



The 2018 release of the National Health Security Preparedness Index includes 140 measures of capabilities that research and experience have shown to be important in protecting people from the health consequences of large-scale hazards and emergencies. Responsibility for achieving these capabilities spans across both public and private sector agencies and organizations, from federal, state, and local public health and emergency management to health care providers, businesses, and volunteer organizations across the United States. Data included in the Index is drawn from more than 60 different sources. This document describes each measure in detail, providing key information about data source(s) and measurement limitations that should be considered when using the Index to understand and address gaps in health security capabilities.

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Domain 1: Health Security Surveillance	
Subdomain 1.1: Health Surveillance & Epidemiological Investigation	
M17* - State health department participates in the Behavioral Risk Factor Surveillance	2012—2015
System (BRFSS)	
Source: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveilla	nce System
Survey Questionnaire (BRFSS). Atlanta, Georgia: U.S. Department of Health and Human Sei	rvices, Centers
for Disease Control and Prevention. Survey data analyzed by PMO personnel.	
Limitations: The state's level of participation level in the BRFSS is not described, and can va-	ary from state to
state.	1
M18 - Number of Epidemiologists per 100,000 population in the state	2012—2016
Source: Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES)	
Limitations: The measure does not evaluate the level of training of the epidemiologists. Th	e measure does
not consider mutual aid plans that may be in place for agencies to supplement the number	r of available
epidemiologists in the event of an emergency. Also, BLS and other national data sources of	n health provider
supply have been shown to undercount certain types of professionals, and may differ cons	iderably from
the estimates available from state licensing boards. Since the measurement undercounting	
are expected to be relatively consistent across states, they should not cause significant bia	
state and national results. The Bureau of Labor Statistics (BLS) produces occupational estin	•
surveying a sample of non-farm establishments. As such, estimates produced through the	Occupational
Employment Statistics (OES) program are subject to sampling error.	
M19* - State health department participates in the Epidemic Information Exchange	2013
(Epi-X) System	
Source: Centers for Disease Control and Prevention (CDC), The Epidemic Information Exchange (Epi-X)	
Program	
Limitations: The measure does not evaluate the quality or comprehensiveness of the state participation in	
the system.	
M20* - State health department participates in the National Electronic Disease	2013—2015
Surveillance System (NEDSS)	1.6
Source: Centers for Disease Control and Prevention (CDC), Division of Health Informatics and Surveillance	
(DHIS), National Electronic Disease Surveillance System (NEDSS)	
Limitations: The measure does not evaluate the quality or comprehensiveness of the state	participation in
the system.	2012 2 2015
M22 - State health department has an electronic syndromic surveillance system that	2012 & 2016
can report and exchange information	. D. Islanda
Source: Association of State and Territorial Health Officials (ASTHO), ASTHO Profile of State	e Public Healtn:
Volume Three	floor difference
Limitations: Data are self-reported by public health laboratory representatives and may reflect differences	
in awareness, perspective and interpretation among respondents.	
M217 - State public health laboratory has implemented the laboratory information	2012, 2014, &
management system (LIMS) to receive and report laboratory information electronically	2016



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(e.g., electronic test order and report with hospitals and clinical labs, surveillance data	
from public health laboratory to epidemiology)	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: Data are self-reported by public health laboratory representatives and may re	flect differences
in awareness, perspective and interpretation among respondents.	
M220 - State has legal requirement for nongovernmental laboratories (e.g. clinical,	2012, 2014, &
hospital-based) in the state to send clinical isolates or specimens associated with	2016
reportable foodborne diseases to the state public health laboratory	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: Data are self-reported by public health laboratory representatives and may re	flect differences
in awareness, perspective and interpretation among respondents.	
M256* - State public health laboratory participates in either of the following federal	2012 & 2014
surveillance programs: Foodborne Diseases Active Surveillance Network (FoodNet) or	
National Molecular Subtyping Network for Foodborne Disease Surveillance (PulseNet)	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: The measure does not evaluate the quality or comprehensiveness of participa	tion in the
surveillance networks.	
M23 - Percent of foodborne illness outbreaks reported to CDC by state and local public	2012—2016
health departments for which a causative infectious agent is confirmed	
Source: Centers for Disease Control and Prevention (CDC), Foodborne Online Outbreak Da	
Limitations: The measure does not evaluate the quality or comprehensiveness of the state	's reporting of
foodborne illness outbreaks.	1
M289* - State health department participates in a broad prevention collaborative	2013
addressing HAIs (healthcare-associated infections)	
Source: Centers for Disease Control and Prevention (CDC), National Healthcare Safety Net	work (NHSN),
Prevention Status Reports	
Limitations: The measure does not evaluate the quality, comprehensiveness, or effectiveness of	
participation in the prevention collaborative by the health department or hospitals.	2014 0 2015
M290 - State has a public health veterinarian	2014 & 2015,
Source: National Association of State Dublic Health Veterinarians (NASDHV). Designated as	2017 & 2018
Source: National Association of State Public Health Veterinarians (NASPHV), Designated and Acting State Public Health Veterinarians	
Limitations: The measure does not evaluate the quality or comprehensiveness of the veter	rinarian's
integration into an animal response plan or coordination with other animal-related resour	
board of animal health, particularly in an health security emergency.	ccs, such as a
M265 - State uses an Electronic Death Registration System (EDRS)	2014—2017
Source: National Association for Public Health Statistics and Information Systems (NAPHSI	
Death Registration Systems by Jurisdiction (State)	-,, =:==::
Limitations: The measure does not evaluate the quality or comprehensiveness of the state	's death
registration system, or indicate other redundant systems the might be used if the EDRS is not available	
such as cyber-attack and power outages.	
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M801* - State public health laboratory participates in the following federal

surveillance programs: Influenza Centers for Disease Control and Prevention (CDC),

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Data Date(s)

2012 & 2014

World Health Organization (WHO) Surveillance Network	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: The measure does not evaluate the quality or comprehensiveness of participal surveillance networks.	tion in the
Subdomain 1.2: Biological Monitoring & Laboratory Testing	
M1* - Public Health Emergency Preparedness (PHEP) Cooperative Agreement-funded	2011—2013
Laboratory Response Network chemical (LRN-C) laboratories collect, package, and ship	
samples properly during an LRN-C exercise	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	lness and
Response (OPHPR), National Snapshot of Public Health Preparedness	
Limitations: The measure is based on an exercise that includes only simulated samples, excluding real-life	
scenarios such as mislabeled specimens or specimens arriving at the laboratory at differen	t times.
M1314 - State public health chemical OR radiological terrorism/threat laboratory is	2013—2017
accredited or certified by the College of American Pathologists (CAP) or Clinical	
Laboratory Improvement Amendments (CLIA)?	
Source: Association of Public Health Laboratories (APHL), All-Hazards Laboratory Preparedness Survey	
Limitations: Certification may be based on simulated samples, since actual chemical samples are lacking.	
M208 - State public health laboratory has a permit for the importation and	2012, 2014, &
transportation of materials, organisms, and vectors controlled by USDA/APHIS (U.S.	2016
Department of Agriculture/ Animal and Plant Health Inspection Service)	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)	
Limitations: Data are self-reported by public health laboratory representatives and may reflect differences	
in awareness, perspective and interpretation among respondents.	

M8 - State public health laboratory has a plan for a 6-8 week surge in testing capacity to respond to an outbreak or other public health event, with enough staffing capacity

to work five 12-hour days for six to eight weeks in response to an infectious disease

2013—2017

outbreak, such as novel influenza A (H1N1)

Source: Association of Public Health Laboratories (APHL), All-Hazards Laboratory Preparedness Survey

Limitations: The measure does not evaluate the quality or comprehensiveness of the plan, or the frequency that the plan is used or tested.

