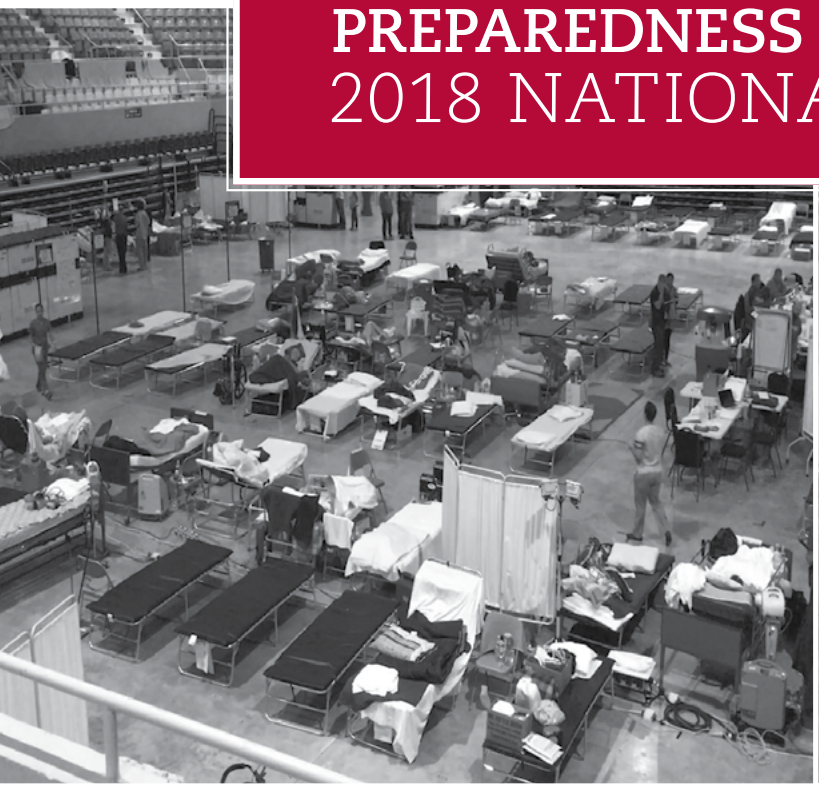
PUBLIC HEALTH

PREPAREDNESS AND RESPONSE

2018 NATIONAL SNAPSHOT



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

As stewards of public health we remain committed to a ***common defense of our country*** *– from infectious disease outbreaks, natural disasters, and man-made threats. We must stay true to the* ***science*** *that informs our evidence-based practices and programs that protect communities from threats. We must be guided by* ***surveillance****, which helps identify new and emerging disease threats and predict when and where the next public health emergency might happen. And finally, we must always return to the core value of* ***service*** *to our citizens here at home and people around the globe.*

— Stephen Redd, MD
RADM, USPHS

Welcome 7
Background 8

PREPARE

Every Response is Local 12
Right Resources, Right Place, Right Time 16
Keeping Lifesaving Research Safe and Secure 20
Health Security: Improving Response Capacity of Global Partners 21

RESPOND

Strengthening Public Health Emergency Response Operations 24
Laboratories: On the Front lines of America's Health 26
Emergency Leaders: The Future of Incident Response 27

CONNECT

Global Training to Protect Us All 30
Protecting Our Most Vulnerable 32
The Power of Preparedness: National Preparedness Month 34
The Opioid Epidemic: An Unprecedented Public Health Emergency 36

RESPONSE IN ACTION

Three Major Hurricanes Make Landfall in the United States 42
A Complex Threat: The Spread of Zika 46
Reaching the Finish Line: Global Polio Eradication 52

LOOKING FORWARD

Medical Countermeasure Distribution and Dispensing 56
Preparing for the Most Likely Scenarios 56
Increasing Efficiency of Information Sharing 57
Transferring the Strategic National Stockpile 57

Photo Credit: Federal Emergency Management Agency

PREPAREDNESS & RESPONSE:
BY THE NUMBERS

$612 M

In annual PHEP funds awarded to 62 jurisdictions for 2017.

$8 M

Funding for public health preparedness and response research to improve the ability of CDC and its partners to effectively respond to a wide range of public health emergencies and disasters.

1,739

Total CDC deployments for Zika.

530

CDC staff, including staff deployed to the field, during the responses to Hurricanes Harvey, Irma, and Maria.

181

Inspections of laboratories registered to handle select agents and toxins conducted by the Federal Select Agent Program (FSAP) in 2016.

3,758

Federal, state, territorial, and local emergency responders trained on how to receive and distribute products from the Strategic National Stockpile.

90

CDC field staff assigned to 58 different PHEP awardee locations in 2017.

19

Countries sent public health leaders to CDC headquarters for emergency management training.

69

Peer-reviewed publications and Morbidity and Mortality Weekly Reports authored by OPHPR staff.

22,776

Incoming calls to CDC's Emergency Operations Center responded to from the public, state health departments, clinicians, and hospitals.

WELCOME

This past year has shown us devastating emergencies—Hurricanes Harvey, Irma, and Maria, and wildfires that ripped through California's wine country. These events and many lesser known ones—the Salmonella outbreak associated with papayas, and the Seoul Virus outbreak associated with rodents—remind us of the importance of being ready for whatever the next public health emergency may be.

CDC is committed to strengthening the nation's health security by protecting against public health threats, whether they begin at home or abroad, or if they are natural or man-made. We know that by responding quickly and to scale, we can reduce illness in an outbreak and injuries in a natural disaster, saving many lives.

As the nation's health protection agency, CDC's mission is to save lives and protect people from health threats. To accomplish our mission we **prepare** by making sure workers are trained, systems are functioning, and critical medicines and supplies are available in the right place at the right time. We **respond** to public health emergencies, combining key emergency management principles and world class scientific expertise to understand emergency situations, implement interventions, and protect the public. And we **connect**, bringing state and local health departments and federal partners together to share information quickly and execute response plans with partners at every level and in every sector.

CDC has decades of experience in bringing top scientific expertise to health emergencies and remains a trusted partner in the United States and around the world. The Office of Public Health Preparedness and Response remains focused on making sure we're ready to respond to any crisis.

Stephen Redd, MD
RADM, USPHS,
Director, Office of Public Health Preparedness and Response

WHAT ARE PUBLIC HEALTH THREATS?

Biological threats

can spread rapidly. They can be natural, accidental, or deliberate. They include viruses, bacteria, parasites, fungi, or toxins that can cause illness or death in plants, animals, or people. Examples of biological threats include flu viruses or bacteria that contaminate foods.

Natural disasters

include heat waves, floods, snow or ice storms, earthquakes and hurricanes.

Chemical and radiological materials

released accidentally or intentionally could create large-scale public health emergencies, especially in densely populated areas.

BACKGROUND

An emergency can happen at any moment, and the U.S. must be ready to respond to pandemics, natural disasters, or chemical or radiological threats. Our actions in this area directly serve to protect the health of the American people and are a matter of national security.

The terrorist and anthrax attacks of 2001 revealed critical gaps in our nation's preparedness and our ability to connect around response efforts. Emerging diseases like H7N9, MERS, Ebola, and Zika continue to show us that we cannot let our guard down. Preparedness demands constant vigilance and investment to keep up with public health threats as they evolve.

CDC's Office of Public Health Preparedness and Response is uniquely positioned to:

Prepare:

We make sure people are trained, systems are functioning, and critical medicines and supplies are available before an emergency strikes.

Respond:

We combine emergency management expertise and the world's best scientists to monitor and respond to emergencies 24/7.

Connect:

We have a track record of working effectively with state and local health departments, federal partners, and across CDC to get fast results and communicate accurate and timely information when lives are at stake.

The Office of Public Health Preparedness and Response and its partners across CDC and the world are working to protect health and save lives from any health emergency that occurs.

