The Evolution of the National Health Security Preparedness Index

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Roadmap

- NHSPI Overview
- 2014 Index
- Leadership Transition
- New Website
- Future Steps
- How You Can Engage in Index Development
NHSPNI Overview: History

- Developed through partnership of CDC, ASTHO, and more than 75 stakeholder groups
- Aims to provide a comprehensive annual measure of health security and preparedness at national and state levels
- First Index was released in 2013
- Domains, subdomains, and measures are still evolving
NHSPRI Overview: Goals

- Focus initially on public health and healthcare systems but is envisioned to include other elements over time
- Use already established metrics, creating new data reports only where gaps exist
- Align with and support, but not be limited by, existing national frameworks (PPD-8, the National Preparedness Goal, National Health Security Strategy, etc.)
- Be developed using recognized processes that underlie other composite indicators
- Use national quality forum criteria for measurement, wherever possible
- Undergo continuous quality improvement

Lumpkin et al. (2013)
2014 Index: Structural Changes

- Refinement of Existing Domains and Subdomains
- New Environmental and Occupational Health Domain
- Revisions to the Healthcare Delivery (formerly Surge Management) Domain
- 75 New Measures (for a total of 194 Measures)
- Addition of a Legal and Administrative Preparedness Subdomain
2014 Index: Results

Areas of Relative Strength Nationally
• Countermeasure Management
• Incident and Information Management
• Health Security Surveillance

Areas for Development
• Environmental and Occupational Health
• Healthcare Delivery
• Community Planning and Engagement
Leadership Transition:
2015 Program Management Structure

- Homefront Communications
- National Coordinating Center for Public Health Services & Systems Research
- National Advisory Committee
- NHSP Program Management Office (UK)
- UK Center for Business and Economic Research
- UK Division of Risk Sciences
- RAND
- Consultants

- Stakeholder Communications Workgroup
  Messages, Uses, Tools, Applications
- Model Design Workgroup
  Frameworks, Domains, Constructs, Indicators
- Methodology & Analysis Workgroup
  Scaling, Weighting, Validation, Comparisons, Trends, Visualizations

PREPARED
NATIONAL HEALTH SECURITY PREPAREDNESS INDEX
New Website

- Launched in December at [www.nhspi.org](http://www.nhspi.org)
- Feedback welcome at [nhspi@uky.edu](mailto:nhspi@uky.edu)
Future Steps: Refining the Index

• Consolidating and simplifying the overall Index set of measures by reducing correlated, redundant, and noisy measures

• Improving the breadth and composition of the Index by adding new measures reflecting social, environmental, and economic indicators of preparedness and resiliency, along with other new areas of measurement.

• Improving Index alignment with established national frameworks for preparedness and health security, particularly those frameworks used by USDHHS and USDHS agencies and relevant state and local agencies.
Future Steps: Refining the Index (continued)

- Improving the methods used for scaling individual measures so as to more accurately reflect the distributional properties of the measures and to enable more accurate comparisons across states and over time.

- Improving the methods used for grouping and weighting individual measures within domains and subdomains so as to improve the internal consistency and discriminant power of the Index.

- Incorporating analytic methods that allow for accurate comparisons of Index values over time (trending).
Future Steps

Preliminary 2015 Timeline

- 2014 Release
  - Call for new measures
  - Validation studies
  - Refine framework, constructs
    - Secure data sources
  - Refine measure set & specifications
    - Test new scaling, weighting, imputation
    - Test comparisons & trending
    - Sensitivity analysis/simulation
- 2015
- 2016 Release
  - Finalize index calcs
  - Update website
  - Messaging
How You Can Engage in Future Index Development

• Through the [Open Call for Measures](#), recommend:
  • New measures
  • Changes to existing measure definitions and specifications
  • Deletion of existing measures
• Participate in webinars/electronic discussions
• Drop in on a workgroup meeting/call

The Program Management Office for the National Health Security Preparedness Index is now soliciting [recommendations for new measures](#) to be incorporated into future versions of the Index. We invite recommendations from all stakeholders having scientific and/or operational knowledge about strategies for reducing the impact of large-scale hazards, disasters, and emergencies on human health and wellbeing. We also invite recommendations about existing Index measures to be modified or eliminated. Recommendations must be received by February 15, 2015 to be considered for the next iteration of the Index.
Questions?

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