M9 - State public health laboratory has a continuity of operations plan consistent with National Incident Management System (NIMS) guidelines

2013—2017

Source: Association of Public Health Laboratories (APHL), All-Hazards Laboratory Preparedness Survey Limitations: The measure does not evaluate the quality or comprehensiveness of the plan, or the

frequency that the plan is used or tested.

M11 - State public health laboratory has a plan to receive specimens from sentinel

2013—2017

clinical laboratories during nonbusiness hours

Source: Association of Public Health Laboratories (APHL), All-Hazards Laboratory Preparedness Survey





2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
Limitations: The measure does not evaluate the quality or comprehensiveness of the plan, or the	
frequency that the plan is used or tested.	
M12 - State public health laboratory has the capacity in place to assure the timely	2013—2017
transportation (pick-up and delivery) of samples 24/7/365 days to the appropriate	
public health Laboratory Response Network (LRN) reference laboratory	
Source: Association of Public Health Laboratories (APHL), All-Hazards Laboratory Prepared	ness Survey
Limitations: The measure does not evaluate the timeliness of the sample transport, or the	whether the
transport available for all sentinel laboratories in the state.	
M211 - Percent of 10 tests for infectious diseases that the state public health	2012, 2014, &
laboratory provides or assures, including arbovirus serology, hepatitis C serology,	2016
Legionella serology, measles serology, mumps serology, Neisseria meningitides	
serotyping, Plasmodium identification, Salmonella serotyping, Shigella serotyping, and	
Varicella serology	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency.

is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M216 - Percent of 15 tests for infectious diseases that the state public health laboratory provides or assures including: antimicrobial susceptibility testing confirmation for vancomycin resistant Staphylococcus aureus, Anaplasmosis (Anaplasma phagocytophilum), Babesiosis (Babesia sp.), botulinum toxin—mouse toxicity assay, Dengue Fever, Hantavirus serology, identification of unusual bacterial isolates, identification of fungal isolates, identification of parasites, Klebsiella pneumoniae Carbapenemase (blaKPC) by PCR, Legionella by culture or PCR, malaria by PCR, norovirus by PCR, Powassan virus, rabies

2012, 2014, & 2016

Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and



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2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
reporting process – either by directly performing the tests or by assuring that alternative la	abs perform the
tests adequately. This standard is designed to ensure that laboratory testing, interpretatio	•
is guided by specialized public health knowledge and expertise found within the state publ	
and that timely, effective public health responses and protective actions occur based on te	
that provide testing through another type of laboratory, with no assurance role performed	
health laboratory, do not meet this standard. (see	, ,
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ens	ures that the
Index is consistent with national expert opinion and federal recommendations concerning	comprehensive
public health laboratory testing capabilities. However, the measure does not assess the qu	ality of the
testing, the timeliness of results reporting to enable responses to public health threats, no	r whether
sufficient capacity exists to test the volume of samples required during a health security ex	vent.
M2 - Percent of Laboratory Response Network biological (LRN-B) proficiency tests	2011—2015
successfully passed by Public Health Emergency Preparedness (PHEP) Cooperative	
Agreement-funded laboratories	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	Iness and
Response (OPHPR), National Snapshot of Public Health Preparedness	
Limitations: Laboratories may not undergo proficiency testing for all assay capabilities.	
M3 - Percent of pulsed field gel electrophoresis (PFGE) subtyping data results for e.	2011—2015
coli submitted to the CDC PulseNet national database within four working days of	
receiving samples from clinical laboratories	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Preparedness and	
Response (OPHPR), National Snapshot of Public Health Preparedness	
Limitations: The measure does not encompass time elapsed for specimen transport and identification, and	
is limited to foodborne agents that have PFGE subtyping.	
M5 - Percent of chemical agents correctly identified and quantified from unknown	2013—2016
samples during unannounced proficiency testing during the state's Laboratory	
Response Network (LRN) Emergency Response Pop Proficiency Test (PopPT) Exercise	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Preparedness and	
Response (OPHPR), National Snapshot of Public Health Preparedness	
Limitations: The measure does not consider the public health laboratory's ability to process a large number	
of samples.	
,	2011—2015
methods—demonstrated by Laboratory Response Network chemical (LRN-C) Level 1 or	
2 laboratories in the state	1
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Preparedness and	
Response (OPHPR), National Snapshot of Public Health Preparedness	
Limitations: The measure does not consider all methods that the laboratory is capable of testing.	
M286 - Number of chemical threat and multi-hazards preparedness exercises or drills the state public health laboratory conducts or participates in annually	2013—2017
Source: Association of Public Health Laboratories (APHL), All-Hazards Laboratory Preparedness Survey	
Limitations: Data are self-reported by public health laboratory representatives and may reflect differences	
in awareness, perspective and interpretation among respondents.	



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M287 - Percent of pulsed field gel electrophoresis (PFGE) sub-typing data results for Listeria monocytogenes submitted by state and local public health laboratories to the CDC PulseNet national database within four working days of receiving samples from clinical laboratories	2011—2015
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), National Snapshot of Public Health Preparedness	Iness and
Limitations: The measure does not consider the volume of samples processed or quality of nor encompass time elapsed for specimen transport and identification.	PFGE results,
M288 - Number of core chemical agent detection methods demonstrated by Level 1 or 2 LRN-C laboratories in the state	2011—2015
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Preparedness and Response (OPHPR), National Snapshot of Public Health Preparedness	
Limitations: The measure does not consider compliance with the standards set by the Clinical Laboratory Improvement Amendments (CLIA) and the College of American Pathologists (CAP) accreditation program, and whether proficiency is achieved annually for the methods reported.	
M911 - State public health laboratory provides or assures testing for soil	2012, 2014, & 2016
Source: Association of Public Health Laboratories (APHL). Comprehensive Laboratory Services Survey (CLSS). 2012 & 2014. Additional details about this measure are available from the source. Data have been compiled by APHL biennially since 2004. The CLSS covers the 50 states, the District of Columbia, and Puerto	

(CLSS). 2012 & 2014. Additional details about this measure are available from the source. Data have been compiled by APHL biennially since 2004. The CLSS covers the 50 states, the District of Columbia, and Puerto Rico. State-level data are not available to the public but can be accessed by public health laboratory directors, among others. Data were obtained directly from the source.

Limitations: The state public health laboratory testing "provide or assure" standard is based on national

consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M902 - State has a high-capability laboratory to detect chemical threats (Level 1 or 2 LRN-C laboratory)

Source: Centers for Disease Control and Prevention (CDC), National Center for Environmental Health (NCEH), Division of Laboratory Sciences (DLS), Emergency Response Branch (ERB)

Limitations: The measure does not evaluate the quality or comprehensiveness of the laboratory capabilities.