Photo Credit: Federal Emergency Management Agency

PREPARE

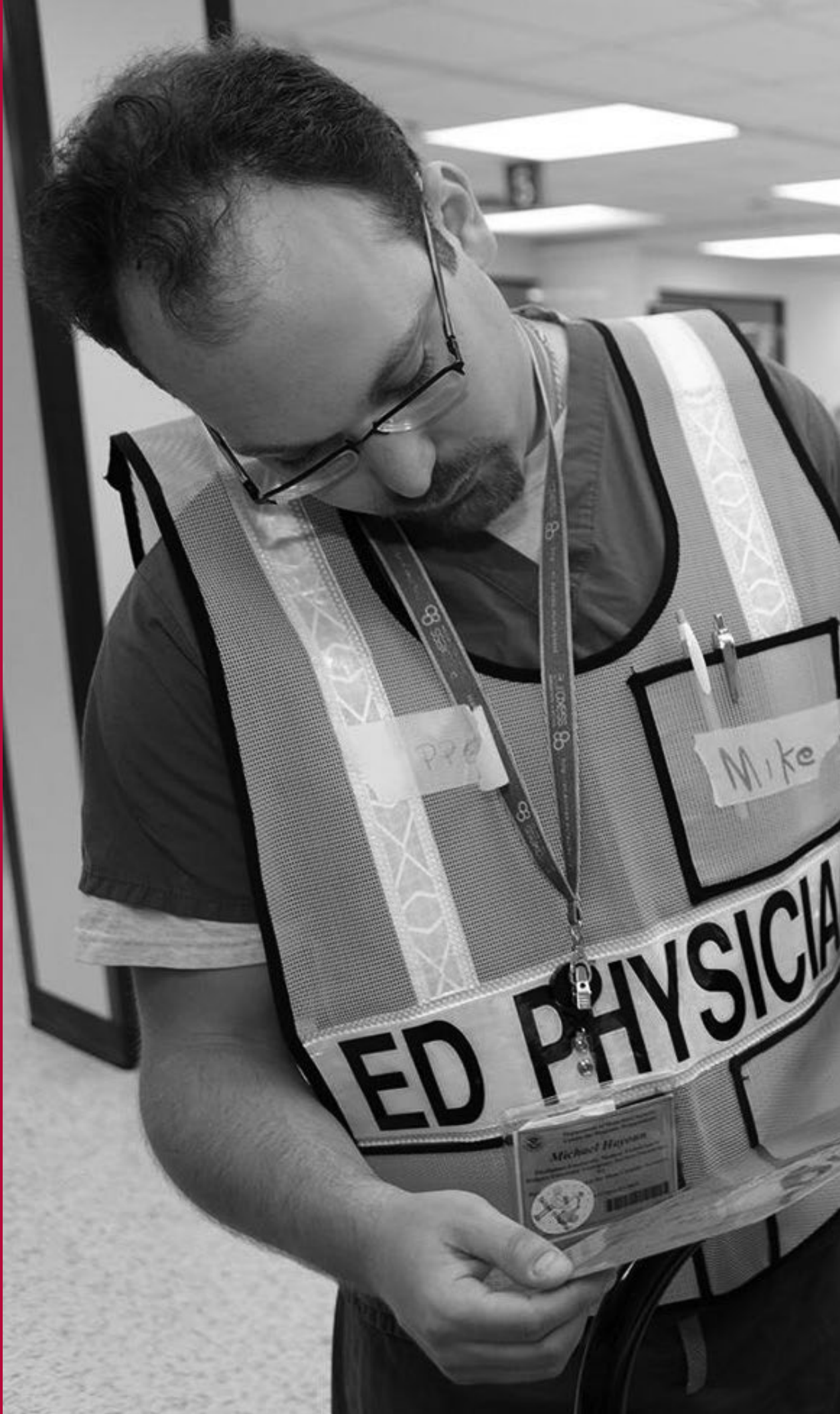


Photo Credit: Federal Emergency Management Agency

EVERY RESPONSE IS LOCAL

The challenge:

Communities continually face unexpected emergencies. State and local health departments across our country fought to stop Zika, while other areas were devastated by floods, hurricanes, or wildfires. State and local health departments must be prepared to handle large-scale emergencies, as well as identify and respond to the many smaller emergencies and potential outbreaks that threaten our nation each year.

Our strategy:

CDC works with state and local partners to provide assistance, guidance and funding, helping communities get ready to handle any public health crisis. In 2017, the Public Health Emergency Preparedness (PHEP) cooperative agreement provided $612 million to public health departments to prepare for and respond to threats across the nation. PHEP funds support preparedness activities in all 50 states, 4 localities, and 8 territories and freely associated states.

Moving the dial:

CDC has implemented a rigorous assessment process designed to better measure a jurisdiction's operational readiness—the ability to exercise and successfully execute public health plans in response to specific threats. Between 2017 and 2019, CDC and PHEP recipients will conduct nearly 500 medical countermeasure Operational Readiness Reviews (ORR) nationwide, including reviews of about 400 local jurisdictions in the 72 metropolitan areas where nearly 60% of the U.S. population reside. These reviews evaluate a jurisdiction's ability to execute a large response requiring the rapid distribution and dispensing of life-saving medicines and medical supplies. Importantly, they also identify opportunities for improvement.

Over the next three years, CDC will expand the ORRs to encompass measurement of hazards for all 15 public health preparedness capabilities. CDC will evaluate each PHEP recipient's ability to effectively implement timely identification and investigation of public health incidents, communication of public risk information, and intervention and control measures. This includes identifying potentially exposed individuals and taking steps to prevent or minimize the spread of disease, and coordination and support of response activities with health care and other partners. CDC expects that by 2022 all PHEP recipients' public health emergency management and response programs to have achieved CDC's expected level of established readiness. To increase state and local expertise in public health emergency management and response, CDC offers ongoing virtual and in-person training, guidance, technical assistance, and other resources to strengthen public health readiness.

MEDICAL COUNTERMEASURE READINESS: STRENGTHS AND CHALLENGES

The Operational Readiness Review (ORR) evaluated the ability of 50 states and four localities to respond to a public health emergency that requires the distribution of medical countermeasures. The assessment identified strengths and challenges faced by preparedness programs across the nation in order to establish opportunities for improvement and enhanced training and guidance.

The majority of states and localities developed plans for:

- Points of dispensing and vulnerable populations
- Receiving and distribution sites
- Maintaining the integrity of medicines and medical supplies
- Transportation assets
- Securely transporting federal medical countermeasures

The biggest challenges states and localities faced were related to exercising their plans around:

- Security for public points of dispensing
- Initiating and sustaining a dispensing campaign during an emergency
- Setting up a dispensing site

SUPPORTING STATE AND LOCAL HEALTH DEPARTMENTS

CDC has placed preparedness staff across the nation to support state and local health departments. In 2017, 90 Public Health Emergency Preparedness (PHEP) Cooperative Agreement-funded field staff were assigned to 58 different awardee locations, including 46 states, 4 localities, and 8 U.S. territories. CDC now has PHEP-funded field staff in 14 more locations than in 2016. Having skilled staff that can provide direct technical assistance and support from CDC at the local level has been a major factor in helping health departments prepare for and respond to emergencies.

2017 PHEP-funded field staff include

36 **Career Epidemiology Field Officers** – created in 2002 to help health departments strengthen their epidemiological capacity

25 **Preparedness Field Assignees** – Public Health Associate Program (PHAP) graduates that support state and local preparedness programs

19 **Public Health Associate Program Associates** – support state and local health departments while gaining valuable knowledge and skills

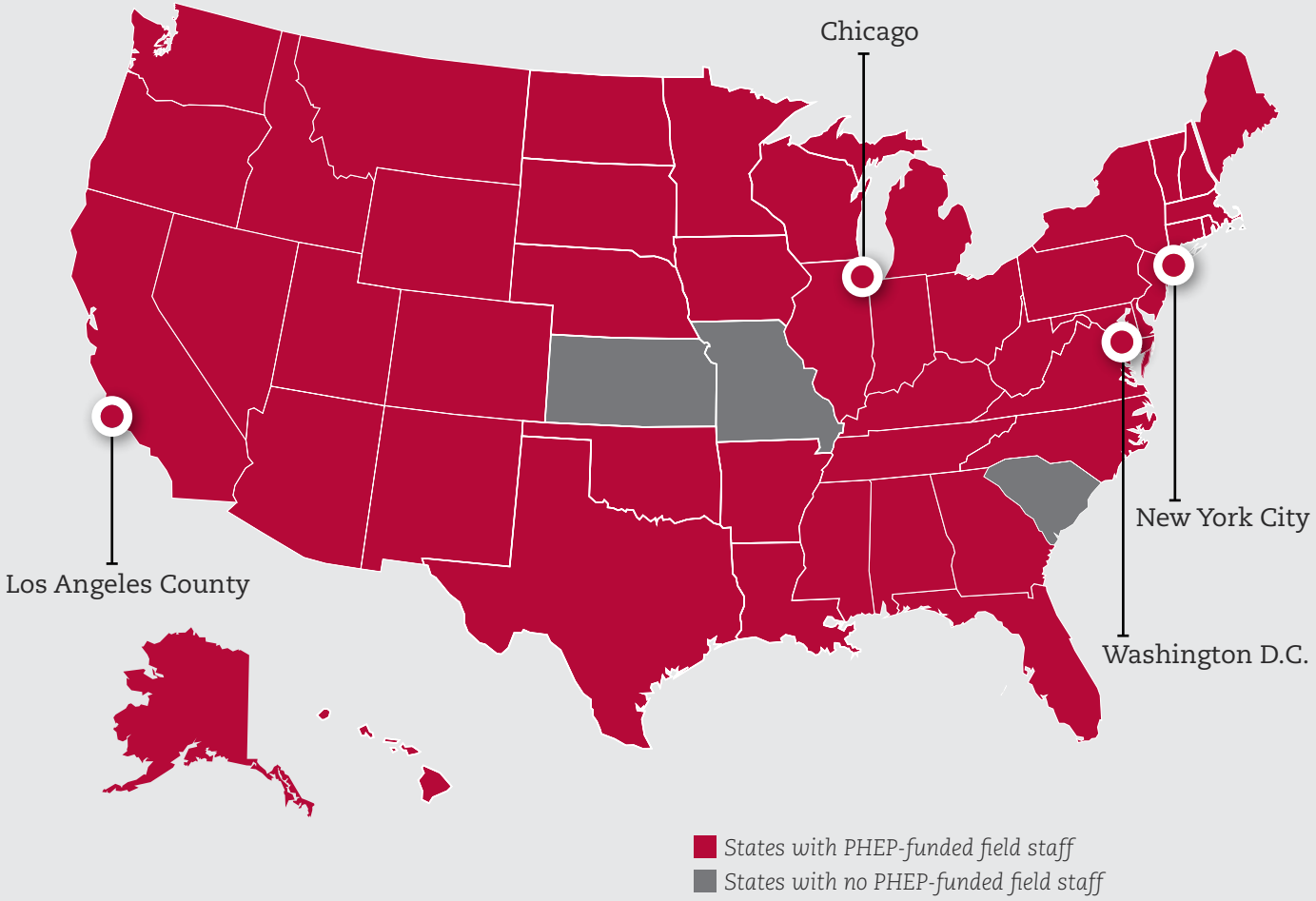
7 **Regional Medical Countermeasure Specialists** – support PHEP funding recipients with their medical countermeasure planning

2 **Public Health Advisors** – help PHEP cooperative agreement recipients develop their preparedness and response programs

1 **Temporary Epidemiology Field Assignees** – created in 2015 in response of the Ebola outbreak to strengthen epidemiologic capability to respond to novel disease introductions

All of these positions help states, localities, and territories prepare for and respond to both small and large public health emergencies.

Photo Credit: Federal Emergency Management Agency



US Territories:

- *American Samoa*
- *Fed States of Micronesia*
- *Guam*
- *Northern Marianas Islands*
- *Puerto Rico*
- *Rep of Marshall Islands*
- *Rep of Palau*
- *US Virgin Islands*

RIGHT RESOURCES, RIGHT PLACE, RIGHT TIME

The challenge:

A large-scale emergency or a rare or unexpected health threat can quickly deplete medicines and supplies, leaving state, territorial, and local agencies unable to protect the public from some of the most devastating diseases.

