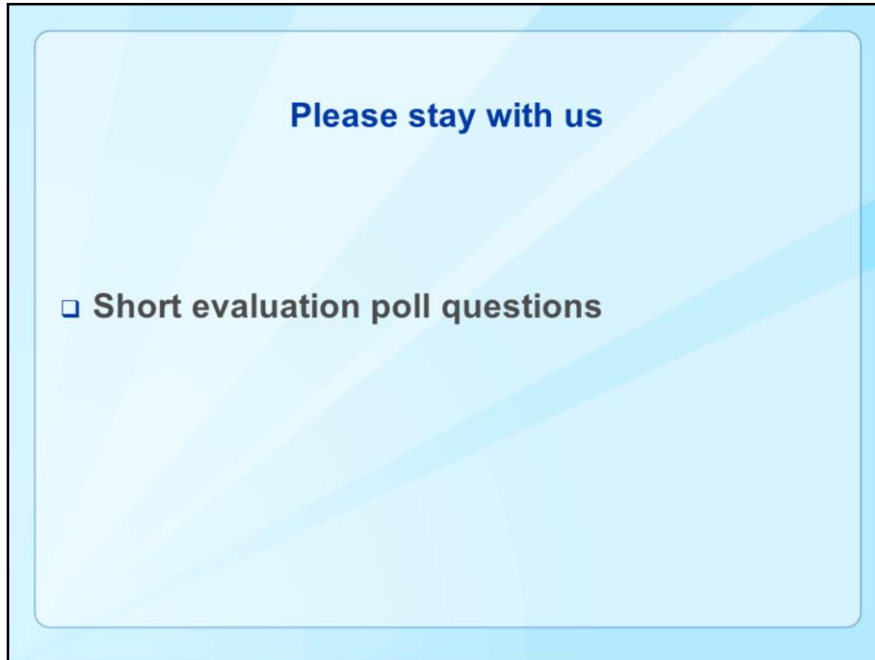
2. Can a state or local public health department complete a QuIC evidence assessment?

If you have the time and resources. You will need at least 3 months and 2 or more staff with a significant portion of their time dedicated to an assessment. Access to evidence can be an issue so a health department should also consider partnering with an academic institution and get access to subject matter experts. If there is a policy or intervention of interest to you, please contact us and we can determine if there is an opportunity to coordinate an assessment.

3. What other policy topics will you assess?

Laws pertaining to stroke systems of care are of interest to us. While many of our future assessments will focus on policies to support effective interventions targeting cardiovascular disease we would also like to see QuIC applied more widely to other public health policy topics, for example policies to prevent violence and injury or to establish complete streets.

Thank you Siobhan and Colleen.



MODERATOR: Please stay with us for a three short poll questions.

NOTE (don't read) Pull up on polls and pause for 15 seconds after each poll question.

Poll 1. The level of information was

Too basic
About right
Beyond my needs

Poll 2. The level of information fit my needs.

Yes
Somewhat
No not at all

Poll 3. The information presented was helpful to me.

Yes
Somewhat
No not at all

ADD Three EVAL questions

Reminders!

All sessions are archived and
the slides and script can be accessed at:

<http://www.cdc.gov/dhdsp/pubs/podcasts.htm>

If you have any questions, comments, or topic
ideas send an email to:

AREBheartinfo@cdc.gov

MODERATOR:

All sessions are archived and the slides and script can be accessed at our
Division website. Today's slides will be available in 2-3 weeks.


If you have any ideas for future topics or have any questions, please contact us
at the listed email address on this slide.

Next Coffee Break


When: July 12th at 2:30pm

Topic: Applying the Knowledge to Action Framework

Presenter: Teresa Brady and Aisha Tucker-Brown



Division for Heart Disease and Stroke Prevention
National Center for Chronic Disease Prevention and Health Promotion



MODERATOR:

Our next Coffee Break is scheduled for Tuesday, July 12th , 2016 and is entitled **“Applying the Knowledge to Action Framework”**.

Thank you for joining us. Have a terrific day everyone. This concludes today’s call.