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Domain 2: Community Planning & Engagement Coordination	
Subdomain 2.1: Cross-Sector / Community Collaboration	
M87 - State health department is accredited by the Public Health Accreditation Board	2014—2017
РНАВ)	
Source: Public Health Accreditation Board (PHAB), Health Departments in e-PHAB	
imitations: The measure does not consider health departments that are undergoing the ac	creditation
process.	
M501 - Percent of the state's population served by a comprehensive public health	2012, 2014 &
ystem, as determined through the National Longitudinal Survey of Public Health	2016
Systems	
Source: National Longitudinal Survey of Public Health Systems (NLSPHS), National Association	on of County
and City Health Officials (NACCHO), and Area Resource File (ARF) data analyzed by PMO and	d affiliated
personnel.	
imitations: Data are self-reported by local health department representatives and may ref.	lect differences
n perspective and interpretation among respondents.	
M9031 - Percent of hospitals in the state that participate in health care preparedness	2013—2017
coalitions supported through the federal Hospital Preparedness Program of the Office	
of the Assistant Secretary for Preparedness and Response	
Source: Division of National Healthcare Preparedness Programs in the Office of the Assistar	nt Secretary for
Preparedness and Response (ASPR) at the U.S. Department of Health and Human Services	
imitations: The measure does not evaluate the quality or comprehensiveness of participat	ion in the
nealth care preparedness coalitions.	
M9032 - Percent of emergency medical service agencies in the state that participate in	2013—2017
nealth care preparedness coalitions supported through the federal Hospital	
Preparedness Program of the Office of the Assistant Secretary for Preparedness and	
Response	
Source: Division of National Healthcare Preparedness Programs in the Office of the Assistant Secretary	
Preparedness and Response (ASPR) at the U.S. Department of Health and Human Services	
imitations: The measure does not evaluate the quality or comprehensiveness of participat	ion in the
nealth care preparedness coalitions.	2013—2017
M9033 - Percent of emergency management agencies in the state that participate in	2013—2017
nealth care preparedness coalitions supported through the federal Hospital	
Preparedness Program of the Office of the Assistant Secretary for Preparedness and	
Response Source: Division of National Healthcare Preparedness Programs in the Office of the Assistar	at Cocrotany for
·	it secretary for
Preparedness and Response (ASPR) at the U.S. Department of Health and Human Services imitations: The measure does not evaluate the quality or comprehensiveness of participat	ion in the
amitations: The measure does not evaluate the quality of comprehensiveness of participat health care preparedness coalitions.	ion in the
M9034 - Percent of local health departments in the state that participate in health care	2013—2017
preparedness coalitions supported through the federal Hospital Preparedness Program	2013—2017
nepareuness coantions supported uniough the lederal hospital riepareuness Plogidii	
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of the Office of the Assistant Secretary for Preparedness and Response Source: Division of National Healthcare Preparedness Programs in the Office of the Assistan	nt Secretary for





2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
Limitations: The measure does not evaluate the quality or comprehensiveness of participa	tion in the
health care preparedness coalitions.	
Domain 2: Community Planning & Engagement Coordination	
Subdomain 2.2: Children & Other At-Risk Populations	
M52 - State requires all licensed child care providers to have a disaster plan for	2013—2016
children with disabilities and those with access and functional needs	
Source: Save the Children, U.S. Report Card on Children in Disasters	
Limitations: The measure does not evaluate the quality or comprehensiveness of the disas	ter plan,
whether the plan has been tested in the past two years, or whether there are effective partnerships	
supporting the plan, and does not consider nonlicensed providers.	
M53 - State has a hazard response plan for all K-12 schools	2013—2016
Source: Save the Children, U.S. Report Card on Children in Disasters	
Limitations: The measure does not evaluate the quality or comprehensiveness of the plan,	whether the
plan has been tested in the past two years, or whether there are effective partnerships supporting the	
plan, and does not specify the multiple types of hazards to be considered.	
M163 - Number of pediatricians per 100,000 population under 18 years old in the	2012—2016
state	
Source: Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES)	
Limitations: The measure does not consider mutual aid plans that may be in place for heal	thcare facilities
to supplement the number of available pediatricians in the event of an emergency. Also, B	IS and other

to supplement the number of available pediatricians in the event of an emergency. Also, BLS and other national data sources on physician supply have been shown to undercount certain types of physicians, and may differ considerably from the estimates available from state medical licensing boards. Since the measurement undercounting in the BLS data are expected to be relatively consistent across states, they should not cause significant bias in the Index state and national results. The Bureau of Labor Statistics (BLS) produces occupational estimates by surveying a sample of non-farm establishments. As such, estimates produced through the Occupational Employment Statistics (OES) program are subject to sampling error.

M164 - Number of obstetricians and gynecologists per 100,000 female population in the state

2012-2016

Source: Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES)

Limitations: The measure does not consider mutual aid plans that may be in place for healthcare facilities to supplement the number of available obstetricians and gynecologists in the event of an emergency. Also, BLS and other national data sources on physician supply have been shown to undercount certain types of physicians, and may differ considerably from the estimates available from state medical licensing boards. Since the measurement undercounting in the BLS data are expected to be relatively consistent across states, they should not cause significant bias in the Index state and national results. The Bureau of Labor Statistics (BLS) produces occupational estimates by surveying a sample of non-farm establishments. As such, estimates produced through the Occupational Employment Statistics (OES) program are subject to sampling error.

M170 - Percent of state children (0-18 years) who reside within 50 miles of a pediatric trauma center, including out-of-state centers

2012-2017

Source: American Hospital Association (AHA), AHA Annual Survey of Hospitals data and U.S. Census population data analyzed by PMO personnel.



personnel.

practice nurses

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2015-2017

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Limitations: The measure does not indicate the capacity of the trauma center, such as the	
available pediatric trauma beds or inpatient treatment beds for the care of pediatric patie	
M50 - State requires that all childcare providers have a plan for family-child	2013—2016
reunification during a disaster	
Source: Save the Children, U.S. Report Card on Children in Disasters	
Limitations: The measure does not evaluate the quality or comprehensiveness of the reun	ification plans,
and the types of plans and target audiences are not consistently defined.	
M51 - State requires that all childcare providers have a plan for evacuating and safely	2013—2016
moving children to an alternate site during a disaster	
Source: Save the Children, U.S. Report Card on Children in Disasters	
Limitations: The measure does not evaluate the quality or comprehensiveness of the reun	ification plans,
and the types of plans and target audiences are not consistently defined.	
Domain 2: Community Planning & Engagement Coordination	
Subdomain 2.3: Management of Volunteers during Emergencies	
M36* - State participates in Emergency System for Advance Registration of Volunteer	2014
Health Professionals (ESAR-VHP) Program and has a state volunteer registry	
Source: Assistant Secretary for Preparedness and Response (ASPR), The Emergency System	n for Advance
Registration of Volunteer Health Professionals (ESAR-VHP)	
Limitations: The measure does not evaluate the quality or comprehensiveness of the volu	nteer registry,
indicate whether it has been used during exercises or responses, or reflect state capacity	for volunteer
surge during emergencies.	
M266 - Percent of the state's population who live in a county with a Community	2012—2014,
Emergency Response Teams (CERT)	2016
Source: Federal Emergency Management Agency (FEMA), Citizen Corps Community Emerg	gency Response
Teams (CERT), and U.S. Census data analyzed by PMO personnel.	
Limitations: The measure does not evaluate the quality or comprehensiveness of the CERT	
leadership strength, local and governmental agency support, or participation of multiple s	
M346 - Number of total Medical Reserve Corps members per 100,000 population in	2012—2014,
the state	2016, 2017
Source: Medical Reserve Corps (MRC), MRC Units Database and Census Bureau data analy	zed by PMO
personnel.	
Limitations: The measure does not evaluate the quality of the MRC management and curr	
licensed/credentialed/trained members, or include other formal and informal systems of	
credentialing, and managing health and medical volunteers such as ESAR-VHP (Emergency	System for the
Advance Registration of Volunteer Health Professionals).	
M176 - Percent of state Medical Reserve Corps members who are physicians	2015—2017
Source: Medical Reserve Corps (MRC), MRC Units Database and Census Bureau data analy	zed by PMO

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Limitations: The measure does not evaluate the quality of the MRC management and current status of

physician members who are licensed, credentialed, and received emergency response training.

M179 - Percent of state Medical Reserve Corps volunteers who are nurses or advanced





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Source: Medical Reserve Corps (MRC), MRC Units Database and Census Bureau data analyzed by PMO	
personnel.	
Limitations: The measure does not evaluate the quality of the MRC management and curre	ent status of
nurses or advanced practice nurses who are licensed, credentialed, and received emergen	cy response
training.	
M186 - Percent of state Medical Reserve Corps volunteers who are other health	2015—2017
professionals	
Source: Medical Reserve Corps (MRC), MRC Units Database and Census Bureau data analyzed by PMO	
personnel.	
Limitations: The measure does not evaluate the quality of the MRC management and current status of	
other health professionals who are licensed, credentialed, and received emergency respon	se training.