Our strategy:

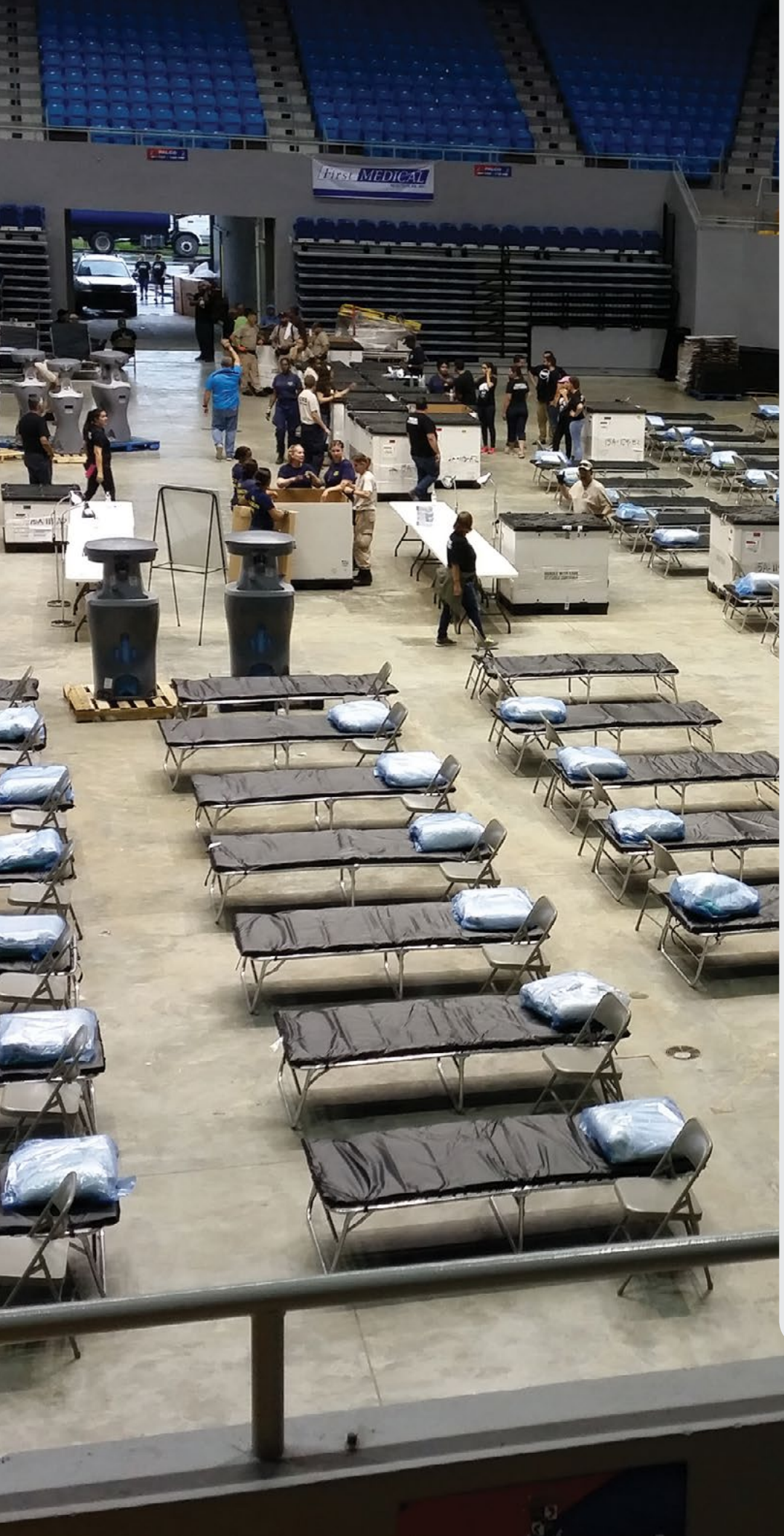
CDC's Strategic National Stockpile is ready to send critical medical supplies quickly to where they are needed to save lives. With more than $7 billion of products in its inventory, the stockpile is the nation's largest supply of life-saving pharmaceuticals and medical supplies that can be used in a public health emergency if local supplies run out. Organized for scalable response to a variety of public health threats, the repository contains enough supplies to respond to multiple large-scale emergencies simultaneously.

Moving the dial:

The stockpile assists states and local jurisdictions with full-scale and tabletop exercises—a total of 12 in 2017—to ensure that systems for delivering medicines are functioning well before they are needed in an actual emergency. In addition to exercise support, in the past year stockpile experts conducted training for 3,758 federal and state, local, tribal, and territorial emergency responders representing 13 different jurisdictions. These trainings focus on how to receive and distribute products provided by the stockpile in a public health emergency.

Over the past year, the stockpile worked with public health partners in the 10 highest risk urban areas of the country—as defined by the Department of Homeland Security Urban Area Security Initiative (UASI). The stockpile is working with these partners to assist each jurisdiction with identifying gaps in plans to respond to a large-scale anthrax event, improving operational readiness, and validating the amount of time needed for CDC to deliver stockpile products.

Memorandums of Understanding are in place with four of the states and directly funded cities containing Department of Homeland Security UASI jurisdictions. They define the specific delivery times for the stockpile's assets required to conduct mass dispensing for the full population of each city in the event of a biological attack. The UASI cities that have completed the collaborative planning work with the stockpile have received updated delivery projections for initial and final delivery of SNS product in their jurisdictions, allowing them to refine their own assumptions and requirements for distribution and dispensing. Cities participating in 2017 saw an average decrease of 56% from the nationwide expectation of 24 hours or less for final delivery.



DID YOU KNOW?

When a state or territory requests assistance to support their medical countermeasure response efforts, the stockpile stands ready to deliver:

Inventory

Medicines, vaccines, and supplies that are rapidly deployable to respond to a health emergency. These products are strategically positioned in warehouses across the country and carefully configured so that they can arrive in any affected area in the United States in 12 hours or less.

CHEMPACK

Containers are pre-positioned at 1,300 sites nationwide to provide chemical antidotes to >90% of the U.S. population within 1 hour of exposure. Sustaining the CHEMPACK program requires close collaboration with state and local partners who host CHEMPACK, as well as other federal agencies and supply chain partners, to ensure viable product is readily available for use in an emergency.

Federal Medical Stations

Caches of beds, supplies, and medicines are available to establish temporary medical shelters to provide care for 50–250 displaced people with health-related needs.

Personnel

Teams of stockpile experts can quickly travel to state and local jurisdictions to provide onsite logistics and operations support in an emergency.

STOCKPILE RESPONSES

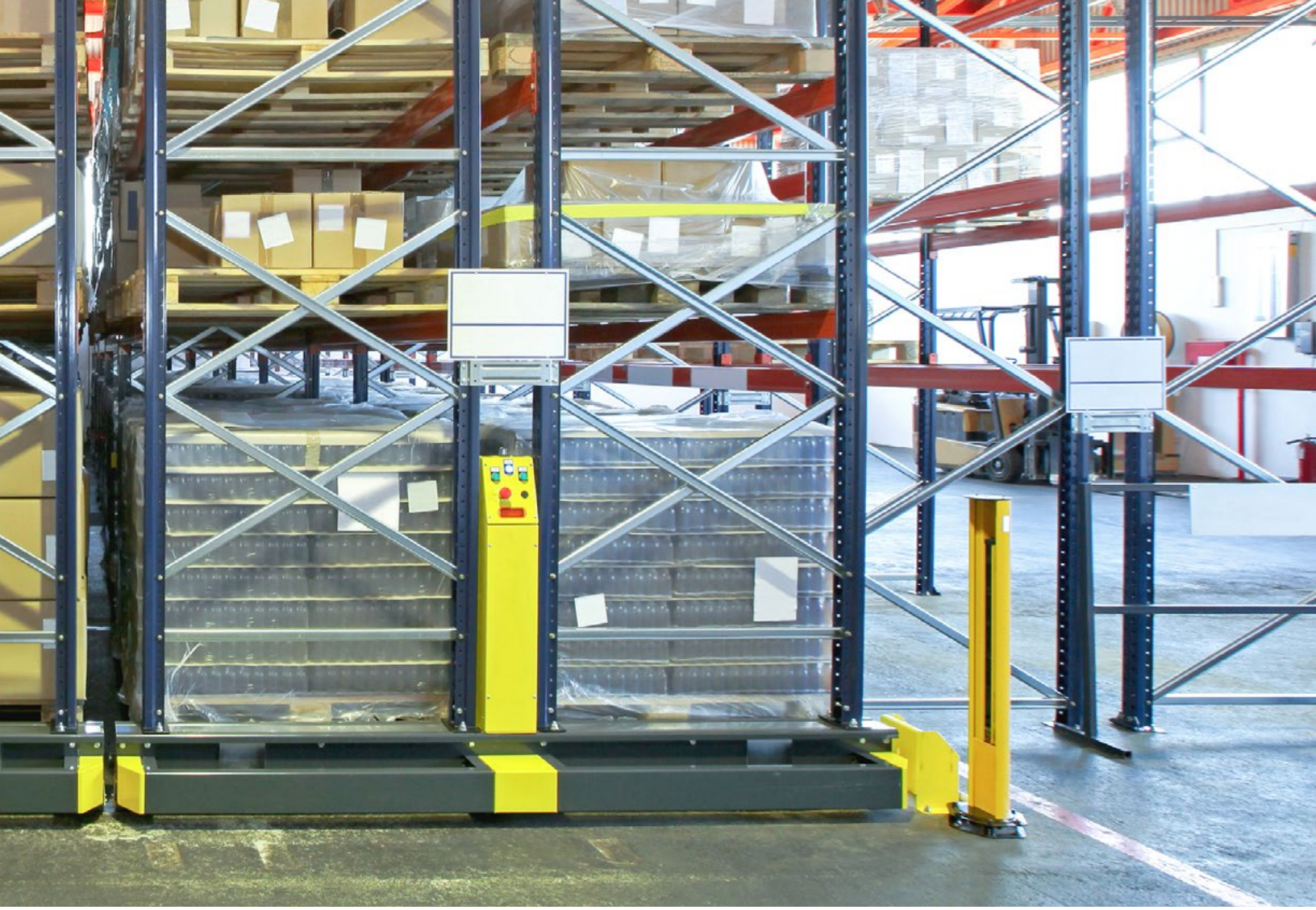
2001
World Trade Center & Anthrax Attacks

2005
Hurricanes Katrina & Rita

2008
Hurricanes Gustav & Ike

2009
H1N1 Pandemic Influenza & North Dakota Flooding

2010
Hurricane Alex & North Dakota Flooding



2011

Hurricane Irene

2012

Hurricanes Isaac & Sandy

2014-2015

Ebola & Botulism Outbreak

2016-2017

Zika Virus

2017

Hurricanes Harvey, Irma & Maria

DID YOU KNOW?

