Analytic Methodology Workgroup Virtual Meeting

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October 14, 2015

NHSPI Program Management Office

University of Kentucky

To participate in this virtual meeting and view the Power Point content,
please follow the link below and join in as a guest.
http://connect.uky.edu/analytic_methodology/
For conference call-in, please dial the number below and enter the access code when prompted.

- Phone Line: 1-877-394-0659
- Access Code: 7129451782#

UK UNIVERSITY OF KENTUCKY

see blue.

BACKGROUND:

NATIONAL HEALTH SECURITY PREPAREDNESS INDEX (NHSPI)

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Leadership

- The National Health Security Preparedness Index was inspired by the Centers for Disease Control and Prevention and developed by a coalition of over 35 preparedness and response partner organizations facilitated by the Association of State and Territorial Health Officials.
- The current Index was released in December 2014, (www.nhspi.org)
- The Robert Wood Johnson Foundation assumed leadership of the Index in 2015 with the Program Management Office located at the University of Kentucky

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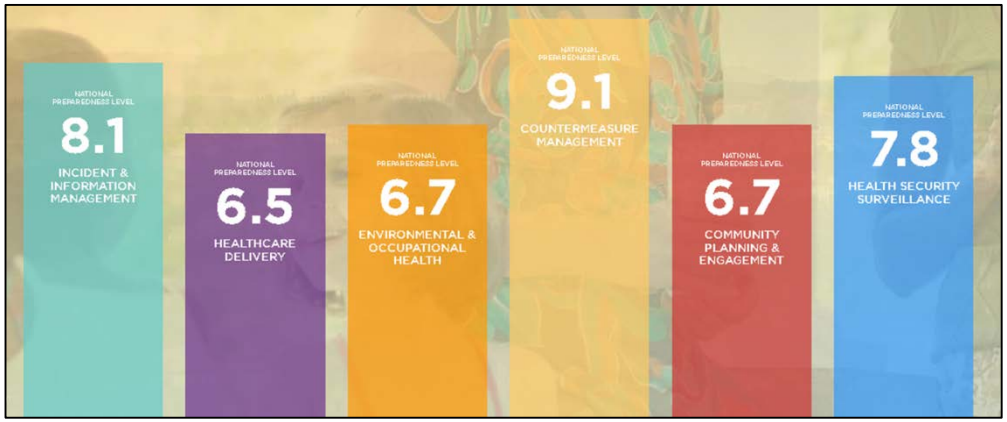
National Advisory Committee Members | 2015

1. **Tom Inglesby**, (Chair) UPMC Center for Health Security
2. **Robert Burhan**s, Emergency Management Consultant
3. **Anita Chandra**, RAND
4. **Ana-Marie Jones**, Collaborating Agencies Responding to Disasters
5. **Eric Klinenberg**, New York University
6. **Jeff Levi**, Trust for America's Health
7. **Nicole Lurie**, Assistant Secretary for Preparedness and Response
8. **Stephanie Lynch**, Caddo Parish (LA) Commissioner
9. **Suzet McKinney**, Chicago Department of Public Health
10. **Stephen Redd**, CDC Office of Public Health Preparedness & Response
11. **Richard Reed**, American Red Cross
12. **Martin Jose Sepulveda**, IBM Corporation
13. **Claudia Thompson**, NIH National Institute of Environmental Health Sci.
14. **John Wiesman**, Washington State Secretary of Health

Current Index Structure and Methodology

- 194 individual measures
  - Unweighted average
- 18 subdomains
  - Unweighted average
- 6 domains
  - Unweighted average
- State overall values
  - Unweighted average
- National overall values

- 2014 Index Results
  - National average: 7.5
  - State overall results range from 6.5 to 8.4



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Current Index Structure and Methodology