Domain 2: Community Planning & Engagement Coordination	
Subdomain 2.4: Social Capital & Cohesion	
M175 - Percent of voting-eligible population in the state participating in the highest	2012, 2014 &
office election	2016
Source: United States Election Project, General Election Turnout Rates	
Limitations: The ideal numerator is total ballots counted (voting eligible population is the denominator),	
but these data are not available for all jurisdictions. Therefore, we use the next best alternative, which is	
the total votes for the highest office (e.g., presidential, gubernatorial, or congressional election).	
M188 - Percent of adults in the state who volunteer in their communities	2012—2015
Source: Current Population Survey (CPS), Volunteer Supplement data analyzed by PMO personnel.	
Limitations: Data do not reflect the frequency, regularity or sustainability of volunteering, and respondents	
may be inclined to over-report their volunteerism.	
M189 - Number of annual volunteer hours per state resident, 15 years and older	2012—2015
Source: Current Population Survey (CPS), Volunteer Supplement data analyzed by PMO personnel.	
Limitations: Respondents may be inclined to over-report the number of hours they volunteer. Also, certain	
communities that have strong social cohesion may have a low reported rate, such as settings where both	
parents work full-time and may not have time to volunteer.	

Domain 3: Incident & Information Management	
Subdomain 3.1: Incident Management	
M10* - State public health laboratory uses a rapid method (e.g., Health Alert Network	2013—2016
(HAN), blast e-mail or fax) to send messages to their sentinel clinical laboratories and	
other partners	
Source: Association of Public Health Laboratories (APHL), All-Hazards Laboratory Prepared	ness Survey
Limitations: The measure does not evaluate the frequency that the alert network is used of	or tested for
routine or emergency messages, or whether it reaches all sentinel clinical laboratories and	dother partners
in the state.	
M70 - CDC assessment score (0-100) of state health department dispensing plan for	2012—2014
prophylaxis or disease fighting materiel from the CDC's Strategic National Stockpile	





2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	ness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure is incident-specific and focused on operational coordination issue	es, and does not
include items such as mutual aid and resource planning.	•
M71 - CDC assessment score (0-100) of state health department coordination plan	2012—2014
with hospitals and alternate facilities to procure medical materiel in an emergency	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	lness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure does not evaluate the quality or implementation of the plan, and	
address additional multi-agency coordination facets of procurement such as information sh	naring between
the public health and healthcare systems.	
M84 - State all hazards emergency management program is accredited by the	2014—2017
Emergency Management Accreditation Program (EMAP)	
Source: Emergency Management Accreditation Program (EMAP), Who Is Accredited?	
Limitations: The measure does not consider state emergency management programs with	conditional
accreditation, and some states may choose not to pursue accreditation for various state an	nd local reasons.
M333 - State has a disaster preparedness plan for animals including livestock and pets	2014—2017
Source: American Veterinary Medical Association (AVMA), Animal Disaster Plans and Resou	urces by State
Limitations: The measure does not evaluate the quality or comprehensiveness of the anima	al disaster
preparedness plan.	
M107 - Percent of local health departments in the state with an emergency	2013 & 2016
preparedness coordinator for states with local health departments, excludes Rhode	
Island and Hawaii	
Source: National Association of County and City Health Officials (NACCHO), 2013 National F	Profile of Local
Health Departments	
Limitations: The measure does not apply to states that do not have local health departmen	its. The measure
does not evaluate the quality or robustness of the local emergency management system.	
M222 - State health department participates in the Water Information Sharing and	2013 & 2016
Analysis Center (WaterISAC)	
Source: Water Information Sharing and Analysis Center (WaterISAC), State Agencies Partici WaterISAC	pating in
Limitations: The measure focuses on information sharing pertaining to water-related incide	ents but does
not address water-intelligence information overall, and does not account for other government	ment or
public/private water systems that participate in the information sharing program.	
M229* - State public health laboratory has a 24/7/365 contact system in place to use	2012 & 2014
in case of an emergency	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Service	ces Survey (CLSS)
Limitations: The measure does not evaluate the quality or comprehensiveness of the system	m, or the
frequency that it is used or tested.	
M150* - State participates in Hospital Available Beds for Emergencies and Disasters	2012
(HAvBED) Program	
Source: Assistant Secretary for Preparedness and Response (ASPR), National Hospital Available	able Beds for
Emergencies and Disasters (HAvBED) System	



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2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
Limitations: The measure data is collected by existing state and local reporting systems us	ing secure data
entry to measure bed counts during emergencies, and does not replace states' need to ev	-
local bed count system development and implementation.	
M72 - CDC assessment score (0-100) of state health department emergency response	2012—2014
training, exercise, and evaluation plans' compliance with guidelines set forth by the	
Homeland Security Exercise and Evaluation Program	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepare	dness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure does not indicate whether preparedness plans are adequate, or	the degree to
which response plans are tested and evaluated.	
M335 - State has statewide and/or county emergency response team(s) for animals	2013—2017
including livestock and pets	
Source: RedRover, Animal Response Teams	
Limitations: The measure does not evaluate the team's integration into the overall state p	lan and activities
or the resources committed to team activities. The source data includes a mix of state, co	
teams, and a state score of "yes" indicates that the state has any combination of state, re	•
county/local teams.	5101101, 01
M701 - Average number of minutes for state health department staff with incident	2011—2015
management lead roles to report for immediate emergency response duty	2011 2013
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Preparedness and	
Response (OPHPR), National Snapshot of Public Health Preparedness	
Limitations: Data are self-reported by health department representatives and may reflect	differences in
awareness, perspective and interpretation among respondents.	
M338* - State requires healthcare facilities to report healthcare-associated infections	2012 & 2013
to the Centers for Disease Control and Prevention's (CDC's) National Health Safety	
Network (NHSN) or other systems	
Source: Centers for Disease Control and Prevention (CDC), National Healthcare Safety Net	work (NHSN).
Healthcare—Associated Infections (HAI) Progress Report	- (- //
Limitations: The measure does not evaluate the healthcare facility compliance with report	ting
requirements.	. 0
M341* - State law includes a general provision regulating the release of personally	2013
identifiable information (PII) held by the health department	
Source: CDC Public Health Law Program resources. https://www.cdc.gov/phlp/	
Limitations: The measure does not evaluate the state's legal scope of authority, infrastruc	ture to
investigate violations, or other strategies to respond to inappropriate release of personal	
M342* - State law requires healthcare facilities to report communicable diseases to a	2013
health department	
Source: Centers for Disease Control and Prevention (CDC), Division of Health Informatics a	nd Surveillance
(DHIS), National Electronic Disease Surveillance System (NEDSS)	-
Limitations: The measure does not evaluate the effectiveness of state monitoring and enfo	orcement of
·	health
reporting requirements, the timeliness or completeness of reporting, or the ability of the departments to receive and use the reported information.	health





2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
M344 - State has adopted the Nurse Licensure Compact (NLC)	2014—2017
Source: National Council of State Boards of Nursing (NCSBN), Nurse Licensure Compact (NLC) Member	
States	
Limitations: The measure does not evaluate state capacity to implement the agreement ar	nd incorporate
out-of-state nurses into medical surge responses. Some states have other limited regional	agreements
precluding the need for participation in the national Nurse Licensure Compact.	
M345* - State has adopted Emergency Management Assistance Compact (EMAC)	2014
legislation	
Source: National Emergency Management Association (NEMA), What is EMAC?	
Limitations: The measure does not evaluate state capacity to implement the agreement and incorporate	
out-of-state health care providers into medical surge responses.	

Domain 3: Incident & Information Management	
Subdomain 3.2: Information Management	
M64* - State has a public information and communication plan developed for a mass	2012 & 2013
prophylaxis campaign	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	dness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure focuses on pre-event planning during a mass dispensing scenario	, and does not
include planning for broader emergency scenarios, for response-driven public information	and risk
communication strategies, or for the implementation of previously developed frameworks	
M228 - Percent of households in the state with broadband in the home	2012—2016
Source: American Community Survey (ACS), 1-year estimate (GCT2801) and Current Population Survey	
(CPS), Computer and Internet Supplement data analyzed by PMO personnel.	
Limitations: The measure focuses only on fixed broadband connections, and does not inclu	ide an indication
of the broadband system's ability to remain operational in a emergency or disaster.	