CDC's Import Permit Program ensures that importation of infectious biological materials into the U.S. that could cause disease in people are monitored and that the facilities receiving these permits have appropriate biosafety measures in place to work with the materials. In 2017, CDC issued 2,377 import permits.

KEEPING LIFESAVING RESEARCH SAFE AND SECURE

The challenge:

We have a responsibility to keep dangerous pathogens and poisons (which we call select agents and toxins) with severe public health consequences safe during research and to prevent them from being stolen, lost, or accidentally or intentionally released. The anthrax attacks of 2001 focused our nation on making sure select agents and toxins are handled safely and protected at all times.

Our strategy:

Scientific research in laboratories is a critical part of our nation's defense against both naturally occurring diseases and bioterrorism. Research leads to discoveries that save lives—for example, when we're able to track mutations of killer diseases like the Ebola virus. The Federal Select Agent Program (FSAP) regulates labs registered to handle select agents and toxins. The program is managed jointly through the CDC and United States Department of Agriculture (USDA) Animal and Plant Inspection Service.

Moving the dial:

To keep select agents and toxins safe, secure, and out of the hands of those who might misuse them, FSAP conducted 181 laboratory inspections and approved individual access for those who handle these potentially deadly pathogens and toxins.

In January 2017, FSAP published amendments to the HHS and USDA select agent regulations to increase the safety and security of laboratories that handle select agents and toxins. These amendments to regulations enhanced the requirements that laboratories and facilities working with these materials must follow.

In 2017, FSAP focused on developing a new electronic information system that will improve the efficiency of information sharing and exchange between FSAP and registered entities. Additionally, the program has addressed recommendations from several external reviews of the program and has published the second annual public report of the program.

HEALTH SECURITY:
IMPROVING RESPONSE CAPACITY OF GLOBAL PARTNERS

The challenge:

In today's tightly connected world, a disease can spread from an isolated village to a major city in under 36 hours. Diseases like Zika and Ebola continue to prove that we cannot let our guard down and remind us that we can always improve our ability to prevent, detect, and respond to public health threats.

Our strategy:

The most practical and cost-effective way to protect Americans from health threats that begin overseas is to stop diseases early and close to the source. CDC helps countries strengthen their own emergency management programs by participating in the Joint External Evaluation (JEE) process. The JEE process brings together representatives from multiple sectors around the world to objectively assess and identify the most urgent gaps in public health systems around the world, including gaps in emergency management processes. This process also supports planning and implementation of efforts to address these gaps.

Moving the dial:

As of March 2018, 70 countries have participated in JEEs. CDC experts have participated in more than 42 JEE deployments, have trained 50 JEE team leads, and have coordinated with host countries to translate JEE findings and recommendations into action. Countries are using the results from their JEEs to inform emergency planning and to set priorities. Twenty-nine additional countries are expected to complete JEEs in 2018.

RESPOND

Exercise Control Group (ECG) Telephone and Email Roster
Simulation Cell for Exercise January 31 to February 1, 2007
Position
Phone #
Email
HHS Duty Officer (All Other Contacts)
404-653-7822
World Health Organization and Member Organizations
404-653-7824
Health and Human Services Info Cell/Operations/Plans and Emergency Communication Center
404-653-7824
Health and Human Services (Logistics/Finance&Administration)
404-653-7825
Senior Management Officials (SMO) and the State Health Departments
404-653-7828

STRENGTHENING PUBLIC HEALTH EMERGENCY RESPONSE OPERATIONS

The challenge:

When an emergency happens, CDC must respond quickly and to scale. When response efforts fail, outbreaks become epidemics and natural disasters become settings for illness and injury.

Our strategy:

With CDC's response system continuously activated since December 2011, our strategic focus is to maintain strong preparedness capabilities so we can respond quickly at any time around the world. Public health responses require flexible leadership and strategies to meet evolving requirements. CDC maintains systems and processes to ensure our emergency response structure is efficient, targeted, and effective.

Moving the dial:

In 2017, CDC launched the Excellence in Response Operations (ERO) initiative to improve CDC's ability to effectively respond to public health emergencies. ERO convened subject matter experts from across the agency to form workgroups to leverage their specialized knowledge and develop and implement risk mitigation strategies. ERO Workgroup members identified 110 risks to the agency's ability to respond to public health emergencies and prioritized 31 mitigation strategies for development. Twelve of these strategies were piloted during the 2017 Hurricane Response.

Collectively the ERO Workgroups are building capacity and better positioning CDC for the next response. The initiative continues to align the ERO Workgroup structure with CDC's public health preparedness and response capabilities, implement system level strategies to improve emergency preparedness and response operations, and develop metrics and performance measures to track implementation of these strategies. The ERO initiative highlights the importance of collaboration across the agency and provides a platform for open and productive dialogue.

Emergency Response Operations Workgroups

1 Response Data Management

2 Response Finance & Resource Management

3 Response Workforce

4 Response Evaluation

5 Scientific Response Support & Management

6 Domestic Response Operations

7 Global Response Operations

8 Response Strategy

ERO Workgroups in Action

The DeployCDC website, a product of the Response Workforce ERO Workgroup, streamlines the management and delivery of information to CDC responders during a public health emergency response. The website minimizes the need to visit multiple sites, limits the need to share documents via e-mail, improves access to deployment resources in the field, and reduces the burden of information overload on CDC responders. The site also provides information for staff who may be interested in learning more about becoming a responder and supporting an emergency response at CDC. DeployCDC is a collaborative effort between key partners and stakeholders across CDC; over 150 responder-related materials and resources were reviewed, consolidated, and posted on the site.

DID YOU KNOW?

87% of the U.S. population is located within a 100-mile radius of an LRN laboratory. A strong network of laboratories helps us prepare for and respond to emergencies in a variety of ways:

- Detecting threats early and close to the source
- Providing trusted results
- Sharing information rapidly and securely
- Deploying new tests quickly across the country

LABORATORIES: ON THE FRONT LINES OF AMERICA'S HEALTH

The challenge:

In the event of an infectious disease outbreak or chemical, radiological, or bioterrorist attack, we need strong laboratory capacity to quickly detect, diagnose, and treat those who are impacted.

Our strategy:

To strengthen laboratory capacity nationwide, CDC and its partners established the Laboratory Response Network (LRN), which brings together state and local public health, federal, and military laboratories. The LRN is a unique asset in the nation's preparedness for biological and chemical terrorism.

The network connects more than 135 biological laboratories in all 50 states to respond quickly to high priority public health emergencies. The network also includes 44 state and local public health laboratories that test clinical specimens to measure human exposure to toxic chemicals.

Moving the dial:

CDC supports laboratories in the network by developing and deploying tests for both existing and emerging threats. These threats may be complex, have severe consequences, or have the potential to overwhelm local resources. Preparing for these threats requires specialized knowledge and skills. Whether it's creating a test to detect an emerging disease or replacing existing tests with one that uses the latest technology, CDC's laboratory experts work to provide the LRN laboratories with the tools—and support—they need. Test results can provide clues to explain both everyday threats like foodborne illnesses and extraordinary incidents like anthrax or Ebola. LRN laboratories are positioned around the country to provide quick, reliable results.

EMERGENCY LEADERS: THE FUTURE OF INCIDENT RESPONSE

The challenge:

In a crisis, every minute counts. CDC needs leaders who are prepared to step in and take immediate action to help save lives.

Our strategy:

Trained emergency leaders bring together the best science with the most efficient systems for managing people and resources. Learning and using a common framework like the CDC Incident Management System (IMS) helps responders "speak the same language" during an event and work seamlessly together.

Moving the dial:

In 2017, CDC launched the *Incident Management Training and Development Program (IMTDP)*. This program is offered across the agency to train subject matter experts on the core principles of emergency management. It increases CDC's public health response leader capacity and integrates training efforts at CDC.

Directors from CDC's Centers, Institutes, and Offices nominate staff who have demonstrated leadership aptitude and abilities in previous IMS activations. Participants in the April 2017 inaugural cohort are primary candidates to serve in a response leader role during future IMS activations. The training program consists of an orientation and six training modules taught by a faculty of experienced CDC response leaders. Four IMTDP participants served in leadership roles for the Zika response or 2017 Hurricane Response.

EMERGENCY LEADERS BY THE NUMBERS

Nominees selected

17

Average career with Health and Human Services

14 YEARS

Public health preparedness and response experience

≥10 YEARS

Epidemic Intelligence Service alumni

53%

CONNECT

TURNING TRAINING INTO ACTION

"On July 2, 2017, the Bangladesh Public Health Emergency Operations Center (PHEOC) was activated for the first time in response to the ongoing, widespread outbreak of Chikungunya. I was assigned the responsibility of coordinator and manager. We formed a national committee, a subcommittee, and a working group to monitor and supervise the combined control measures. I acted as the coordinator of the working group and a member of the other committees. As the coordinator of the PHEOC, I had to organize all relevant activities for its smooth operation. PHEOC activities included 24/7 hotline services, collection of samples for testing, and collection of daily reports from all hospitals in Dhaka and all district hospitals in Bangladesh. These and other measures were very helpful to control and manage the chikungunya outbreak."

