National Health Security Preparedness Index

Analytic Methodology & Model Design Work Group Meeting

February 20, 2017

Index Program Management Office
University of Kentucky

Agenda

- Index Production Update
- State preview period
- 2018 Index Release
- Other updates

Index Production Update

- Completed data collection on measures from over 60 sources

- Waiting on important data from APHL
  - 20 measures from the 2016 Comprehensive Laboratory Services Survey (CLSS) on environmental health
  - 7 measures from the 2017 All-Hazards Laboratory Preparedness Survey

- Delphi completed
  - Results available here: https://tinyurl.com/yblkbwk4

- NAC meeting on March 21
  - Final recommendations on changes to the Index

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PMO Recommendations

- Remove
  - M172-Doing favors for neighbors
  - M340-Reporting foodborne illnesses to whom
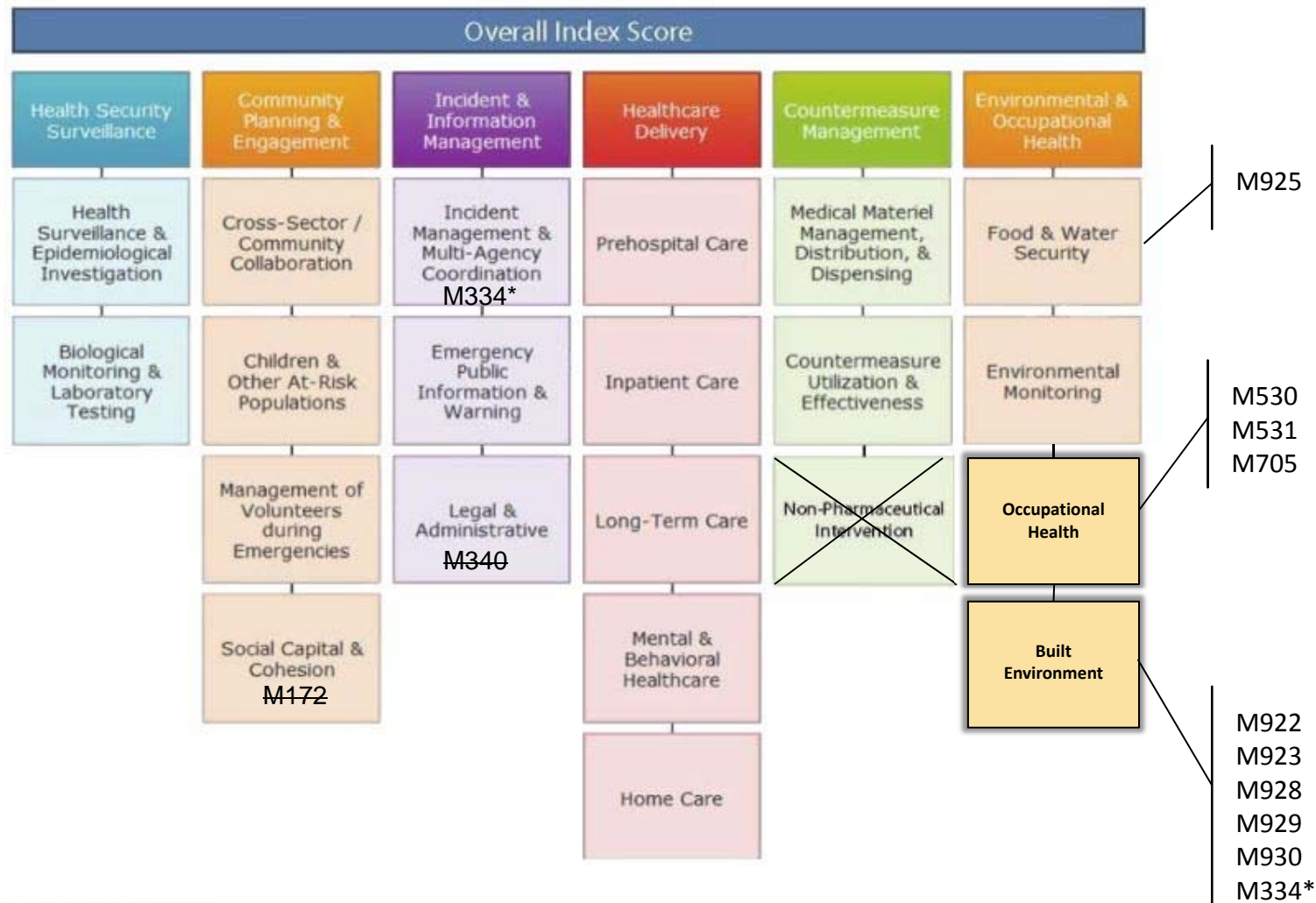 - NPI subdomain (Non-Pharmaceutical Intervention)