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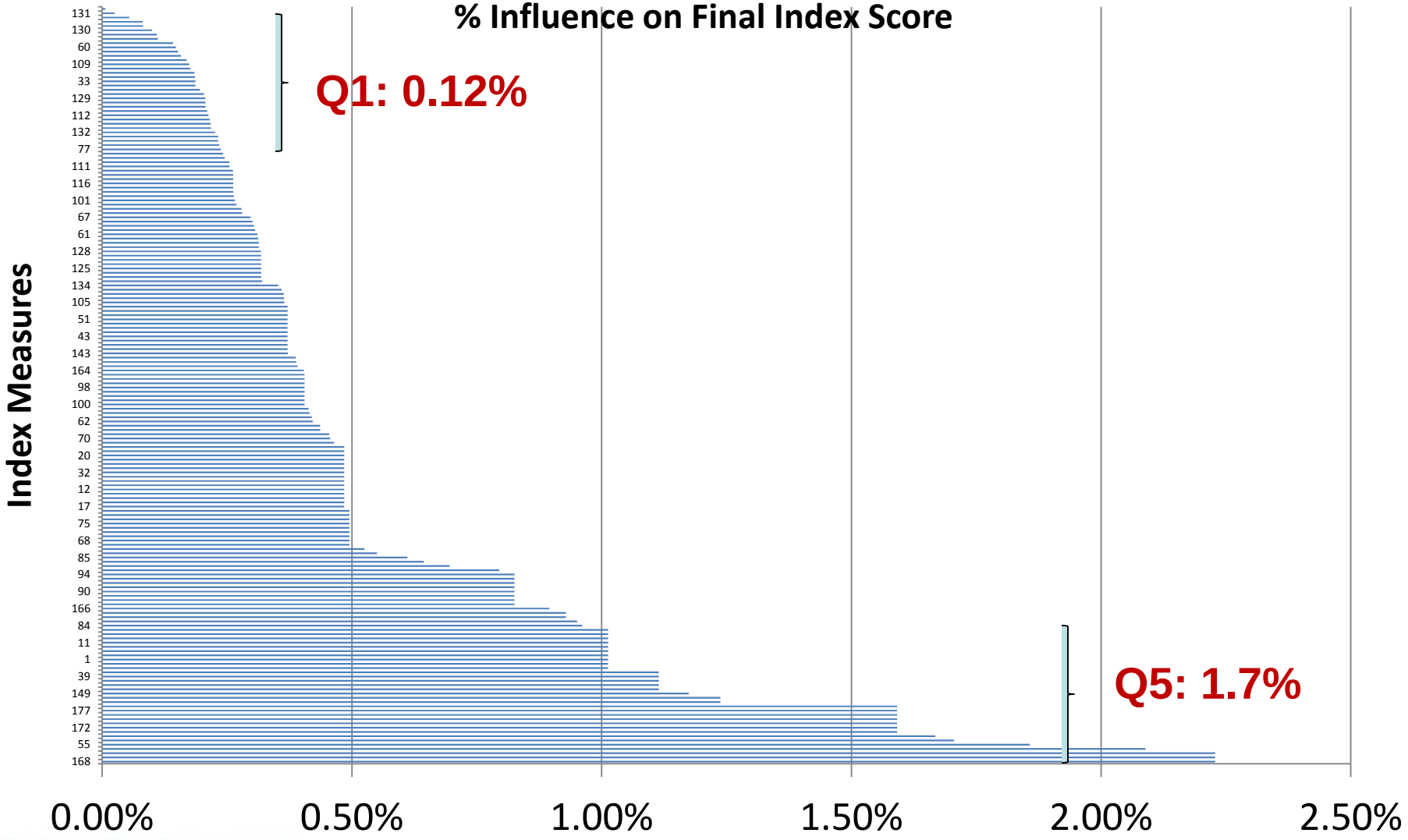
Validation studies with 2014 Index



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Proposed New Item Measures, Subdomain & Domain

- **Hospital partnerships:** AHA survey
- **Health department community collaborations:** NACCHO survey
- **Health care EM accreditation compliance:** Joint Commission
- **Public health response timeliness:** HP2020 personnel activation, public information, after-action reports
- **Occupational health**: CPS paid time off and telecommuting
- **(NEW SUBDOMAIN) Fatality management**: electronic death registration and disaster mortuary EMS capability
- **(NEW DOMAIN) Community resilience:** Cutter, et al., BRIC Index: social, economic, community, institutional, housing/infrastructure, environmental