– Dr. Sohel Samad, Public Health Emergency Management Fellow, Cohort V: January – May 2017

GLOBAL TRAINING TO PROTECT US ALL

The challenge:

When a disease can spread from an isolated village to any major city in as little as 36 hours, investing in public health in other countries is necessary to protect U.S. health security.

Our strategy:

As part of CDC's national commitment to global health security, the United States supports 16 countries to build capacity to prevent, detect, and effectively respond to infectious disease threats. CDC has seen fast and quantifiable results in flagship countries like Cameroon, Ethiopia, Uganda, and Vietnam.

Moving the dial:

CDC continues to train leaders from around the world—28 countries since 2013—through our Public Health Emergency Management (PHEM) Fellowship, a four-month course based at our Atlanta headquarters. Graduates of this course used their knowledge to train 60 emergency response staff in Sierra Leone and respond to a Chikungunya outbreak in Bangladesh. After completing the fellowship, leaders from three countries—Cote d'Ivoire, Mauritania, and Democratic Republic of Congo—were promoted to serve in their countries' emergency management structure as subject matter experts.

In 2017, CDC partnered with the World Health Organization to host the East Africa Emergency Management Regional Training for PHEM graduates in Dar es Salaam, Tanzania. During this training, international leaders came together to develop and streamline the Public Health Emergency Operations Centers in their own countries.

Understanding Community Resilience and Recovery after Disasters

The United States experienced severe hurricanes, wildfires, and other natural disasters in 2017. These events highlight the importance of community resilience, the sustained ability of communities to withstand and recover from adversity. CDC is supporting research at Johns Hopkins University and the University of Delaware Disaster Research Center to develop a complex mathematical model that predicts community functioning and ability to recover following different types of public health disasters and emergencies.

This research project, the Composite of Post-Event Well-being (COPEWELL), has developed leading edge tools that any community can use to assess its current level of resilience to different types of disasters and identify areas it should strengthen. In fact, New York City conducted a pilot study to apply the model at the neighborhood level. In addition, the COPEWELL team is collaborating with FEMA's Division of Community Preparedness to develop a toolkit to help local communities apply the COPEWELL model in Chester County, Pennsylvania. This will help communities assess their current resilience and prioritize interventions that will help them bounce back after disasters, resulting in better prepared communities. Findings from this type of research will also increase confidence in preparedness investments in the future.

MEETING THE NEEDS OF VULNERABLE POPULATIONS

During the 2017 Hurricane Response, the EOC's At-Risk Task Force collaborated with the Federal Emergency Management Agency to create American Sign Language videos with information on flood cleanup and mold safety. They also created maps of Texas, Louisiana, Florida, and Georgia that highlighted areas with populations who were at risk due to economic and social factors and helped get health information to those areas.

CDC's Vulnerable Populations Officer also trained members of the United States Public Health Service Commissioned Corps Rapid Deployment Force 3 on how to work with vulnerable populations. RDF-3 includes many officers who deployed or could potentially deploy for Hurricane Harvey, Irma, and/or Maria.

PROTECTING OUR MOST VULNERABLE

The challenge:

At-risk and vulnerable populations, such as the elderly, children, people with disabilities, pregnant women, and those living in poverty, may not have access to the resources they need in the event of an emergency. During emergencies, vulnerable populations are at a much higher risk of injury, disease, or even death and their needs may not be met by standard emergency preparedness, response, and recovery operations.

Our strategy:

Every emergency response is different, but we must always plan for and respond to the unique needs of vulnerable populations. CDC has taken important steps to address the needs of vulnerable populations in our emergency preparedness and response activities.

Photo Credit: Federal Emergency Management Agency

Moving the dial:

CDC has a dedicated Vulnerable Populations Officer who applies scientific expertise to vulnerable population emergency preparedness and response activities. This individual leads the agency-wide Vulnerable Populations Community of Practice, a network of CDC experts and staff who share best practices to help vulnerable populations before an emergency strikes.

CDC also maintains an At-Risk Task Force in the Emergency Operations Center, which strategically engages with health departments, federal partners, and non-governmental organizations to advocate for and respond to the needs of vulnerable populations. Led by CDC's Vulnerable Populations Officer, the task force includes staff from across the agency with expertise in children's health, maternal and infant health, mental health, and medical countermeasures.

At-risk and vulnerable populations often have specific requirements for medical care and treatment in emergencies. CDC's Strategic National Stockpile (SNS) supports the Public Health Emergency Medical Countermeasures Enterprise to review available countermeasures and prioritize the procurement of products developed and licensed for use in vulnerable populations. In addition, the SNS ensures that all medical countermeasures are evaluated for use in vulnerable populations and that appropriate sizes of medical supplies and equipment are included for all ages. Finally, CDC works with the U.S. Food and Drug Administration to provide evidence-based authorizations and instructions for the emergency use of countermeasures that have not been approved for use in vulnerable populations.

Communication in an Emergency

A CDC-funded project at Drexel University will help determine how families with children, youth with special health care needs, and children and adults with autism spectrum disorders prefer to receive information during emergencies, including their preferred modes of communication (i.e., TV, internet), formats, and information sources. The project also looks at how health care and service providers who support these families communicate with them before and during public health emergencies. Based on the research findings, Drexel and CDC will create communication tools, messages, and guidance documents to support public health emergency planning for these groups.

THE POWER OF PREPAREDNESS:
NATIONAL PREPAREDNESS MONTH

The challenge:

Communities and individuals need the knowledge and resources to prepare for natural disasters and public health emergencies.

Our strategy:

National Preparedness Month supports awareness and education on what everyone can do ahead of time to stay safe when there is an emergency.

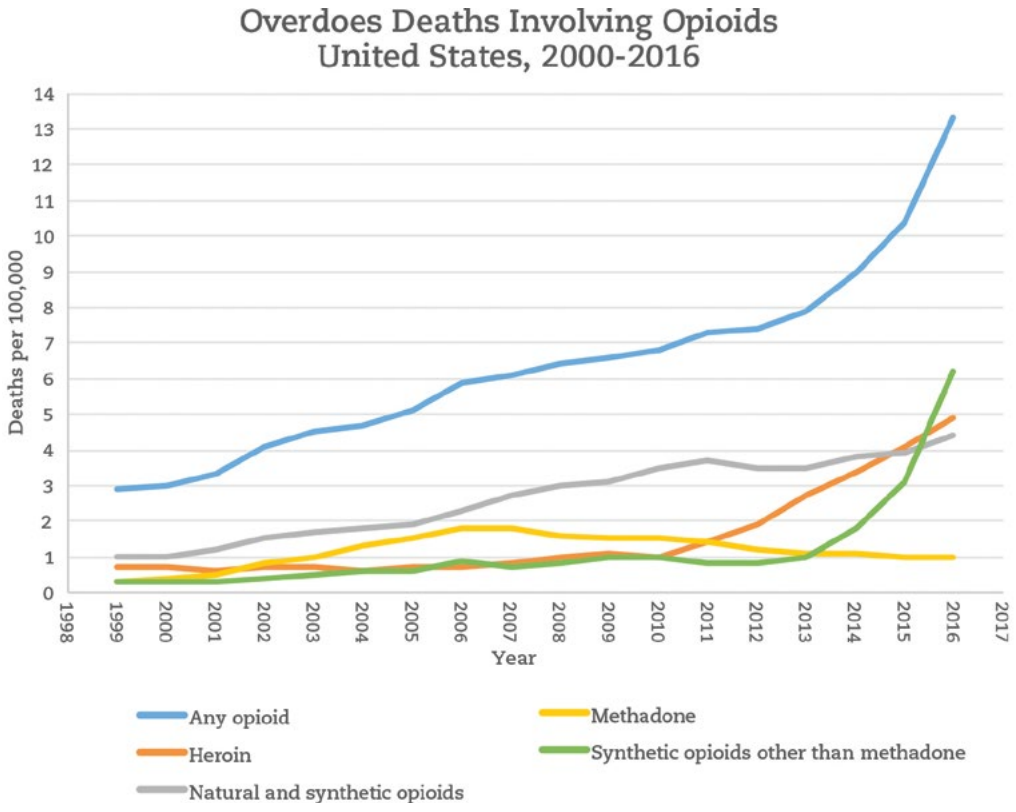
Moving the dial:

During September 2017, CDC and more than 3,000 organizations—national, regional, and local governments, as well as private and public organizations—supported emergency preparedness efforts and encouraged Americans to take action through the National Preparedness Month campaign. CDC's theme for 2017 was "YOU have the power to be prepared". Each week CDC focused on a different topic through the CDC website and social media platforms. CDC's communications team also worked across the agency to raise awareness about the importance of being prepared to respond to public health emergencies and keep people and communities safe.

THE OPIOID EPIDEMIC: AN UNPRECEDENTED PUBLIC HEALTH EMERGENCY

The challenge:

From 2000 – 2016, drug overdoses killed more than half a million people in the U.S. Six out of 10 of these deaths involved an opioid. The number of overdose deaths involving opioids—including heroin and prescription opioids such as methadone, oxycodone, and hydrocodone—has quadrupled since 1999.



Our strategy:

Addressing this complex problem requires a multi-faceted approach and collaboration among public health, clinical medicine, and public safety at the federal, state, local, and tribal levels. State and local public health departments across the country look to CDC for guidance and expertise about proven interventions to prevent opioid misuse, reduce overdoses, and protect their communities.

CDC's National Center for Injury Prevention and Control (Injury Center) and CDC's Public Health Emergency Preparedness (PHEP) program work together to support communities responding to the opioid epidemic. The Injury Center provides scientific expertise, enhanced surveillance, and resources to prevent opioid overdose deaths. The PHEP program supports these efforts through work in developing emergency-ready public health departments. The Injury Center's specific efforts include support to states, localities, and tribes in carrying out the following activities:

- Share data to improve multi-state surveillance and response to the epidemic.
- Report opioid overdoses more quickly, identify hot spots, and rapidly respond with targeted resources.
- Enhance prescription drug monitoring programs.
- Implement and evaluate strategies to improve safe opioid prescribing practices.