PMO Recommendations, continued

- Created, Added, or Moved
  - M925-Non health-based violations in the Food & Water Security subdomain
  - Occupational Health Subdomain (New)
    - Moved three existing measures into this subdomain (i.e., turned off in old subdomain and turned on in new subdomain)
      - M530-PTO, M531-Telecommute, M705-Work from home
  - Built Environment Subdomain (New)
    - M922-Bridges
    - M923-Dams
    - M928-CRS communities in the NFIP
    - M929-Flood insurance policies in floodplains
    - M930-Storm water utilities
    - M334-Climate Action Plans (moved from Incident Management & Multi-agency Coordination)

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Subdomains

Bottom Line

- If these recommendations are adopted by the NAC
    - Index would have 143 measures (remove 2 and add 6)
    - 20 subdomains (remove 1 and add 2)

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State Preview Period

- State preview first part of March
- Distribute to ASHTO, APHL, and NEMA
- Targeted webinars
    - March 12 and 14

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2018 Index Release

- April 17 - NACCHO's annual Preparedness Summit

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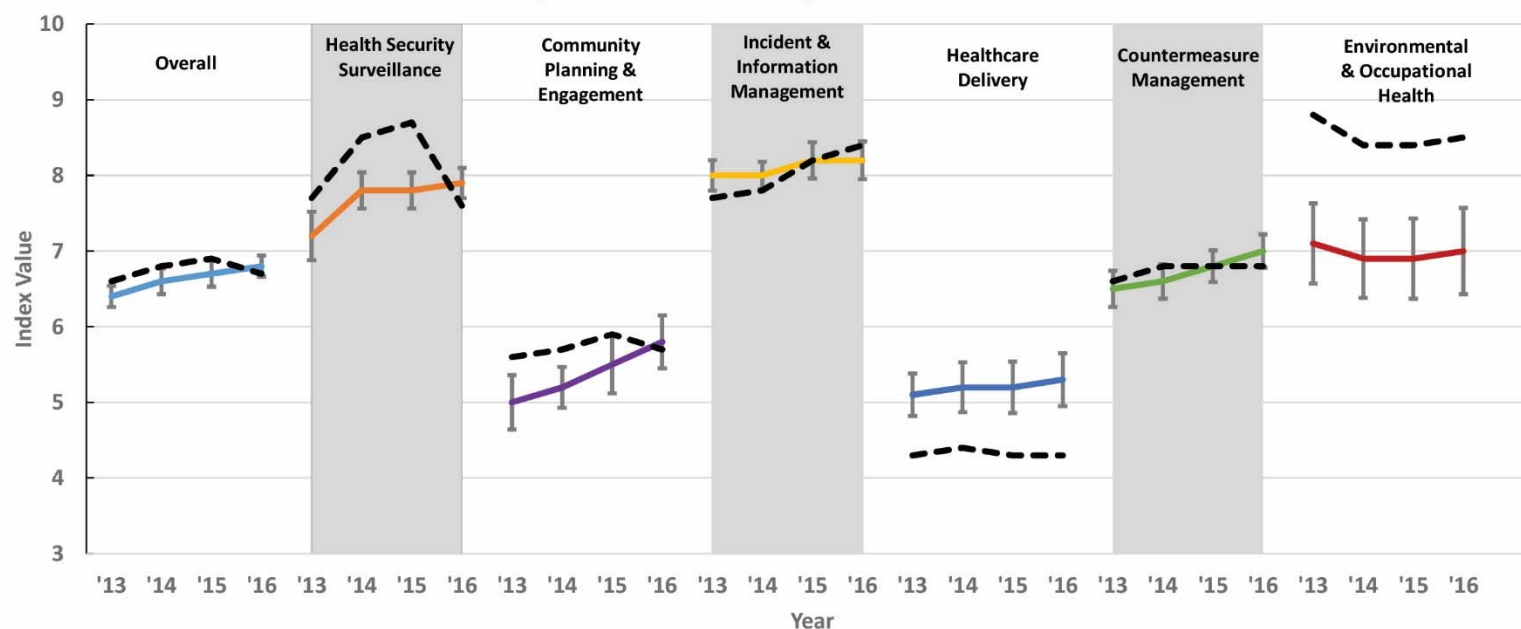NATIONAL HEALTH SECURITY PREPAREDNESS INDEX