Domain 4: Healthcare Delivery	
Subdomain 4.1: Prehospital Care	
M140 - Number of emergency medical technicians (EMTs) and paramedics per 100,000	2012—2016
population in the state	
Source: Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES)	
Limitations: The measure may not distinguish licensed EMTs and paramedics from those the practicing, and affiliated. BLS and other national data sources have been shown to undercomplete of health professionals, and may differ considerably from the estimates available from boards. Since the measurement undercounting in the BLS data are expected to be relative across states, they should not cause significant bias in the Index state and national results. Labor Statistics (BLS) produces occupational estimates by surveying a sample of non-farm As such, estimates produced through the Occupational Employment Statistics (OES) programpling error.	ount certain om state licensing ly consistent The Bureau of establishments.
M331 - Percent of local emergency medical services (EMS) agencies that submit	2015
National EMS Information System (NEMSIS) compliant data to the state	





2018 Release Measure ID, Data Source, and Limitations

Data Date(s)

Source: National Highway Traffic Safety Administration (NHTSA), State NEMIS Progress Reports: State & Territory Version 2 Information

Limitations: Quality of local level data is of concern due to limited documentation, and usefulness for full understanding of emergency health incidents may be limited since it is not benchmarked with state or national NEMSIS data measures, or linked to state or local information from emergency departments, police reports, and hospital datasets.

Domain 4: Healthcare Delivery	
Subdomain 4.2: Hospital and Physician Services	
M147 - Median time in minutes from hospital emergency department (ED) arrival to	2013—2017
ED departure for patients admitted to hospitals in the state (identifier ED-1)	
Source: Centers for Medicare & Medicaid Services (CMS), Timely and Effective Care—State	
Limitations: The measure does not evaluate the severity of the patients' conditions, or the	nature of their
treatment between emergency department arrival and discharge.	
M148 - Median time in minutes from hospital admission decision to emergency	2013—2017
department (ED) departure for patients admitted to hospitals in the state (identifier	
ED-2)	
Source: Centers for Medicare & Medicaid Services (CMS), Timely and Effective Care—State	1
Limitations: The measure does not evaluate the hospital's capacity to move patients from t	the emergency
department to inpatient care during a mass casualty or other event.	
M149 - Number of staffed hospital beds per 100,000 population in the state	2013—2017
Source: American Hospital Directory (AHD), Inc. American Hospital Directory	
Limitations: The measure does not evaluate the healthcare facilities' total capacity of licensed beds	
(including unstaffed beds), or plans to create additional beds through implementation of hospital surge	
plans.	.
M152 - Percent of the state's population who live within 50 miles of a trauma center,	2012—2016
including out-of-state centers	
Source: American Hospital Association (AHA), AHA Annual Survey of Hospitals data and U.S. Census	
population data analyzed by PMO personnel.	
Limitations: The measure does not evaluate the quality or comprehensiveness of care prov	ided by the
trauma centers.	
M160 - Number of physicians and surgeons per 100,000 population in the state	2012—2016
Source: Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES)	
Limitations: The measure does not consider mutual aid plans that may be in place for healt	
to supplement the number of available physicians and surgeons in the event of an emergency. Also, BLS	
and other national data sources on physician supply have been shown to undercount certa	• •
physicians, and may differ considerably from the estimates available from state medical lic	ensing boards.

states, they should not cause significant bias in the Index state and national results. The Bureau of Labor Statistics (BLS) produces occupational estimates by surveying a sample of non-farm establishments. As such, estimates produced through the Occupational Employment Statistics (OES) program are subject to sampling error.

Since the measurement undercounting in the BLS data are expected to be relatively consistent across





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2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
M167 - Number of active registered nurse (RN) and licensed practical nurse (LPN)	2013—2017
licenses per 100,000 population in the state	
Source: National Council of State Boards of Nursing (NCSBN), National Nursing Database	
Limitations: The measure does not consider mutual aid plans that may be in place to supp	lement the
number of available RNs and LPNs in the event of an emergency. The source data may un	dercount the RNs
and LPNs available to provide care during an emergency due to limited or non-reporting b	y some states.
M168 - Percent of the state's population living within 100 miles of a burn center,	2014 & 2017
including out-of-state centers	
Source: American Burn Association (ABA) data on Burn Care Facilities analyzed by PMO pe	ersonnel.
Limitations: The measure does not evaluate the specialized resources needed for surge ca	pacity when an
emergency results in a large number of burn patients.	
M296 - Percent of hospitals in the state providing a specialty geriatric services	2012—2016
program (includes general as well as specialized geriatric services, such as psychiatric	
geriatric services/Alzheimer care)	
Source: American Hospital Association (AHA), Annual Survey of Hospitals	
Limitations: The measure does not consider hospital geriatric services provided through c	ontractual
arrangements, the program's capacity to provide services during an emergency, or wheth	er high quality
care is provided to geriatric patients without having a designated specialty program.	
M297 - Percent of hospitals in the state providing palliative care programs (includes	2012—2016
both palliative care program and/or palliative care inpatient unit, but excludes pain	
management program, patient-controlled analgesia, and hospice program)	
Source: American Hospital Association (AHA), Annual Survey of Hospitals	
Limitations: The measure does not evaluate the quality of services provided, or the progra	am's capacity to
provide services during an emergency.	1
M298 - Number of hospital airborne infection isolation room (AIIR) beds per 100,000	2012—2016
population in the state, including hospitals with AIIR rooms within 50 miles from	
neighboring states	
Source: American Hospital Association (AHA), Annual Survey of Hospitals	
Limitations: The measure does not consider mutual aid plans that may be in place to supp	lement the
number of available AIIR beds in the event of an emergency.	1
M299 - Risk-adjusted 30-day survival rate (percent) among Medicare beneficiaries	2011-2013, &
hospitalized in the state for heart attack, heart failure, or pneumonia	2015
Source: The Commonwealth Fund, Aiming Higher: Results from a Scorecard on State healt	th System
Performance	
Limitations: Variation in state population health, such as obesity or smoking rates, may ha	ave a greater
effect on the measure results than prevention and preparedness programs.	T
M300 - Percent of hospitals in the state with a top quality ranking (Grade A) on the	2013—2017
Hospital Safety Score	
Source: The Leapfrog Group, Hospital Safety Score (HSS)	
Limitations: The measure source data does not include critical access hospitals, specialty h	•
pediatric hospitals, hospitals in Maryland, territories exempt from public reporting to CMS	
Critical Access hospitals are facilities with no more than 25 beds and located in a rural are	a further than 35
miles from the nearest hospital, and/or are located in a mountainous region.	





response training.

2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
M906 - Percent of hospitals in the state that have demonstrated meaningful use of certified electronic health record technology (CEHRT). This includes the demonstration of meaningful use through either the Medicare or Medicaid EHR Incentive Programs.	2013—2016
Critical Access hospitals are facilities with no more than 25 beds and located in a rural	
area further than 35 miles from the nearest hospital, and/or are located in a	
mountainous region.	
Source: The Office of the National Coordinator for Health Information Technology, a division	on of the U.S.
Department of Health and Human Services	
Limitations: The measure source data is estimated based on a survey of healthcare facility	providers.
M907 - Percent of office-based medical doctors and doctors of osteopathy in the state	2013—2016
that have demonstrated meaningful use of certified electronic health record	
technology (CEHRT). This includes the demonstration of meaningful use through either	
the Medicare or Medicaid EHR Incentive Programs.	
Source: The Office of the National Coordinator for Health Information Technology, a division	on of the U.S.
Department of Health and Human Services	
Limitations: The measure source data is estimated based on a survey of healthcare facility	providers.