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KEY ASSUMPTIONS

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All Hazards

- Think about the importance of an item measure across the full-spectrum of the fifteen national planning scenarios.
  - Scenario 1: Nuclear Detonation – Improvised Nuclear Device
  - Scenario 2: Biological Attack – Aerosol Anthrax
  - Scenario 3: Biological Disease Outbreak – Pandemic Influenza
  - Scenario 4: Biological Attack – Plague
  - Scenario 5: Chemical Attack – Blister Agent
  - Scenario 6: Chemical Attack – Toxic Industrial Chemicals
  - Scenario 7: Chemical Attack – Nerve Agent
  - Scenario 8: Chemical Attack – Chlorine Tank Explosion
  - Scenario 9: Natural Disaster – Major Earthquake
  - Scenario 10: Natural Disaster – Major Hurricane
  - Scenario 11: Radiological Attack – Radiological Dispersal Device
  - Scenario 12: Explosives Attack – Bombing Using Improvised Explosive Device
  - Scenario 13: Biological Attack – Food Contamination
  - Scenario 14: Biological Attack – Foreign Animal Disease
  - Scenario 15: Cyber Attack
- But remember that health security is about preparedness, protection, and resilience—and involves many sectors of society.

FAQs

- ***Am I suppose to assess my own state?***
  - Instead of thinking about your state of residence, you should think about a "typical state" or "the country overall" when assessing the item measures.
- ***Can I go back and change my assessment?***
  - Yes, as long as it is before **October 19**
    - Go back to the original link and start over. If the link doesn't work, you will likely need to first clear the browser cache (e.g., the last hr. or last day) OR use a different browser (e.g, Chrome instead of IE).
    - 2. Use the same 4-digit code as your user ID, but append a v2 (as in version 2, e.g., 9999v2) so we will know to jettison the other one(s).
- ***I lack sufficient expertise, should I participate in the Delphi?***
  - Yes. You can always click “don’t know” but each person was specifically chosen because of their experience, demonstrated knowledge, and/or expertise—we only want your best professional judgement.

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ELEMENTS OF THE ONLINE SURVEY

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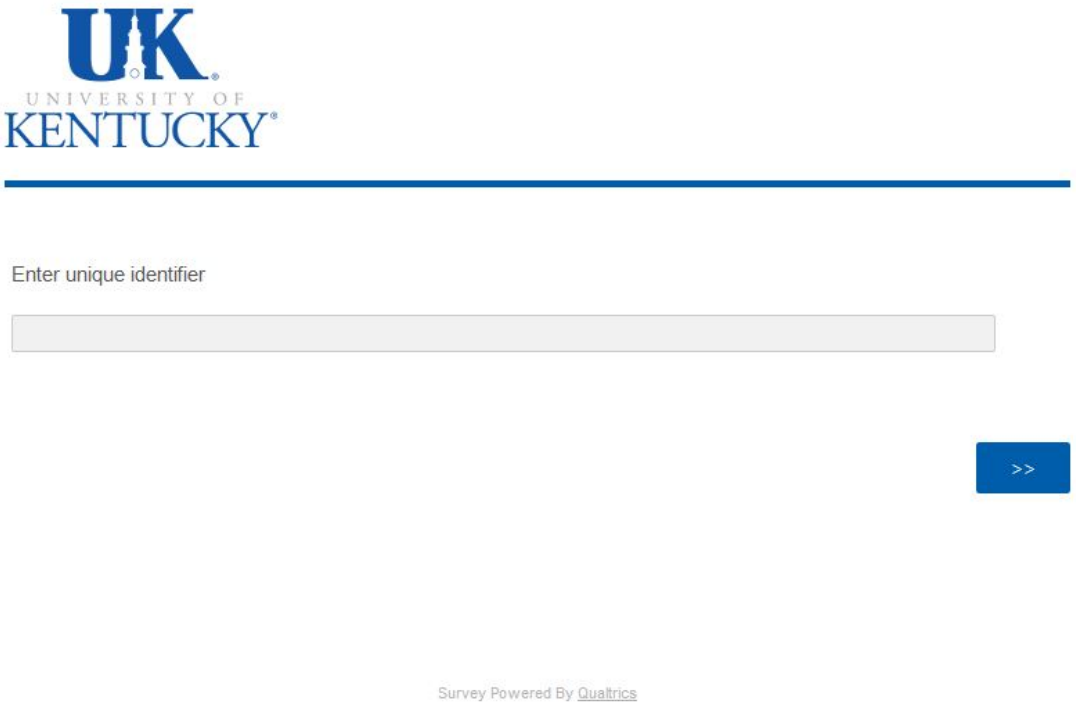
First Screen: Unique Identifier