If the opioid epidemic overwhelms local health systems, public health departments may need to activate emergency response activities. CDC's PHEP program provides vital resources to ensure communities across the nation are prepared for emergencies and can effectively respond to a range of public health threats, including the opioid epidemic.

WHAT IS A PDMP?

Prescription Drug Monitoring Programs (PDMPs) track prescriptions for controlled substances, including opioids and other medications that can cause physical or mental dependence. These state-run databases help improve opioid pain reliever prescribing, inform clinical practice, and protect patients at risk.

PDMPs are one of the most promising state-level interventions to control the opioid epidemic. State-level evaluation of PDMPs can improve the identification and implementation of promising practices to reduce prescription drug overdoses.

die every day from an **opioid overdose**

**Including prescription opioids and heroin.*

Moving the dial:

To identify communities hardest hit by the opioid epidemic, some state health departments use PHEP funding to help track emergency department and treatment center visits. In addition, some state health departments use PHEP funds to support the distribution of naloxone, a medical treatment to prevent death from opioid overdose.

In 2016, CDC's Injury Center invested more than $50 million in state health departments to support the agency's Overdose Prevention in States effort, which addresses the opioid epidemic. CDC funds 45 states and Washington, D.C. to prevent opioid misuse and overdose deaths at the community level through three key programs:

Prevention for States provides state health departments with the resources and support needed to prevent prescription drug overdoses through strategies like improving prescription drug monitoring programs (PDMPs). This initiative funds 29 state health departments, through 2019, to implement prevention strategies specific to their states. States participating in the program focus on activities to address the epidemic in four key areas:

- Maximize state PDMPs by making them easier to use and improving reporting to identify and address inappropriate prescribing patterns.
- Increase community, insurer, or health system interventions to improve prescribing practices and the use of evidence-based prescribing guidelines.
- Conduct policy evaluations to better understand what works to prevent prescription drug overdoses.
- Advance innovative prevention approaches and respond to new and emerging crises and opportunities.

Data-Driven Prevention funds 13 states and Washington, D.C. to advance and evaluate actions that address opioid misuse, abuse, and overdose by increasing their ability to:

- Improve data collection and analysis around opioid misuse, abuse, and overdose.
- Develop strategies that impact behaviors driving prescription opioid dependence and abuse.
- Work with communities to develop more comprehensive opioid overdose prevention programs.
- Implement interventions to reduce the consequences of opioid overdoses.

Enhanced State Opioid Overdose Surveillance supports states in their efforts to improve the timeliness and comprehensibility of data on fatal and nonfatal opioid overdoses. CDC funds 32 states and Washington, D.C. to:

- Increase the timeliness of reporting nonfatal opioid overdoses through emergency medical services data.
- Improve the timeliness and comprehensiveness of reporting fatal opioid overdoses through the State Unintentional Drug Overdoes Reporting System.
- Disseminate surveillance findings to key stakeholders in order to inform prevention and response efforts for opioid-involved overdoses.

PROMISING STATE STRATEGIES TO COMBAT THE OPIOID EPIDEMIC

Increase and maximize use of prescription drug monitoring programs

Consider policy options to reduce prescribing practices that are risky to patients

Promote and support the use of the CDC Guideline for Prescribing Opioids for Chronic Pain

Evaluate state data and programs to improve detection of inappropriate prescribing practices and resulting interventions

Increase access to substance abuse treatment services for opioid addiction

Identify opportunities to expand first responder access to overdose reversing drugs, like naloxone

Help local jurisdictions implement promising strategies in the hardest hit communities

RESPONSE IN ACTION

Santa Júlia Apts.

THREE MAJOR HURRICANES MAKE LANDFALL IN THE UNITED STATES

The challenge:

Three major hurricanes–Harvey, Irma, and Maria–made landfall in the United States and its Caribbean territories over the course of two months in late summer 2017. This was the first time the United States experienced three Category 4 or greater hurricanes during a single hurricane season.

Our strategy:

CDC, in collaboration with the Federal Emergency Management Agency (FEMA), the U.S. Department of Health and Human Services' Office of the Assistant Secretary for Preparedness and Response (ASPR), and other partner organizations, mobilized to help get the people affected by the storms clean drinking water, reliable shelter, and other basic necessities. CDC also conducted epidemiologic surveillance to detect and mitigate outbreaks, surged laboratory capacity to ensure accurate diagnoses and appropriate distribution of medical countermeasures, bolstered immunization services, and communicated extensively with the affected communities to prevent illness and injury. These activities supported the needs of four very different communities–Texas, Florida, the U.S. Virgin Islands, and Puerto Rico.

Moving the Dial:

CDC activated an incident management system (IMS) and its emergency operations center (EOC) on August 31, 2017. Epidemiologists, environmental health specialists, emergency managers, health communicators, and scientists with expertise in waterborne and vector-borne diseases worked together to monitor and address public health threats in the aftermath of these record-breaking storms.

As part of the CDC IMS and EOC activation, CDC mobilized its State Coordination Task Force, which provides a direct line of communication with state, local, and territorial health departments. The task force worked directly with these jurisdictions to identify and coordinate response needs in areas impacted by the hurricanes. Since September 2017, the task force has facilitated 57 calls with effected jurisdictions and non-governmental partners to prioritize and coordinate response activities and determine strategies for communicating with affected populations.

The Strategic National Stockpile (SNS), in coordination with ASPR, provided personnel, medical supplies, and on-site assistance to areas in most need after all three hurricanes. SNS rapidly deployed Federal Medical Stations, non-emergency medical centers to care for displaced persons with special healthcare needs, in the aftermath of the storms. Six were sent to Texas and Louisiana affected by Hurricane Harvey and three to Florida following Hurricane Irma. After Hurricane Maria made landfall in Puerto Rico, SNS deployed six Federal Medical Stations across the island and coordinated the delivery of supplies such as refrigerators, meals ready to eat, cases of water, and vaccines to assist in Puerto Rico's critical public health needs. SNS logisticians established a temporary warehouse and distribution network to ensure these supplies could get to those who needed them most, even when the island's infrastructure was heavily damaged.

CDC provided information about how to remain safe before, during, and after a hurricane, including how to avoid and stay safe around flood waters, prevent carbon monoxide poisoning through proper generator use, and remove mold safely and effectively. Without dependable power in many areas, emergency responders got creative in their communications with people in the areas affected by the storms. They visited radio stations and communities, sharing public health information via radio interviews, face-to-face interactions, and printed materials.

HURRICANE RESPONSE BY THE NUMBERS

175,000
Educational resources shipped to Texas, South Carolina, Alabama, Puerto Rico, and the US Virgin Islands

127
Educational materials translated into over 10 different languages

582
CDC INFO inquiries answered

20
Hurricane special editions of the Emergency Partners Information Connection newsletter

15
Targeted messages to partners featuring communications resources

57
Calls hosted with impacted jurisdictions and non-governmental organizations

HURRICANE STORIES
FROM THE FIELD

Caring for Displaced People in Houston

Federal Medical Station strike teams—teams of logistics experts deployed to assist with set up—arrived in Houston, TX, just hours after Hurricane Harvey made landfall. According to Steve Holland, a member of one of the strike teams, "Once we received orders to move the supplies to Houston, our Strategic National Stockpile liaison coordinated with the Bureau of Alcohol, Tobacco, Firearms, and Explosives to plan a route for us. But the plan continued to change because roads were flooding and often had to be closed. What would have been a 3-hour drive on a normal day took nearly 13 hours because of flooded roads."

The strike team unpacked and setup the Federal Medical Station in Houston's George R. Brown Convention Center in just 5 hours, a task that usually takes 10 hours to 12 hours. Martha Mock, a CDC emergency management specialist serving on the strike team recalls, "Within an hour, patients started receiving care while we continued to set up". The convention center was used as a Federal Medical Station site that ultimately cared for 160 people displaced by Hurricane Harvey who were in need of non-emergency medical care.

Educating Children After Hurricane Maria

Hurricane Maria and Hurricane Irma hit the Caribbean in September 2017. In their aftermath, teachers in the U.S. Virgin Islands (USVI) talked about how many of the books in their classrooms were moldy and how teachers and staff had to help the janitorial staff clean up classrooms. Parents shared stories of their children coming home from school with mosquito bites all over their arms and legs.

CDC responder Malaika Washington worked with officials from the USVI Department of Health, the USVI Department of Education, and CDC Foundation to print and distribute information packets to more than 16,000 K-12 students on St. Croix, St. Thomas, and St. John to take home to their families. The packets included CDC-developed materials about how to stay safe after a hurricane that students could share with their families. Washington also visited kindergarten and first grade classrooms on St. Croix to read the Ready Wrigley Flooding and Mold Activity Book and hear the students' stories and experiences after the hurricane. She reflected, "Children are the key to primary prevention because they are the drivers of the health behaviors we hope to change."

Strategic National Stockpile Medical Logistics Support

2017 Hurricane Maria

$4.5 MILLION in supplies

- **6** Federal Medical Stations with 1,500 beds total
- **$2.4 million** vaccines for public health needs
- **$84,157** additional vaccines purchased for USVI public health needs
- **$543,600** additional medical supplies purchased
- **177,000** bottles of water
- **42,000** meals ready to eat

10,000 sq. ft. of warehouse operations in P.R.

120 Stockpile personnel working the response

26 total flights with supplies

347+ tons of cargo

Returning Home After the Storm

Vitelio Silva works for CDC's Strategic National Stockpile (SNS) as a logistics management specialist. However, even after decades in a career that has been dedicated to disaster relief and coordination he was not prepared for what he experienced during the 2017 Hurricane Response. Silva grew up in Puerto Rico and was struck by the harsh reality of Hurricane Maria's impact as his plane approached San Juan's International Airport. From 5,000 feet above the ground, he saw the devastation his beautiful emerald island had suffered. All of the blue beach coves that he had previously used to help orient his location had been destroyed by long muddy run-offs from the flooding. As the plane made its final descent Silva saw familiar neighborhoods that were underwater.

