

National Health Security Preparedness Index

Analytic Methodology & Model Design Work Group Meeting



September 19, 2017

Index Program Management Office
University of Kentucky

Agenda

- Using the Index as a tool to advance ASPR's mission
- Suggested changes to the Index



NATIONAL HEALTH SECURITY PREPAREDNESS INDEX

NHSPI & ASPR

- How can the National Health Security Index (NHSPI) be used to further the mission and practice of the Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response (ASPR)?
 - This might include, but is not limited to: new measures, user-friendly tools, cross-walks, and linkages with guidance documents and strategies



Previously Suggested Measures

Measures suggested, but not adopted, a year ago

- ...any changes that would warrant a second pass?
- First responder health and safety (fatalities)
 - Lower fatality rates may reflect superior health and safety practices and enhanced workforce capability to respond to emergencies. *But many other factors affect fatalities—not just occupational health practices.*
- Bridge structural integrity
 - The structural integrity of bridges may be an indicator of the transportation system's resilience to natural disasters and its capacity for supporting emergency-related surges in utilization.



Potential New Measures

■ Dam safety

- Specification: percentage of Regulated High-Hazard Potential Dams in Poor or Unsatisfactory Condition. Rationale: Infrastructure quality is important for community disaster resilience. Dam safety is just one measure, albeit an important one, of state-level infrastructure quality and disaster resilience.

■ Cybersecurity

- Specification: a “yes/no” measure of whether a state implemented a cybersecurity program or participated in a regional or state-run cybersecurity program during the year. Rationale: The 911 Public Safety Answering Points (PSAPs) are essential for marshalling emergency response resources during a disaster or emergency—and are vulnerable to cyber-based threats. This measure is an indicator of cybersecurity risk reduction.



Potential New or Modified Measures

- M195—Percent of population in the state whose community water systems meet all applicable health-based standards through approaches that include effective treatment and source water
 - Recommended change: add another measure for non-health violations for these standards.
- Formal Enforcement Actions for Violations of the Safe Drinking Water Act (SDWA)
 - Specification: percentage of violations of the SDWA that result in a formal enforcement action from the US EPA or relevant state agency. This can be determined for all violations as well as health-based violations. Rationale: A relatively small percentage of violations result in formal enforcement actions nationally, with wide variation across the states—suggesting uneven enforcement of the SDWA.



Potential New or Modified Measures

- **Returning to Compliance after a Safe Drinking Water Act (SDWA) Violation**
 - Specification: percentage of violations of the SDWA that return to compliance by the end of the year. This can be determined for all violations as well as health-based violations. Rationale: Across the U.S. a relatively small percentage of violations return to compliance by the end of the year, but there is wide variation across the states—suggesting an uneven regulatory landscape.
- **Hazard Mitigation Buy-Outs**
 - Specification: housing units in the FEMA Hazard Mitigation Grant Program (HMGP) as a percentage of total housing units in floodplains. Rationale: A high percentage might indicate that a state needs to evaluate its zoning, planning, and building codes.



Potential New or Modified Measures

■ Flood Insurance Policies

- Specification: FEMA National Flood Insurance Policies (NFIP) in-force as a percentage of total housing units in floodplains. Rationale: A low percentage might indicate that a state needs to facilitate, encourage, or incentivize higher rates of NFIP participation.

■ Registered Environmental Health Specialist/Registered Sanitarian (REHS/RS) Credential

- Specification: Number of REHS/RS Credential holders as a percentage of environmental and health scientists and specialists. Rationale: This credential represents the “gold standard” for environmental health practice.

■ Hospitals Providing Pediatric Medical-Surgical Care

- Specification: Percentage of hospital facilities in the state that provide pediatric medical-surgical care. Rationale: Children might require specialized services and this item measure will reflect a state’s capacity to provide these services.



Potential New or Modified Measures

- HP2020 (PHI-11.4)—Increase proportion of state public health agencies that provide or assure comprehensive laboratory services in support of environmental health and protection.
 - Combine existing measures into the above (M202, M273, M197, M275_xx, M272)



Other Measures to consider

- Technical Assistance Review (TAR) Scores, twelve measures, M60 to M72 (not M68)
 - Issue: Dated (2014) and CDC transitioning to Operational Readiness Review (ORR). However, ORR data will not be available for at least two more years.
- M303—State requires that long-term care and nursing home facilities must have a written disaster plan.
 - This has not been updated by the American College of Emergency Physicians (ACEP), America's Emergency Care Environment, A State-by-State Report Card since 2013; and, no sign it will be updated. However, 8 deaths in a Florida nursing home as a result of Irma—highlighting the importance of this item measure.



Other Measures of Interest, continued

- M22—State health department has an electronic syndromic surveillance system that can report and exchange information.
 - This has not been updated by ASTHO since 2012, but there is a survey in the field now to update the Profile of Public Health.
- M172—Percentage of residents doing favors for neighbors.
 - This U.S. Census, Current Population Survey data has not been updated since 2013—but the CPS Civic Engagement Survey is currently in the field (SEPT 2017) to be updated. We won't have results in time for 2018—but will have the following year.



Other Measures of Interest, continued

- M340-Who must report foodborne illness within the state? Number out of the following reporting source types: clinical laboratories, physicians, hospitals, nurses, physician assistants, and/or other healthcare providers (e.g., chiropractors, veterinarians).
 - This has not been updated since 2013 [Public Health Law Research (PHLR), Temple University. Robert Wood Johnson Foundation (RWJF), LawAtlas: State Foodborne Illness Reporting Laws Map].



For More Information



National Program Office

Supported by The Robert Wood Johnson Foundation

Glen P. Mays, Ph.D., M.P.H. glen.mays@uky.edu

Email: NHSPI@uky.edu

Web: www.nhspi.org

www.systemsforaction.org

Journal: www.FrontiersinPHSSR.org

Archive: works.bepress.com/glen_mays

Blog: publichealtheconomics.org

Systems for Action

National Coordinating Center

Systems and Services Research to Build a Culture of Health