Limitations: The measure source data is estimated based on a survey of healthcare facility	providers.
Domain 4: Healthcare Delivery	
Subdomain 4.3: Long-Term Care	
M303 - State requires written disaster plans for long-term care and nursing home	
facilities	
Source: American College of Emergency Physicians (ACEP), America's Emergency Care Env State-by-State Report Card	ironment, A
Limitations: The measure does not evaluate the disaster plan quality, feasibility, or intensi with other community organizations. NOTE: According to state public health personnel in 2013-2014 ACEP data source does not accurately reflect Vermont administrative regulatio 2000-2001 which require a written disaster plan for long-term care and nursing home facily Vermont item measure value for M303 is changed from "0" to "1" as a result of this feedbox.	Vermont, this ns dating to lities. The
M308 - Average number of nurse (RN) staffing hours per resident per day in nursing 2014—2	
homes in the state	
Source: Centers for Medicare & Medicaid Services (CMS), Nursing Home State Averages	
Limitations: The measure source data are collected during a specific two-week period and account variations related to season, region, resident acuity, skill mix of other care provide factors. The measure does not evaluate staff availability for a disaster or whether staff recresponse training.	ers, and other
M309 - Average number of nursing assistant (CNA) staffing hours per resident per day	2014—2017
in nursing homes in the state	
Source: Centers for Medicare & Medicaid Services (CMS), Nursing Home State Averages	
Limitations: The measure source data are collected during a specific two-week period and account variations related to season, region, resident acuity, skill mix of other care provide factors. The measure does not evaluate staff availability for a disaster or whether staff rec	ers, and other



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2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
M307 - Percent of long-stay nursing home residents in the state that are assessed and	2013—2017
appropriately given the seasonal influenza vaccine	
Source: Centers for Medicare & Medicaid Services (CMS), Nursing Home State Averages	
Limitations: Vaccine effectiveness varies each year as a function of the accuracy in predicting the influenza	
strains covered by each year's vaccine. As a result, expected influenza protection and redu	uced demand on
healthcare facilities may be marginal in the event of a major disaster.	
M310 - Average number of licensed practical nurse (LPN) staffing hours per resident 2014—201	
per day in nursing homes in the stat	
Source: Centers for Medicare & Medicaid Services (CMS), Nursing Home State Averages	
Limitations: The measure source data are collected during a specific two-week period and do not take into	
account variations related to season, region, resident acuity, skill mix of other care providers, and other	
factors. The measure does not evaluate staff availability for a disaster or whether staff received disaster	
response training.	

Domain 4: Healthcare Delivery	
Subdomain 4.4: Mental & Behavioral Healthcare	
M315 - Percent of hospitals in the state providing chaplaincy/pastoral care services	2012—2016
Source: American Hospital Association (AHA), Annual Survey of Hospitals	
Limitations: The measure does not evaluate whether chaplaincy/pastoral service capacity response to a surge in the event of a disaster.	is adequate to
M316 - Percent of hospitals in the state providing psychiatric emergency services	2012—2016
Source: American Hospital Association (AHA), Annual Survey of Hospitals	
Limitations: The measure source data does not have a standard definition of emergency posservices, and survey respondents may have different interpretations for positive responses emergency medical services include emergency psychiatric services, but fewer hospitals have complete, specialty-staffed, comprehensive psychiatric emergency services. Negative respondicate the absence of any emergency psychiatric services, or the absence of a separate, it comprehensive service. The measure does not evaluate the extent of service integration we disaster preparedness and response efforts by the hospital or emergency psychiatric service disaster-related services provided such as mobile crisis response capacity and telephone-be services.	s. All hospital ave more onses may dentifiable, with other ce, or the

M317 - Percent of need met for mental health care in health professional shortage	2014, 2016, &
areas (HPSA) in the state	2017

Source: The Henry J. Kaiser Family Foundation, Mental Health Care Health Professional Shortage Areas (HPSA)

Limitations: The measure data is based on the availability of psychiatrists, and does not include other behavioral health professionals (e.g., psychologists, social workers, licensed counselors, pastoral counselors, psychiatric nurses) who provide the majority of behavioral health services following disasters. The measure does not consider the ability of a state to temporarily move mental health resources within the state in response to a disaster, such as state trained and certified crisis teams that can be activated and deployed to disaster zones and rapidly supplement local resources. In addition, the measure does not



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2018 Release Measure ID, Data Source, and Limitations	Data Date(s)
evaluate lack of provider availability and readiness during disasters due to appointment waiting lists, contractual obligations to serve certain populations, or their status of skills and training necessary for optimal performance in disasters.	
M800 - Percent of the state's population not living in a HRSA Mental Health	2015, 2016, &
Professional Shortage Area	2017
Source: U.S. Census Bureau and Health Resources & Services Administration (HRSA) data analyzed by PMO personnel.	
Limitations: The measure data is estimated based on matching U. S. Census area definitions with the geographic boundaries for HRSA Mental Health Professional Shortage Areas.	

Domain 4: Healthcare Delivery	
Subdomain 4.5: Home Care	
M291 - Percent of home health episodes of care in the state where the home health	2013—2017
team determined whether their patient received a flu shot for the current flu season	
Source: Centers for Medicare & Medicaid Services (CMS), Home Health Care-State by State Data	
Limitations: Vaccine effectiveness varies each year as a function of the accuracy in predicting the influenza strains covered by each year's vaccine. As a result, expected influenza protection and reduced demand on healthcare facilities may be marginal in the event of a major disaster.	
M292 - Percent of home health episodes of care in the state where the home health	2013—2017
team began their patients' care in a timely manner	
Source: Centers for Medicare & Medicaid Services (CMS), Home Health Care-State by State Data	
Limitations: The measure does not evaluate the quality of the services provided including length of service delays.	
M293 - Number of home health and personal care aides per 1,000 population in the	2012—2016
state aged 65 or older	
Source: American Community Survey (ACS), 1-year Public Use Microsample (PUMS) data analyzed by PMO personnel.	
Limitations: The measure does not evaluate availability of home health aide services during a health emergency, or whether providers have emergency care plans for their clients.	

Domain 5: Countermeasure Management	
Subdomain 5.1: Medical Materiel Management, Distribution, & Dispensing	
M60* - State has developed a written countermeasure management plan including	2012—2014
Strategic National Stockpile (SNS) elements	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Preparedness and	
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure does not evaluate whether the state has the resources and ability to implement	
the plan in a timely and effective manner.	
M61 - CDC assessment score (0-100) of a state's ability to manage the CDC's Strategic	2012—2014
National Stockpile assets, including updated staffing, call-down exercises, Incident	
Command System (ICS) integration, testing, and notification of volunteers	