Silva was one of the first CDC responders to deploy to the island after Hurricane Maria made landfall in September 2017. He served as the Strategic National Stockpile liaison and was responsible for taking care of Stockpile responders, supporting ASPR and CDC response goals, and collaborating with local and federal agencies to ensure that supplies from the Stockpile went to where they were needed most. Over 347 tons of cargo were shipped to Puerto Rico, including six Federal Medical Stations with 1,500 beds, 177,000 bottles of water and 42,000 meals ready to eat. The SNS also coordinated the purchase and delivery of over $540,000 worth of medical supplies and $2.4 million for vaccines to meet public health needs.

The hard work and expertise of the SNS in responses like the one in Puerto Rico helps prepare CDC to support our partners and provide the right materials, at the right time, to secure our nation's health. Silva reflects, "We have gotten good at responding to this type of disaster when they happen — SNS employees and contractors rush to help, most of them willing to make sacrifices under very harsh conditions to help those who are in need."

A COMPLEX THREAT: THE SPREAD OF ZIKA

The challenge:

The spread of Zika has presented a complex public health challenge for the nation and the world. Zika is especially dangerous for pregnant women and their babies. Infection during pregnancy can cause serious birth defects, including microcephaly. As the number of Zika cases rose throughout the Western Hemisphere, so did the risk for pregnant women.

Our strategy:

As CDC and its partners raced to respond to Zika, many questions about the virus emerged. Scientists and responders from across the agency rose to the challenge, and the CDC Emergency Operations Center activated from January 22, 2016 - September 29, 2017.

Moving the dial:

By the end of the response, CDC employees had completed more than 1,700 deployments to U.S. states, territories, and other countries. At the same time, CDC and the CDC Foundation assembled 31,468 Zika Prevention Kits for distribution to pregnant women in US territories. The kits included insect repellent, larvacides, mosquito bed nets, condoms to prevent sexual transmission of Zika, and educational materials. CDC also managed mosquito control contracts to oversee spraying of more than 9,000 homes, hospitals, schools, and churches in areas affected by Zika. In addition, in 2016 and 2017, CDC's Import Permit program issued 304 permits for Zika virus. The permits ensured samples of the virus were safely brought into the United States safely so that scientists could learn more about Zika, especially how to prevent its spread, and develop a vaccine.

Deactivation does not mean that the threat of Zika is gone or that people are no longer at risk of infection. Zika continues to be a public health threat in the United States and internationally. Zika is still a risk for pregnant women in the United States, and travel-related cases are expected as travelers visit areas with risk of Zika. Since the mosquitoes that can spread Zika are present throughout the country, local mosquito-borne transmission is still possible in the United States. CDC remains committed to protecting the health of Americans and will continue working to defend the nation from the threat of Zika.

CDC Responds to Zika

Throughout the activation, CDC worked to protect people, especially pregnant women, from Zika. CDC responders

- Supported on-the-ground response efforts, including mosquito control, in areas with risk of Zika
- Developed laboratory tests to diagnose Zika
- Conducted public health surveillance and studies to learn more about the link between Zika and microcephaly and other birth defects and between Zika and Guillain-Barré syndrome
- Monitored and reported cases of Zika to improve understanding of how and where Zika was spreading
- Published and disseminated estimates of contraceptive use among women at risk for unintended pregnancy and sexually active adolescents (condoms can reduce the chance of getting Zika from sex)
- Provided guidance to Americans traveling to and living in areas with Zika
- Tracked Zika cases in the United States, including U.S. territories
- Rapidly developed and disseminated clinical guidance for pregnant women and infants

ZIKA RESPONSE BY THE NUMBERS

31,468
Zika Prevention Kits distributed across the United States and territories

207,125
specimens processed by CDC labs and the Laboratory Response Network

64
travel health notices posted for Zika

51
published MMWR early releases

32,500
Zika-related inquiries from consumers, healthcare professionals, and public health partners answered by CDC-INFO

ZIKA STORIES FROM THE FIELD

Corporations Partner with Local Health Departments to Help Fight Zika

CDC linked corporate partners with local health departments to help fight Zika in areas most affected by the virus. Through this strategy, corporate partners like Home Depot, Ace Hardware, and Walgreens co-sponsored community events known as Zika Action Days with local health departments. Corporate partners helped get Zika prevention information and products along with Zika Prevention Kits for pregnant women to community members who attended events in Puerto Rico, the US Virgin Islands, American Samoa, and Florida.

Home Depot sponsored the first Zika Action Day in Caguas, Puerto Rico. About 800 attendees, including 100 children who participated in a children's workshop, learned different ways to prevent mosquito bites. "Partnering with retail stores benefits community members, as they can interact with the people they see all the time at their local Home Depot or Walmart," said Mahmoud Aboukheir, who served as a health educator with the Puerto Rico Department of Health.

Similarly, during a Zika Action Day in American Samoa sponsored by Ace Hardware, participants received flu shots and health screenings in addition to Zika prevention education and resources. Walgreens has also helped support Zika prevention efforts by sponsoring a Zika Action Day in St. Thomas in the U.S. Virgin Islands. The corporation set up in-store displays of CDC educational materials alongside EPA-registered insect repellents and other Zika prevention products. Walgreens featured these displays in communities at high risk for Zika across the United States, including 152 stores within Puerto Rico. Several other pharmacies also used this model, extending CDC's reach and amplifying Zika prevention messages.

For all of the Zika Action Days, the CDC Foundation has played a critical role. The Foundation helped CDC identify corporate sponsors as well as fund the purchase of Zika Prevention Kits for pregnant women. CDC Zika responder Sue Visser helped coordinate the first Zika Action Day in Puerto Rico and continued working with corporate partners on Zika prevention activities. "Corporate partners want to help. They see what's happening in their community and want to position themselves as a trusted resource for Zika prevention," said Visser.

CDC SUPPORT IS KEY TO ZIKA SURVEILLANCE

With funding from CDC's National Center on Birth Defects and Developmental Disabilities, the Massachusetts State Public Health Laboratory implemented rapid population-based surveillance of birth defects that were possibly related to Zika. "The funding from CDC has been essential for us because it supports a full-time position that is 100% devoted to coordinating our Zika surveillance efforts," says Mahsa Yazdy, PhD, MPH, Director of the Massachusetts Center for Birth Defects Research and Prevention. "It's also allowed us to identify areas where we need more support. We have worked on setting up a Zika advisory committee and the lab has done an outreach campaign with our partners."

Integrating Data to Improve Zika Reporting in Massachusetts

In Massachusetts, the first state to report Zika data to CDC's US Zika Pregnancy Registry, 40% of all calls placed to the Department of Public Health's Infectious Disease Epidemiology Program in 2016 concerned Zika. Massachusetts has an active birth defects surveillance system, but when the Zika outbreak began, the system couldn't quickly identify cases of birth defects in babies.

Connecting Zika Surveillance Across Disciplines

The state's Birth Defects Team and Infectious Disease Team initially collected Zika case information through two separate secure systems—one for arboviral diseases and one for birth defects, However, as knowledge emerged of the risk of Zika-related birth defects in babies born to women infected during pregnancy, both groups needed to share information and have access to all relevant data, securely, in one place. Efforts to integrate the two systems began in spring 2016, and the new system went live in May 2017.

The teams worked with health facilities to get remote access to electronic records of babies born to mothers infected with Zika during pregnancy. Having secure remote access reduced the amount of time staff spent traveling to and from hospitals to review records.

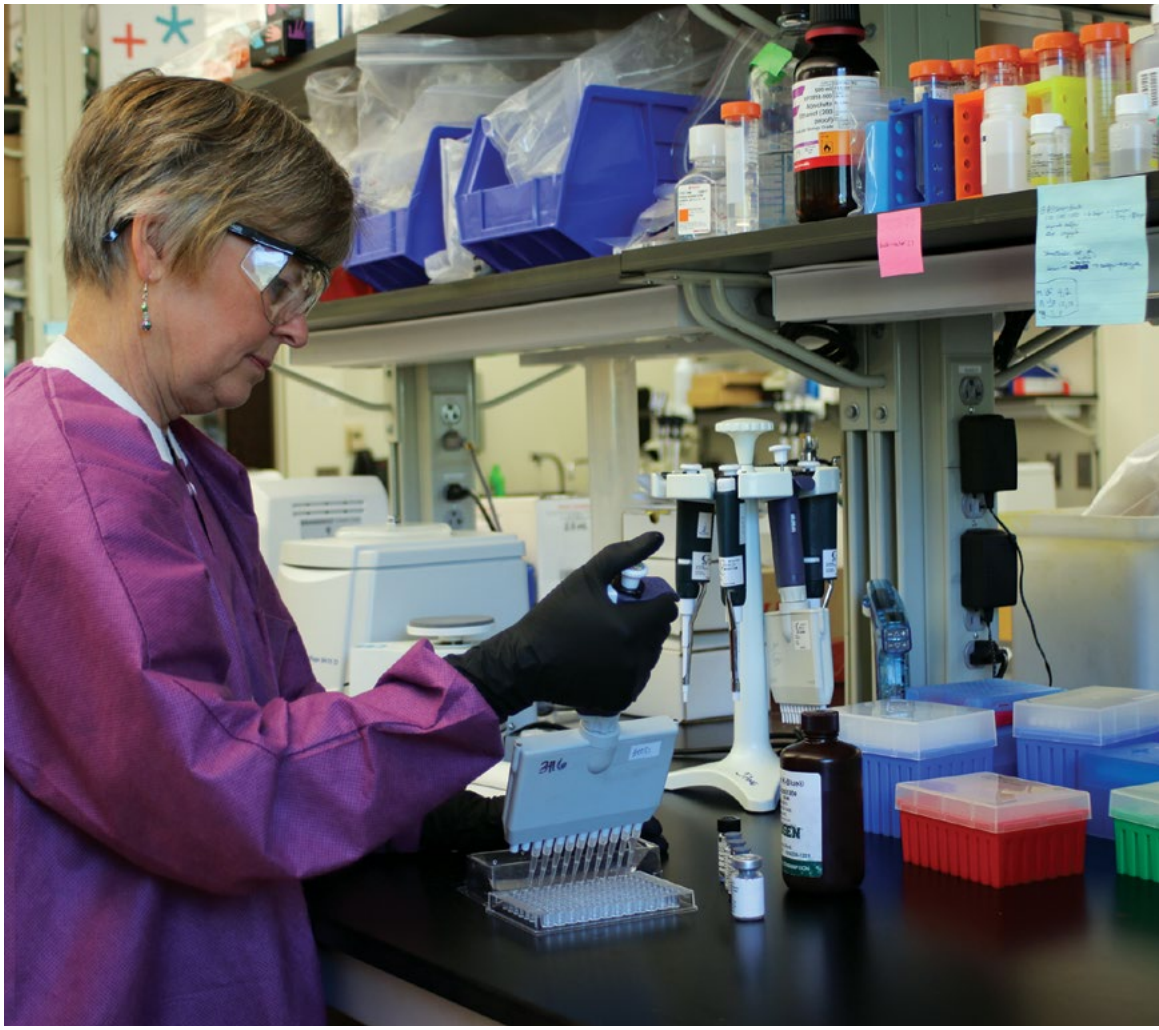
Collecting Data on Zika-related Birth Defects