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Second Screen: Instructions

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Instructions: The National Health Security Preparedness Index aims to provide an accurate portrayal of our country's health security using relevant, actionable information to help guide efforts to achieve a higher level of health security preparedness. While not an exhaustive compilation of national health security measures, the Index uses existing state-level preparedness data from a variety of sources that are broadly indicative of national or state-level health security. The current Index includes 194 measures grouped into eighteen "sub-domains," which are organized into six "domains." In addition, we have identified over 50 other candidate measures for possible inclusion in the next release of the Index, many of which are included in a grouping we call "pre-event community status."

The goal of this Delphi exercise is to collect input on the relative importance of various factors affecting health security. Requiring about 20 minutes to complete, we have organized the Delphi so that a rater will assess a subset of the measures—not all of them. Using a visual analog scale that ranges from 0 to 10, raters will be presented with a list of item measures and asked to assess how important each measure is to its overarching dimension of health security (or sub-domain).

When making assessments, one should think about the importance of an item measure across the full spectrum of the fifteen all-hazards National Planning Scenarios. These scenarios represent a broad range of potential health threats, and as noted in the National Health Security Strategy and Implementation Plan, "they can be intentional or naturally occurring and can result from both persistent and emerging threats, including severe weather, infectious diseases, hazardous material exposures, and terrorist attacks."

We recognize that some hazards are more relevant in some parts of the county than in others, and that some factors associated with health security might be more relevant to one planning scenario than another. For example, factors affecting health security preparedness in the context of Pandemic Influenza might be quite different from those in a Cyber Attack. An assessment of relative importance might be affected by the perceived likelihood of a scenario happening, its potential impact on health security should it happen, and the perceived relevance of a sub-domain for any given scenario. We ask that you think about these issues "on average." That is, any given measure, sub-domain, or domain might have more relevance in the context of one planning scenario compared to another, but across all fifteen planning scenarios you should think about its "average" importance. Similarly, we ask that you make your assessments assuming an all-hazards approach—which is an approach for prevention, protection, mitigation, response, and recovery that addresses a full range of threats and hazards, including domestic terrorist attacks, natural and [human-caused] disasters, accidental disruptions, and other emergencies.

Domain: Pre-Event Community Status

These measures provide insight on a community's disaster resilience.

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Third Screen: State of Residence