2018 Release Measure ID, Data Source, and Limitations	Data Data(s)
	Data Date(s)
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	lness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure does not evaluate the number of staff or volunteers that would be	oe available
during an emergency.	
M62 - CDC assessment score (0-100) of a state's ability to request the CDC's Strategic	2012—2014
National Stockpile (SNS) assets from local authorities, including the level of	
completeness and utility of state plans and procedures	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	lness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure evaluates the completeness of state plans to distribute SNS asset	ts to local health
departments, but it does not consider whether the state and local health departments have	e the capacity to
implement the plan.	
M63 - CDC assessment score (0-100) of a state's tactical communications plan for the	2012-2014
CDC's Strategic National Stockpile usage	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	lness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	
Limitations: The measure does not evaluate variations in local readiness across the state, t	he quality of the
state plan, or whether the plan has been completed, tested, or improved.	, ,
M65 - CDC assessment score (0-100) of a state's security planning for the CDC's	2012-2014
Strategic National Stockpile assets, including coordination of medical	
countermeasures dispensing, management, and mass prophylaxis	
Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	Iness and
Response (OPHPR), Division of State and Local Readiness (DSLR)	iness and
Limitations: The measure does not evaluate the quality of the state plan, or whether the p	lan has been
completed, tested, or improved.	ian nas seen
M66 - CDC assessment score (0-100) of a state's ability to receive, stage, and store	2012—2014
(RSS) the CDC's Strategic National Stockpile materiel, including plans and procedures	2012 2014
developed to coordinate all logistics for the SNS	Iness and
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	lness and
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Preparece Response (OPHPR), Division of State and Local Readiness (DSLR)	
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across	
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved.	the state, the
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to	
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory	the state, the
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS)	the state, the 2012—2014
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS) Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared	the state, the 2012—2014
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS) Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR)	2012—2014 Iness and
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS) Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across to the state of	2012—2014 Iness and
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS) Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across receive, stage, store, move, track, and keep secure SNS supplies.	2012—2014 Iness and the state to
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developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS) Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across receive, stage, store, move, track, and keep secure SNS supplies. M69 - CDC assessment score (0-100) of a state's distribution plans and procedures for physical delivery of the CDC's Strategic National Stockpile (SNS) assets from the	2012—2014 Iness and the state to
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS) Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across receive, stage, store, move, track, and keep secure SNS supplies. M69 - CDC assessment score (0-100) of a state's distribution plans and procedures for physical delivery of the CDC's Strategic National Stockpile (SNS) assets from the receipt, stage, and store (RSS) facility to dispensing sites	2012—2014 Iness and the state to 2012—2014
developed to coordinate all logistics for the SNS Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across quality of the state plan, or whether the plan has been completed, tested, or improved. M67 - CDC assessment score (0-100) of a state's controlling inventory procedure to track the CDC's Strategic National Stockpile (SNS) materiel, including an Inventory Management System (IMS) Source: Centers for Disease Control and Prevention (CDC), Office of Public Health Prepared Response (OPHPR), Division of State and Local Readiness (DSLR) Limitations: The measure does not evaluate important variations in local readiness across receive, stage, store, move, track, and keep secure SNS supplies. M69 - CDC assessment score (0-100) of a state's distribution plans and procedures for physical delivery of the CDC's Strategic National Stockpile (SNS) assets from the	2012—2014 Iness and the state to 2012—2014



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2018 Release Measure ID, Data Source, and Limitations

Data Date(s)

Limitations: The measure does not evaluate important variations in local readiness across the state to receive, stage, store, move, track, and keep secure SNS supplies.

M161 - Number of Pharmacists per 100,000 population in the state

2012-2016

Source: Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES)

Limitations: The measure does not consider mutual aid plans that may be in place for healthcare facilities to supplement the number of available pharmacists in the event of an emergency. Also, BLS and other national data sources on health provider supply have been shown to undercount certain types of providers, and may differ considerably from the estimates available from state licensing boards. Since the measurement undercounting in the BLS data are expected to be relatively consistent across states, they should not cause significant bias in the Index state and national results. The Bureau of Labor Statistics (BLS) produces occupational estimates by surveying a sample of non-farm establishments. As such, estimates produced through the Occupational Employment Statistics (OES) program are subject to sampling error.

M270 - Percent of hospitals in the state participating in a group purchasing arrangement

2012-2016

Source: American Hospital Association (AHA), Annual Survey of Hospitals

Limitations: Although group purchasing arrangements may be in place, many other economic and non-economic factors affect shortages of drugs and medical supplies and create gaps in the supply chain.

Subdomain 5.2: Countermeasure Utilization & Effectiveness

M24 - Percent of children ages 19-35 months in the state receiving recommended routine childhood vaccinations, including four or more doses of diphtheria, tetanus, and pertussis vaccine, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine, and three or more doses of Hepatitis B vaccine

2012—2016

Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHC), National Immunization Survey (NIS)

Limitations: The measure evaluates routine vaccines for preventable disease in pre-school age children, and may not reflect the vaccination rate for a severe emerging disease.

M32 - Percent of seniors age 65 and older in the state receiving a seasonal flu vaccination

2013-2017

Source: Centers for Disease Control and Prevention (CDC), National Immunization Survey (NIS) and the Behavioral Risk Surveillance System (BRFSS), FluVaxView State, Regional, and National Vaccination Report Limitations: Vaccine effectiveness varies each year as a function of the accuracy in predicting the influenza strains covered by each year's vaccine. As a result, expected influenza protection and reduced demand on healthcare facilities may be marginal in the event of a major disaster.

M33 - Percent of seniors age 65 and older in the state receiving a pneumococcal vaccination

2012-2016

Source: Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System Survey Questionnaire (BRFSS). Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Survey data analyzed by PMO personnel.

Limitations: The measure evaluates the recommended vaccine for preventable disease in seniors, and may not reflect the vaccination rate for a severe emerging disease.





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M34 - Percent of children aged 6 months to 4 years old in the state receiving a	2012—2017
seasonal flu vaccination	
Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHC),	
National Immunization Survey (NIS)	
Limitations: Vaccine effectiveness varies each year as a function of the accuracy in predict	ing the influenza
strains covered by each year's vaccine. As a result, expected influenza protection and reduced demand on	
healthcare facilities may be marginal in the event of a major disaster.	
M35 - Percent of adults aged 18 years and older in the state receiving a seasonal flu	2013—2017
vaccination	
Source: Centers for Disease Control and Prevention (CDC), National Immunization Survey (NIS) and the	
Behavioral Risk Surveillance System (BRFSS), FluVaxView State, Regional, and National Vaccination Report	
Limitations: Vaccine effectiveness varies each year as a function of the accuracy in predicting the influenza	
strains covered by each year's vaccine. As a result, expected influenza protection and reduced demand on	
healthcare facilities may be marginal in the event of a major disaster.	

Domain 6: Environmental & Occupational Health	
Subdomain 6.1: Food & Water Security	
M275_DW - State public health laboratory provides or assures testing for drinking	2012, 2014, &
water	2016
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)	

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M275_PWW - State public health laboratory provides or assures testing for private	2012, 2014, &
well water	2016

Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This



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https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M275_REC - State public health laboratory provides or assures testing for recreational water

2012, 2014, & 2016

Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

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M275_SUR - State public health laboratory provides or assures testing for surface water

2012, 2014, & 2016

Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public





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health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M275_WST - State public health laboratory provides or assures testing for waste water

2012, 2014, & 2016

Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M276 - Percent of 16 tests for different organisms or toxins that the state public health laboratory provides or assures to assist with foodborne disease outbreak investigations, including Bacillus cereus, Brucella sp., Campylobacter sp., Clostridium botulinum, Clostridium perfringens, Cryptosporidium sp., Cyclospora cayetanensis, Listeria monocytogenes, norovirus, Salmonella, Shigella, Staphylococcus aureus, STEC non-O157, STEC O157, Vibrio sp., Yersinia enterocolitica.

2012, 2014, & 2016

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Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the



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Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M195 - Percent of population in the state whose community water systems meet all applicable health-based standards

2012-2016

Source: Environmental Protection Agency (EPA), Safe Drinking Water Information System Federal (SDWIS/FED) Drinking Water Data

Limitations: The measure does not evaluate drinking water supplies that are non-public (private), or provide information on community water supplies that were adversely affected by emergencies or disasters.

M925 - Community Water System Compliance with Non-Health Standards. Percent of the population being served by a community water system that did not experience a non-health-based violation of the federal Safe Drinking Water Act (SDWA)

2012-2016

Source: Environmental Protection Agency (EPA), Safe Drinking Water Information System Federal (SDWIS/FED) Drinking Water Data

Limitations: The measure does not cover drinking water supplies that are non-public (private) and does not directly provide information on community water supplies that were adversely affected by emergencies or disasters.