In addition to accelerating the collection process for Zika and birth defects cases from health facilities, Massachusetts also prioritized the reporting of data on Zika-related birth defects from the birth defects monitoring program. The sooner data are collected from the monitoring program and made available for analysis, the sooner public health officials can understand the risks of Zika infection and take action. Data turnaround times in the state are far ahead of national standards, which normally give states two years to report the final data.

Building Laboratory Capacity to Test for Zika

Infectious disease surveillance relies on laboratory testing. Most public health laboratories can do the initial testing for Zika, but Massachusetts is one of only five states that can also do a more advanced test that distinguishes Zika from similar viruses when initial test results are unclear. Using this test to confirm Zika virus infection in pregnant women can help ensure appropriate infant follow-up care. The Massachusetts State Public Health Laboratory rapidly established its Zika laboratory testing capacity with funds from CDC's Epidemiology and Laboratory Capacity for Infectious Diseases Cooperative Agreement.

Catherine Brown, DVM, MSc, MPH, Deputy State Epidemiologist and State Public Health Veterinarian for the Massachusetts Department of Public Health, describes the effect of CDC funding: "We had a strong foundation, but getting additional resources from CDC allowed us to leverage and improve our capacity to respond to Zika and collaborate with each other in a very integrated way."



POLIOVIRUS CONTAINMENT

CDC has a long history in the fight against poliovirus worldwide and is a key member of the Global Polio Eradication Initiative. The agency provides technical assistance for poliovirus outbreak response, laboratory testing, disease surveillance, vaccination campaign planning, program monitoring and evaluation, and research. CDC's expertise in poliovirus, combined with experience overseeing and monitoring biosafety and security in laboratories, has positioned the agency to lead poliovirus containment efforts in the U.S. and around the world.

The last case resulting from wild poliovirus type 2 occurred in 1999 and the virus was formally declared eradicated in 2015. Laboratories and facilities designated as *poliovirus-essential* must follow defined poliovirus containment measures to minimize the risk that the virus could get into the environment and cause harm.

REACHING THE FINISH LINE: GLOBAL POLIO ERADICATION

The challenge:

The World Health Assembly set a goal to eradicate polio from the world in 1988. That global effort is continuing to make progress with cases in 2017 from only two countries—Afghanistan and Pakistan. Failing to eradicate polio could lead to a global resurgence of the disease.

Our strategy:

CDC activated the Incident Management System on December 5, 2011 to accelerate progress in achieving the goal of polio eradication. The agency uses the Emergency Operations Center to coordinate, expand, and centralize the global polio eradication effort.

The polio eradication response has:

- Trained international public health volunteers to improve polio surveillance around the world
- Scaled up in-country technical expertise and support for polio surveillance, planning, implementation, and monitoring of vaccination campaigns
- Expanded technical and management support—in collaboration with global partners—to assist with outbreak response, surveillance reviews, vaccination campaign planning and monitoring, and data management

Moving the dial:

Since 1988, cases of polio have decreased around the world by more than 99%. However, polio remains an ongoing threat in Afghanistan, Nigeria, and Pakistan. The CDC has been, and remains, an important partner in the global eradication of poliovirus. Since activating the CDC Emergency Operations Center in December 2011, the number of annual polio cases has dropped from 553 on the day of activation to two cases in one country, as of March 6, 2018.

Photo Credit: Federal Emergency Management Agency

Stopping Polio in the Middle East

In 2013, a case of acute flaccid paralysis was detected in Syria by the Early Warning Alert and Response Network, a joint surveillance system managed by the World Health Organization and CDC. Soon after, more patient specimens were tested in the laboratory and found positive for polio. In all, thirty-six cases of polio were identified in Syria, followed by 2 more cases in Iraq. CDC and global partners coordinated a multi-country response to prevent polio from crossing borders and infecting polio-free countries, stopping the outbreak within 6 months.

Before this outbreak, which lasted from 2013–2015, Syria had not had a case of polio for more than 10 years. Public health workers set up immunization sites at clinics, border crossings, and displaced person camps. Vaccinators were also sent house-to-house in some locations and mobile vaccination teams traveled to remote locations. Public health workers focused on containing the virus in the two affected countries, vaccinating children who may have missed their routine vaccinations, and strengthening routine immunization systems, including additional vaccination campaigns. By the end of the response in 2015, 27 million children in unsafe and difficult-to-access conflict areas were vaccinated against polio.

LOOKING FORWARD

INCREASING EFFICIENCY IN MEDICAL COUNTERMEASURE DISTRIBUTION AND DISPENSING

CDC uses a rigorous assessment process to evaluate state and local jurisdictions' capabilities to distribute MCMs to dispensing sites and dispense them to individuals and families in an emergency. Through these assessments, CDC can support state and local jurisdictions in their efforts to effectively protect communities. Over the next two years, CDC will conduct nearly 500 of these assessments throughout the country. CDC will also expand this review process to measure all 15 public health preparedness capabilities and is in the process of updating these capability standards to account for current emergency preparedness and response priorities.

Photo Credit: Federal Emergency Management Agency

PREPARING FOR THE MOST LIKELY SCENARIOS

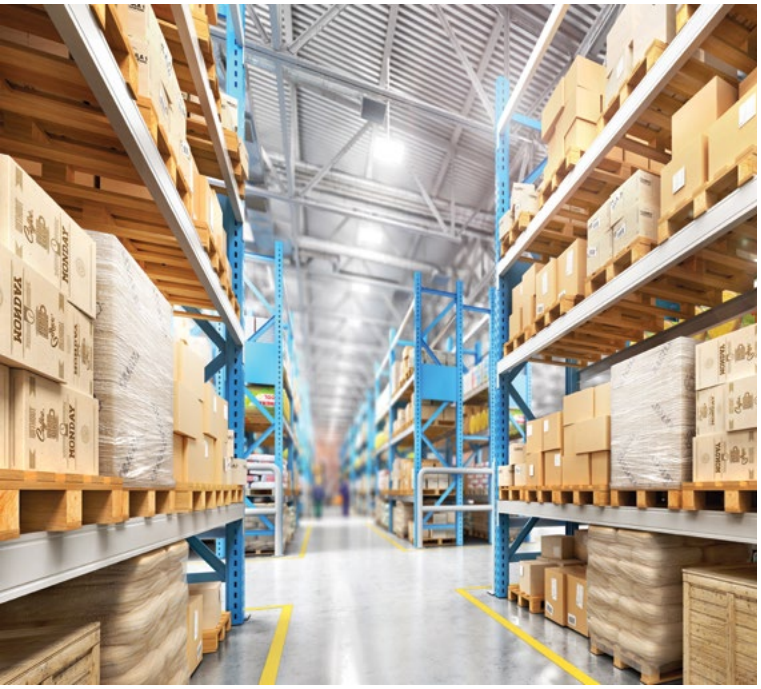
This year, CDC will focus on sustaining and improving its own preparedness efforts for scenarios that are the most likely to occur, such as outbreaks of infectious diseases like influenza. For example, CDC is leading a series of combined planning and exercise events with the Department of Health and Human Services (HHS), other Federal agencies, and state, local, and tribal organizations. This is known as the Pandemic Influenza Training & Exercise Program, or PI-TEP, and its final exercise is scheduled for September of this year.

CDC will also initiate changes to its risk-based approach for state and local MCM planning. Specifically, all jurisdictions will be required to maintain fully developed plans to ensure their readiness to respond to an intentional release of a toxic agent, such as anthrax, and an emerging infectious disease outbreak, such as pandemic influenza.

INCREASING EFFICIENCY OF INFORMATION SHARING

The Federal Select Agent Program (FSAP) will continue to develop, implement, and refine a new electronic information system that improves the real-time sharing of information between FSAP and regulated laboratories. This will help FSAP provide faster regulatory guidance and rapidly address issues of potential public health concern.

CDC will also meet with technology and business sector partners to discuss opportunities for sharing data and developing tools for emergency response. These tools would help response leaders better identify and pre-position response and recovery support where it may be needed, and would also help to rapidly share critical information with affected populations before and after an event.



TRANSFERRING THE STRATEGIC NATIONAL STOCKPILE

The Strategic National Stockpile (SNS) will be transferred from CDC to the Assistant Secretary for Preparedness and Response (ASPR) in fiscal year 2019. CDC is working closely with ASPR to ensure that there is no disruption to the SNS' ability to distribute medical countermeasures when needed.

April 2018
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