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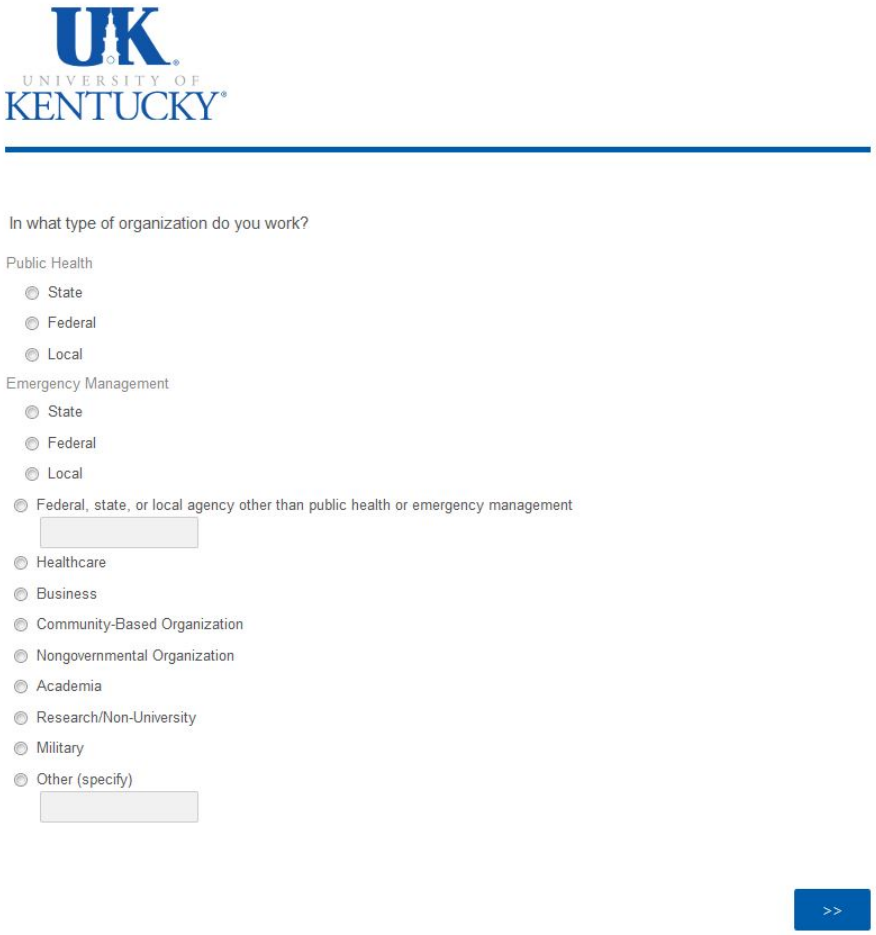
Fourth Screen: Your Work



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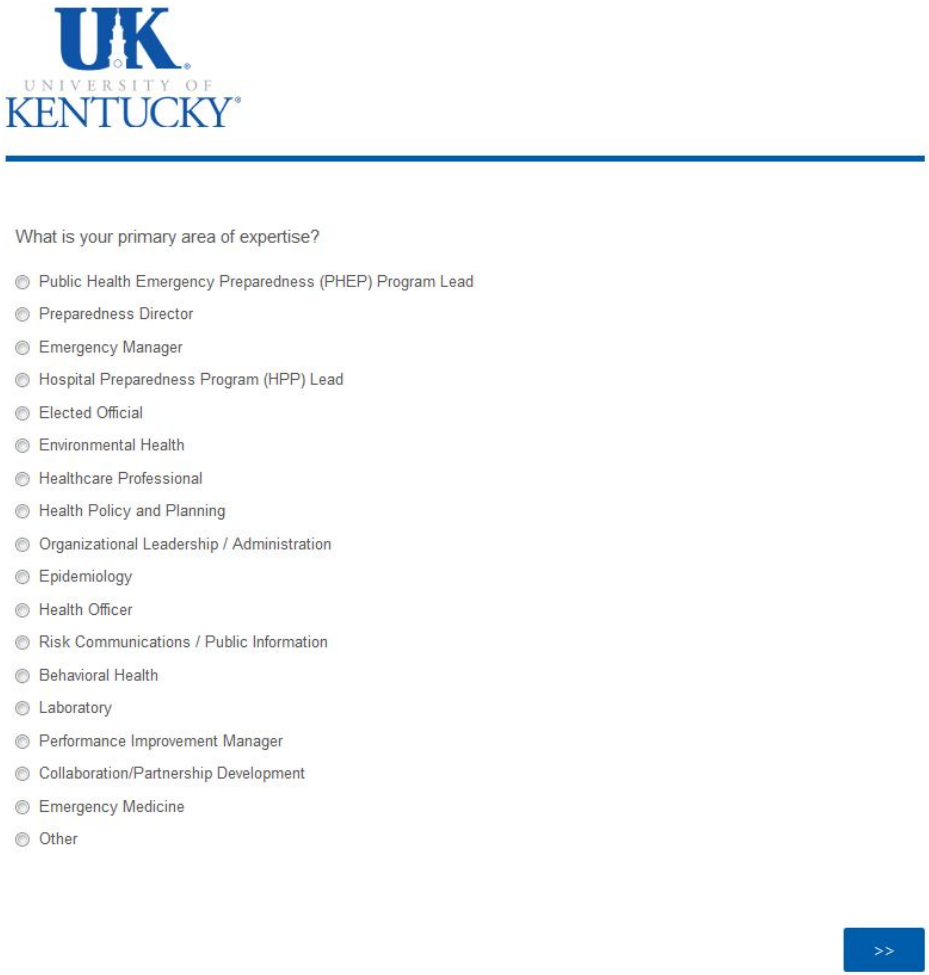
Fifth Screen: Your Expertise