Other Updates

- Ongoing discussions with NACCHO and the Big Cities Health Coalition about opportunities for "downscaling" Index results to the local level

- One-day think tank on methodologies and approaches,
  - Washington DC on March 20, one day before our National Advisory Committee meeting in Baltimore

- We have recently added downloadable State Profiles to the Index website
  - contain all Index results and measures for an individual state in a PDF format that is easy to download, print, and share electronically

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Kentucky Health Security Profile

The National Health Security Preparedness Index tracks state and national progress in preparing for disasters, disease outbreaks and other emergencies that pose risks to health and well-being. The Index measures changes in national and state health security capabilities over time, across a broad array of domains and sectors. The 2017 release of the Index is based on 139 measures organized into the six domains below and 19 subdomains on the following page. The 2017 release includes annual results for four time periods: 2013, 2014, 2015, and 2016. Pages 3 to 8 display data for all measures included in the Index.

Kentucky Health Security Trends 2013-2016

2016 Overall Health Security

KEY	
State Value	— — .
National Value with	
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Learn more about the Index and health security levels at www.NHSPI.org

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Kentucky Domain and Subdomain Summary

Kentucky's overall health security level reached 6.7 out of 10 in 2016, a 1.5% increase from 2013. The overall health security level in Kentucky was in line with the national average health security level of 6.8 in 2016.

MEASURE	2016 Value	%Change since 2015	%Change since 2013
OVERALL INDEX VALUE*	6.7	-2.9%	1.5%
DOMAIN 1: HEALTH SECURITY SURVEILLANCE	7.6	-12.6%	-1.3%
Subdomain 1.1: Health Surveillance & Epidemiological Investigation	6.5	-25.3%	0.0%
Subdomain 1.2: Biological Monitoring & Laboratory Testing	7.4	-7.5%	-1.3%
DOMAIN 2: COMMUNITY PLANNING & ENGAGEMENT COORDINATION	5.7	-3.4%	1.8%
Subdomain 2.1: Cross-Sector / Community Collaboration	5.8	-7.9%	13.7%
Subdomain 2.2: Children & Other At-Risk Populations	8.0	-1.2%	0.0%
Subdomain 2.3: Management of Volunteers during Emergencies	3.4	0.0%	0.0%
Subdomain 2.4: Social Capital & Cohesion	3.5	12.9%	-7.9%
DOMAIN 3: INCIDENT & INFORMATION MANAGEMENT	8.4	2.4%	9.1%
Subdomain 3.1: Incident Management & Multi-Agency Coordination	7.0	-12.5%	0.0%
Subdomain 3.2: Emergency Public Information & Warning	6.8	65.9%	94.3%
Subdomain 3.3: Legal & Administrative	10.0	0.0%	0.0%
DOMAIN 4: HEALTHCARE DELIVERY	4.3	0.0%	0.0%
Subdomain 4.1: Prehospital Care	2.4	0.0%	-7.7%
Subdomain 4.2: Hospital and Physician Services	4.9	2.1%	6.5%
Subdomain 4.3: Long-Term Care	6.5	3.2%	-1.5%
Subdomain 4.4: Mental & Behavioral Healthcare	4.7	-6.0%	-4.1%
Subdomain 4.5: Home Care	5.6	7.7%	14.3%
DOMAIN 5: COUNTERMEASURE MANAGEMENT	6.8	0.0%	3.0%
Subdomain 5.1: Medical Materiel Management, Distribution, & Dispensing	9.2	0.0%	1.1%
Subdomain 5.2: Countermeasure Utilization & Effectiveness	5.1	-7.3%	-1.9%
Subdomain 5.3: Non-Pharmaceutical Intervention	3.6	12.5%	24.1%
DOMAIN 6: ENVIRONMENTAL & OCCUPATIONAL HEALTH	8.5	1.2%	-3.4%
Subdomain 6.1: Food & Water Security	8.7	3.6%	-5.4%
Subdomain 6.2: Environmental Monitoring	7.7	0.0%	-1.3%

Strengths:

- Kentucky's largest improvement occurred in the Incident & Information Management domain, which increased by 9.1% between 2013-16.

- The state's highest health security level in 2016 occurred in the domain of Environmental & Occupational Health with a value of 8.5.

- Health security levels in 2016 significantly exceeded the national average in one domain: Environmental & Occupational Health.

Challenges:

- Health security levels in 2016 declined in 2 domains, with the largest decline of -3.4% occurring in Environmental & Occupational Health.