Domain 6: Environmental & Occupational Health

Subdomain 6.2: Environmental Monitoring

M202 - State public health laboratory provides or assures testing for air samples

2012, 2014, & 2016

Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M257_AIHA - State public health laboratory is certified or accredited by the American Industrial Hygiene Association (AIHA)

2012, 2014, & 2016

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Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: Data are self-reported by public health laboratory representatives and may re	flect differences
in awareness, perspective and interpretation among respondents.	
M257_EPA - State public health laboratory is certified or accredited by the	2012, 2014, &
Environmental Protection Agency (EPA)	2016
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: Data are self-reported by public health laboratory representatives and may reflect differences	
in awareness, perspective and interpretation among respondents.	
M257_NELAC - State public health laboratory is certified or accredited by the National	2012, 2014, &
Environmental Laboratory Accreditation Conference (NELAC)	2016
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: Data are self-reported by public health laboratory representatives and may re	flect differences
in awareness, perspective and interpretation among respondents.	
M196* - State public health laboratory provides or assures testing for environmental	2012 & 2014
samples in the event of suspected chemical terrorism	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: The state public health laboratory testing "provide or assure" standard is base	d on national
consensus expert opinion and is recommended by the U.S. Centers for Disease Control and	d Prevention
(CDC) and the U.S. Department of Health and Human Services, and is reflected in the Health	thy People 2020
goals concerning access to comprehensive public health and environmental health laborat	ory testing. This
standard requires the state public health authority, through its laboratory, engage in the testing and	
reporting process – either by directly performing the tests or by assuring that alternative is	•
tests adequately. This standard is designed to ensure that laboratory testing, interpretation	
is guided by specialized public health knowledge and expertise found within the state public	
and that timely, effective public health responses and protective actions occur based on to	
that provide testing through another type of laboratory, with no assurance role performed	by the public
health laboratory, do not meet this standard. (see	
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the	
Index is consistent with national expert opinion and federal recommendations concerning comprehensive	
public health laboratory testing capabilities. However, the measure does not assess the qu	•
testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.	
M272 - Percent of 12 tests for different contaminants in environmental samples that	2012, 2014, &
the state public health laboratory provides or assures, including asbestos, explosives,	2016
gross alpha and gross beta, inorganic compounds (e.g., nitrates), metals, microbial,	2010
lead, persistent organic pollutants, pesticides (including organophosphates),	
pharmaceuticals, radon, or volatile organic compounds	
Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Servi	ces Survey (CLSS)
Limitations: The state public health laboratory testing "provide or assure" standard is base	• • • • • • • • • • • • • • • • • • • •
consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention	
(CDC) and the U.S. Department of Health and Human Services, and is reflected in the Health	thy People 2020
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goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and



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reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M273 - State public health laboratory provides or assures testing for hazardous waste

2012, 2014, & 2016

Source: Association of Public Health Laboratories (APHL), Comprehensive Laboratory Services Survey (CLSS)

Limitations: The state public health laboratory testing "provide or assure" standard is based on national consensus expert opinion and is recommended by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services, and is reflected in the Healthy People 2020 goals concerning access to comprehensive public health and environmental health laboratory testing. This standard requires the state public health authority, through its laboratory, engage in the testing and reporting process – either by directly performing the tests or by assuring that alternative labs perform the tests adequately. This standard is designed to ensure that laboratory testing, interpretation, and reporting is guided by specialized public health knowledge and expertise found within the state public health agency, and that timely, effective public health responses and protective actions occur based on test results. States that provide testing through another type of laboratory, with no assurance role performed by the public health laboratory, do not meet this standard. (see

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846798/). Inclusion of this measure ensures that the Index is consistent with national expert opinion and federal recommendations concerning comprehensive public health laboratory testing capabilities. However, the measure does not assess the quality of the testing, the timeliness of results reporting to enable responses to public health threats, nor whether sufficient capacity exists to test the volume of samples required during a health security event.

M274 - State participates in the National Plant Diagnostic Network (NPDN)

2014

Source: National Plant Diagnostic Network (NPDN), National Plant Diagnostic website

Limitations: The measure does not evaluate the level or effectiveness of the state participation, including the resources committed and state success in quickly detecting and identifying pathogens.

M904 - Number of environmental scientists and specialists (including health) per 100,000 population in the state

2012-2016

Source: Bureau of Labor Statistics (BLS), Occupational Employment Statistics (OES), OES 19-2041

Limitations: The measure does not evaluate the level of training of the environmental and health scientists. The measure does not consider mutual aid plans that may be in place for agencies to supplement the number of available environmental and health scientists in the event of an emergency. Also, BLS and other national data sources on health provider supply have been shown to undercount certain types of health professionals, and may differ considerably from the estimates available from state medical licensing boards. Since the measurement undercounting in the BLS data are expected to be relatively consistent



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across states, they should not cause significant bias in the Index state and national results. The Bureau of Labor Statistics (BLS) produces occupational estimates by surveying a sample of non-farm establishments. As such, estimates produced through the Occupational Employment Statistics (OES) program are subject to sampling error.

Domain 6: Environmental & Occupational Health	
Subdomain 6.3: Physical Environment and Infrastructure	
M922 - Transportation Structural Integrity, percent of bridges that are in good or fair	2012—2016
condition (not poor)	
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Brid	lges and
Structures	
Limitations: The frequency of bridge inspections varies according to numerous criteria. Mo	-
a one-, two-, or four-year inspection cycle. Consequently, the data year does not necessar	ily coincide with
the inspection year.	T .
M923 - Surface Water Control Structural Integrity, percent of High-Hazard Potential	2016
Dams that are not in poor or unsatisfactory condition	
Source: U.S. Corp of Engineers, National Inventory of Dams (NID) and the Association of St Officials (ASDSO)	ate Dam Safety
Limitations: A small, but growing number of states exempt categories of dams from inspec	tion based on
the purpose of the impoundment or the owner type. Nationally roughly a quarter (23%) o	f the high-hazard
dams are not rated for condition, with wide differences among the states	
M928 - Housing Mitigation for Flood Hazards, population living in a community	2017
participating in the FEMA Community Rating System (communities with a CRS of 1	
through 9) as a percent of all communities participating in the National Flood	
Insurance Program	
Source: FEMA National Flood Insurance Program (NFIP) Community Rating System (CRS)	
Limitations: Participation in the National Flood Insurance Program (NFIP) is voluntary. It is some communities located in flood zones are not part of the NFIP.	possible that
M929 - Flood Insurance Coverage, FEMA National Flood Insurance Policies (NFIP) in-	2013—2017
force as a percentage of total housing units located in 100- and 500-year floodplains	====
Source: U.S. Department of Homeland Security, FEMA, National Flood Insurance Program, and the NYU	
Furman Center (FloodzoneData.us)	
Limitations: Participation in the National Flood Insurance Program (NFIP) is voluntary. It is	possible that
some communities located in flood zones are not part of the NFIP. Also, many flood zone r	maps are
outdated.	
M334 - State has a climate change adaptation plan	2014—2016
Source: Center for Climate and Energy Solutions (C2ES), State and Local Climate Adaptatio	n
Limitations: The measure does not evaluate the quality or comprehensiveness of the plan, or the degree to	
which the plan is implemented.	





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Domain 6: Environmental & Occupational Health	
Subdomain 6.4: Workforce Resiliency	
M530 - Percent of employed population in the state with some type of paid time off	2012—2016
(PTO) benefit	
Source: Current Population Survey (CPS), Annual Social and Economic Supplement (ASEC) data analyzed by	
PMO personnel.	
Limitations: The measure data is estimated based on a survey of a sample of the general population.	
M531 - Percent of employed population in the state engaging in some work from	2011—2013,
home by telecommuting	2015
Source: Current Population Survey (CPS), Work Schedules Supplement data analyzed by PMO personnel.	
Limitations: The measure data is estimated based on a survey of a sample of the general population.	
M705 - Percent of employed population in the state who work from home	2012—2016
Source: American Community Survey (ACS), 1-year estimate (Table B08128)	
Limitations: The measure data does not include all individuals who can work at home on a "part-time"	
basis.	