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Sixth Screen:
The Subdomain Being Assessed

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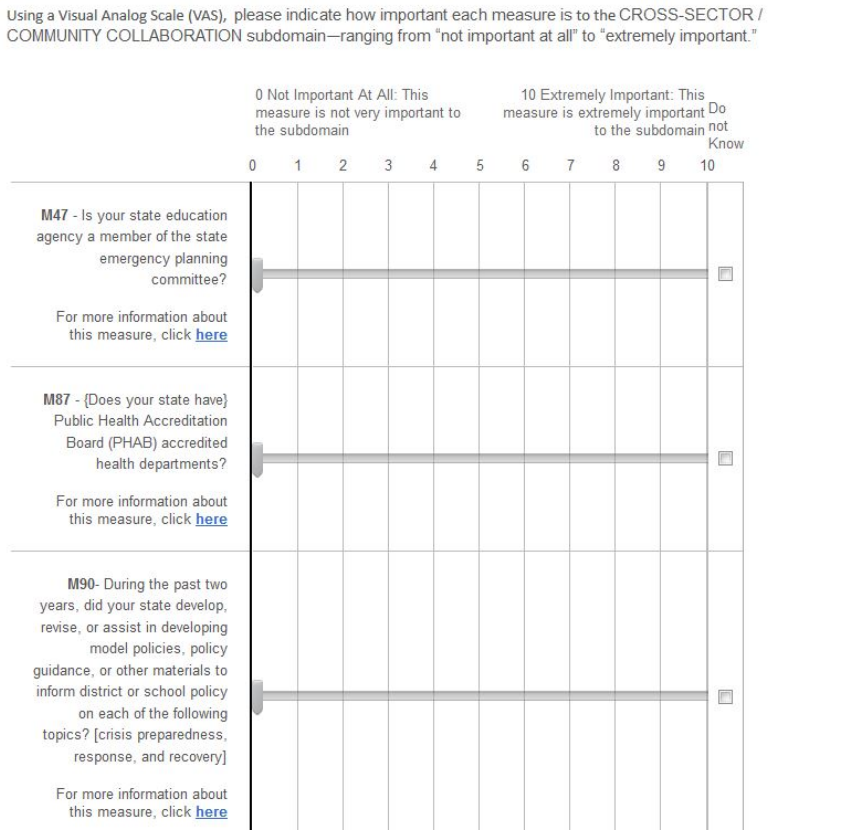
Seventh Screen:
Item Measures and the Visual Analog Scale