- The state's lowest health security level in 2016 occurred in Healthcare Delivery with a value of 4.3.

- Health security levels in 2016 were significantly below the national average in 2 domains: Health Security Surveillance, and Healthcare Delivery.

- Above National Average
- Meets National Average
- Below National Average

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Kentucky Measure Details 2013-2016*

| | Above National Average | Meets National Average | Below National Average |

	2013	2014	2015	2016
OVERALL INDEX VALUE (0-10)	**6.6**	**6.8**	**6.9**	**6.7**
DOMAIN 1: HEALTH SECURITY SURVEILLANCE INDEX VALUE (0-10)	**7.7**	**8.5**	**8.7**	**7.6**
SUBDOMAIN 1.1: HEALTH SURVEILLANCE & EPIDEMIOLOGICAL INVESTIGATION INDEX VALUE (0-10)	**6.5**	**8.1**	**8.7**	**6.5**
M18 – Number of Epidemiologists per 100,000 population in the state (Min=0.2, Max=14.4)	3.2	2.7	2.5	1.6
M22 – State health department has an electronic syndromic surveillance system that can report and exchange information	Yes	Yes	Yes	Yes
M217 – State public health laboratory has implemented the laboratory information management system (LIMS) to receive and report laboratory information electronically	Yes	Yes	Yes	Yes
M220 – State has legal requirement for nongovernmental laboratories to send specimens associated with reportable foodborne diseases to the state public health laboratory	No	Yes	Yes	Yes
M23 – Percent of foodborne illness outbreaks reported to CDC by state and local public health departments for which a causative infectious agent is confirmed (Min=0.0%, Max=100.0%)	40.0%	50.0%	100.0%	33.3%
M290 – State has a public health veterinarian	Yes	Yes	Yes	No
M265 – State uses an Electronic Death Registration System	Yes	Yes	Yes	Yes
SUBDOMAIN 1.2: BIOLOGICAL MONITORING & LABORATORY TESTING INDEX VALUE (0-10)	**7.5**	**8.1**	**8.0**	**7.4**
M1314 – State public health chemical OR radiological terrorism/threat laboratory is accredited or certified	No	**No**	No	No
M208 – State public health laboratory has a permit for the importation and transportation of materials, organisms, and vectors controlled by USDA Animal and Plant Health Inspection Service	Yes	Yes	Yes	Yes
M8 – State public health laboratory has a plan for a 6-8 week surge in testing capacity to respond to an emergency	Yes	Yes	Yes	Yes
M9 – State public health laboratory has a continuity of operations plan consistent with national incident management guidelines	Yes	Yes	Yes	Yes
M11 – State public health laboratory has a plan to receive specimens from sentinel clinical laboratories during nonbusiness hours	No	Yes	Yes	Yes
M12 – State public health laboratory assures the timely transportation of samples to appropriate reference laboratories at all times	Yes	Yes	Yes	Yes
M211 – Percent of 10 tests for infectious diseases that the state public health laboratory provides or assures, including but not limited to measles, mumps, and hepatitis C (Min=10.0%, Max=100.0%)	100.0%	100.0%	100.0%	100.0%
M216 – Percent of 15 tests for infectious diseases that the state public health laboratory provides or assures including but not limited to dengue fever, legionella, malaria, and rabies (Min=13.3%, Max=100.0%)	100.0%	100.0%	100.0%	100.0%
M2 – Percent of Laboratory Response Network biological (LRN-B) proficiency tests successfully passed by laboratories in the state (Min=0.0%, Max=100.0%)	100.0%	100.0%	100.0%	66.7%
M3 – Percent of e. coli-positive tests submitted by state and local public health laboratories to the CDC PulseNet national database within four working days of receiving samples from clinical laboratories (Min=0.0%, Max=100.0%)	100.0%	100.0%	90.0%	81.0%
M5 – Percent of chemical agents correctly identified and quantified during unannounced proficiency testing during the state's Laboratory Response Network (LRN) Emergency Response Pop Proficiency Test (PopPT) Exercise (Min=50.0%, Max=100.0%)		100.0%	100.0%	100.0%
M7 – Number of additional chemical agent detection methods—beyond the core methods—demonstrated by Laboratory Response Network chemical (LRN-C) Level 1 or 2 laboratories in the state (Min=0, Max=4)				
M286 – Number of chemical threat and multi-hazards preparedness exercises the state public health laboratory conducts annually (Min=0, Max=19)	3.0	3.0	3.0	0.0

Learn more about the Index and health security levels at www.NHSPI.org

For More Information

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