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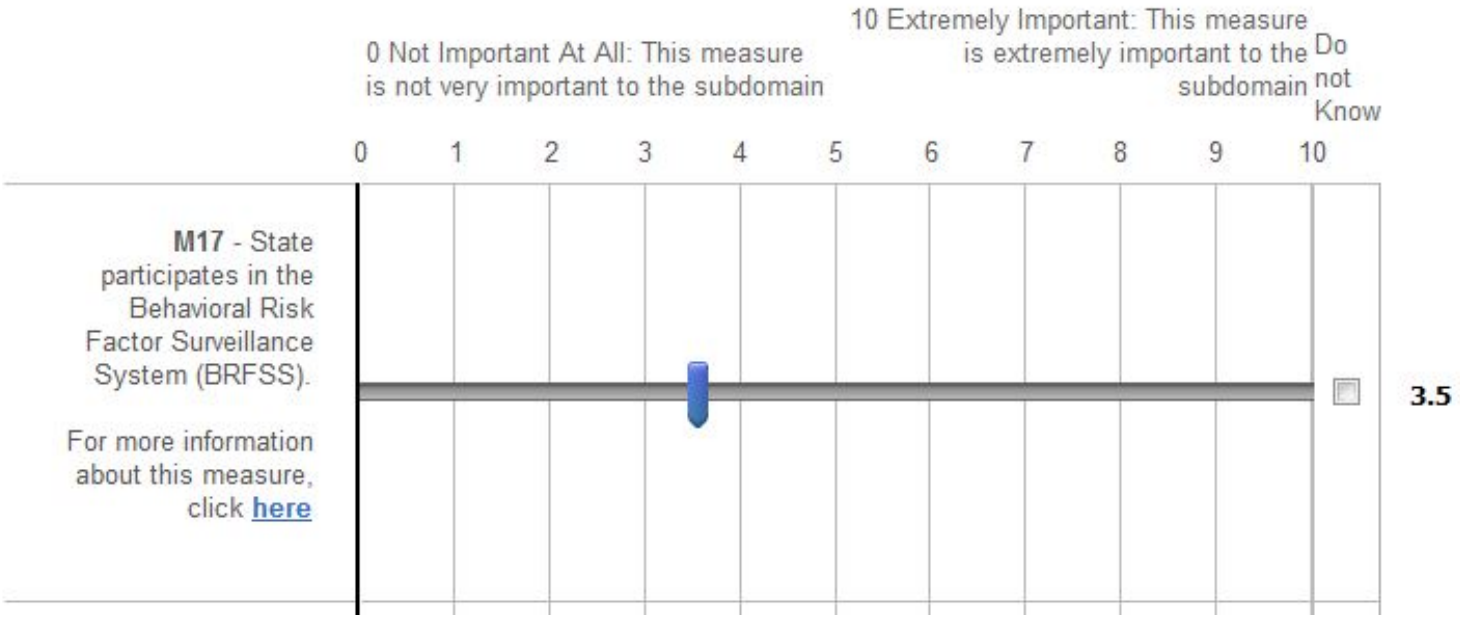
The Visual Analog Scale

Using a Visual Analog Scale (VAS), please indicate how important each measure is to the Health Surveillance & Epidemiological Investigation subdomain—ranging from "not important at all" to "extremely important."



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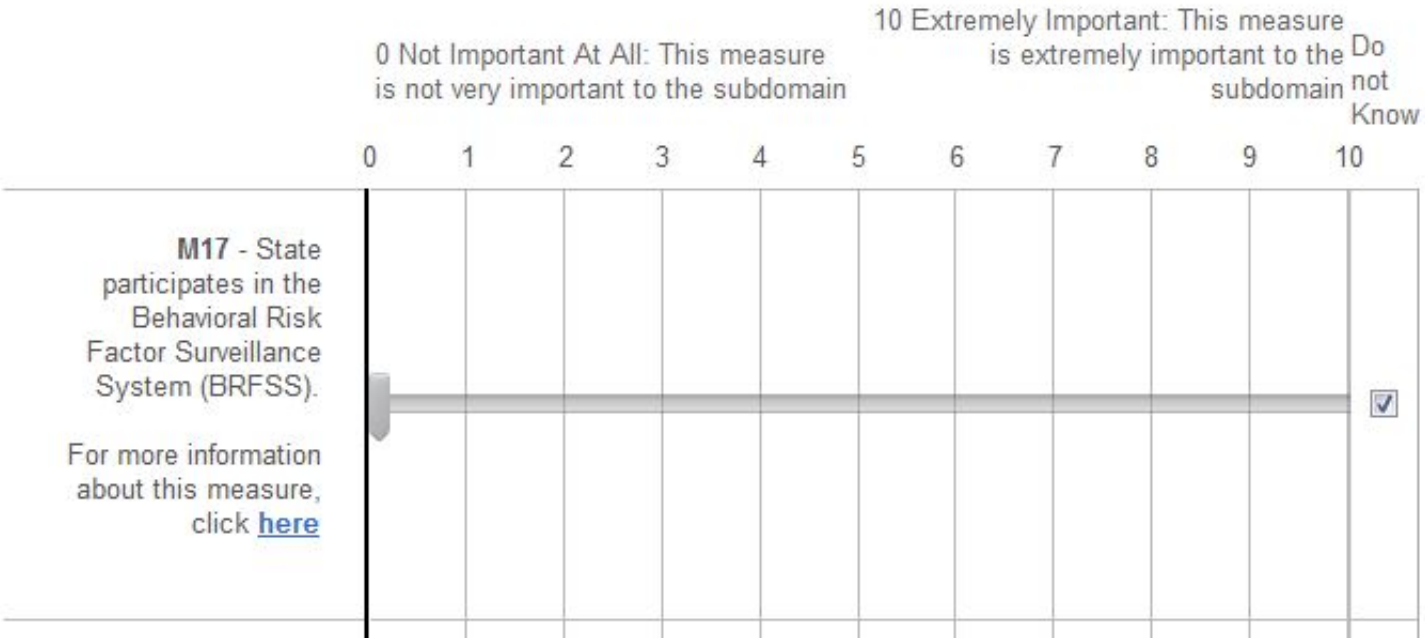

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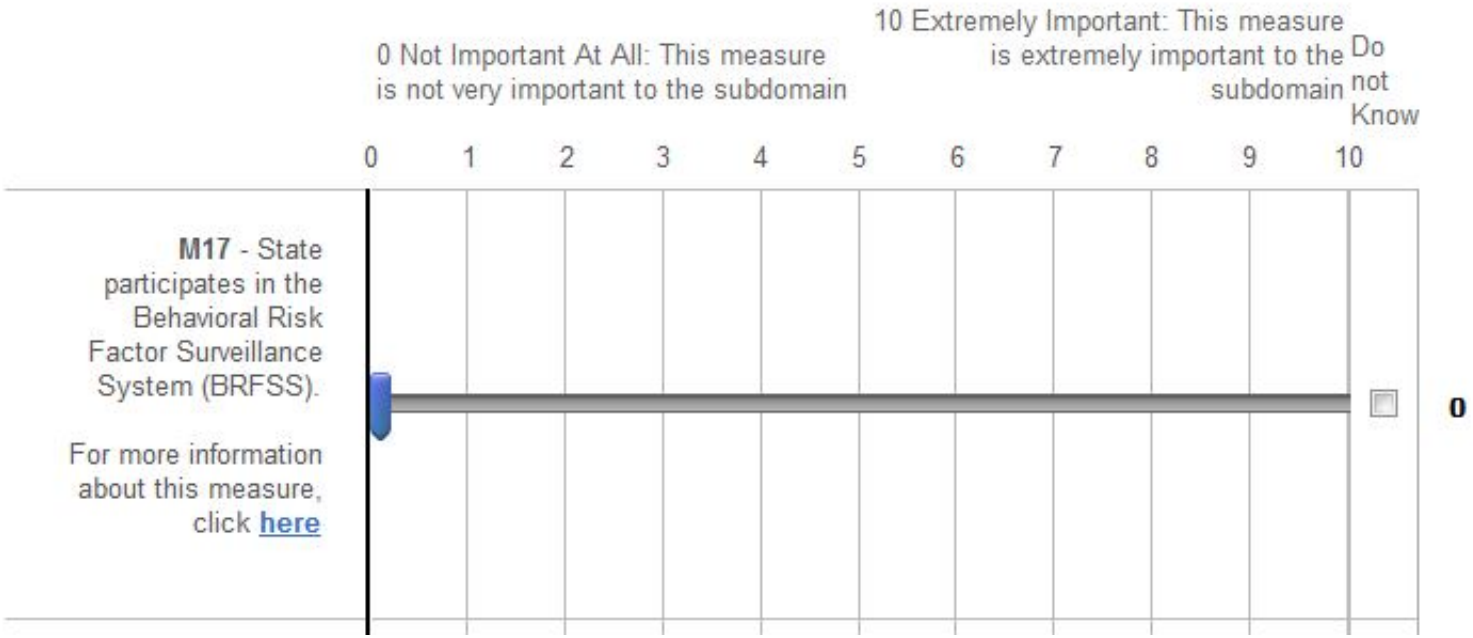

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What's Next?

- The Delphi process seeks "convergence"
- We will compile the "results" and send them to you for a second round of assessments
- How many rounds will there be?
- After the item measures we'll move to the subdomains
  - This will be quicker and easier to assess

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For More Information

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