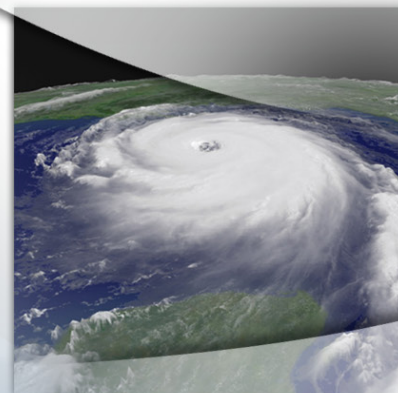
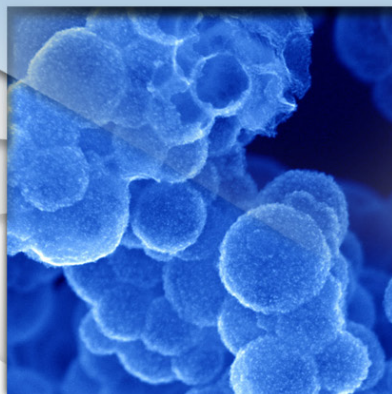


# A NATIONAL STRATEGIC PLAN FOR PUBLIC HEALTH PREPAREDNESS AND RESPONSE

SEPTEMBER 2011



Centers for Disease Control and Prevention  
Office of Public Health Preparedness and Response

# A National Strategic Plan for Public Health Preparedness and Response

## September 2011



---

### Contents

---

Message from the Director of the Office of Public Health Preparedness and Response	2
Introduction	3
Vision, Mission, and Values	4
Objective 1: Prevent and/or mitigate threats to the public's health	4
Objective 2: Integrate public health, the healthcare system, and emergency management	5
Objective 3: Promote resilient individuals and communities	5
Objective 4: Advance surveillance, epidemiology, and laboratory science and service practice	5
Objective 5: Increase the application of science to preparedness and response practice	6
Objective 6: Strengthen public preparedness and response infrastructure	6
Objective 7: Enhance stewardship of public health preparedness funds	6
Objective 8: Improve the ability of the public health workforce to respond to health threats	7
Quick Wins	7
Implementation	8
Appendix A: Contributors	

## Message from the Director of the Office of Public Health Preparedness and Response

Dear Colleagues,

Our nation's ability to prevent, protect, respond to, mitigate, and recover from threats to the public's health is critical. In the last five years alone, national and global health security<sup>1</sup> have been threatened by incidents including Hurricane Katrina, West Nile virus, the H1N1 influenza pandemic, bacterial contamination of food by *E. coli* and *salmonella*, the Deepwater Horizon oil spill, the Haiti earthquake and following cholera outbreak, and the Japanese tsunami and subsequent radiation release.

State and local health departments and individuals are first responders for public health emergencies, including outbreaks, intentional attacks, and environmental disasters. Citizens are becoming a trained resource by equipping themselves with the knowledge to combat emergent threats through nationally recognized programs such as the Citizen Corps<sup>2</sup>. In addition, public health programs at all levels are enhancing the nation's ability to prevent and respond by implementing scientific and technological innovations and developing partnerships with other response agencies. For example, the Global Public Health Information Network, CDC's Global Disease Detection Operations Center, international influenza response networks, and use of the internet and other media assist in early disease detection every day and also provide core surveillance capabilities for large-scale public health threats<sup>3</sup>.

These are challenging economic times. We must sustain existing public health capabilities and infrastructure while developing solutions to build the public health systems of the future. Looking ahead towards the year 2020, projected pressures on public health include the increase of the U.S. population from 308 million to 336 million, more diversified age groups (including a 54% increase of citizens over 65, straining the already overburdened health care system<sup>4</sup>), socio-economic tensions, and mass migrations due to adverse weather events<sup>5</sup>. We also know that the advancement and diffusion of scientific technologies will pose threats to health security. Improvements in DNA technologies will increase our vulnerability to attacks from groups who have adapted microbes or created entirely new pathogens with the intent to harm the population. We also face the risk of individuals acting on their own, combining readily available chemicals and other materials to create improvised weapons. The increasing ease of global mobility means that bio-attacks, pandemics, and other health threats to our citizens can more easily travel across borders. Vigilance and forecasting are necessary to mitigate these scenarios and can only be done by sustaining and increasing public health capabilities.

Therefore, it is my privilege to present A National Strategic Plan for Public Health Preparedness and Response. This plan will stimulate scientific and technological innovations, raise the visibility of public health security, and promote the training of the next generation of public health leaders through initiatives such as the CDC Public Health Associates Program<sup>6</sup>. The strategic priorities described are a guide for CDC, the entire public health system, and its stakeholders to secure the health of our nation. I am grateful to the 375 experts from across government and partner organizations who offered input to this plan. CDC is committed to saving lives, protecting people, and saving money through prevention. To do this, it is essential that we continue our collective efforts to improve the nation's health security.

Sincerely,

Ali S. Khan, MD MPH  
Assistant Surgeon General (USPHS) & Director  
Office of Public Health Preparedness & Response  
DHHS/Centers for Disease Control and Prevention

<sup>1</sup> According to the National Health Security Strategy, health security is a state in which the nation and its people are prepared for, protected from, and resilient in the face of, health threats or incidents with potentially negative health consequences.

<sup>2</sup> <http://www.citizencorps.gov/>

<sup>3</sup> Centers for Disease Control and Prevention. Ten Great Public Health Achievements—United States: 2001–2010. Morbidity and Mortality Weekly Report, 60(19):619–623. Available at: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6019a5.htm?s\\_cid=mm6019a5\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6019a5.htm?s_cid=mm6019a5_w)

<sup>4</sup> The National Health Security Strategy defines the healthcare system as the entire span of healthcare delivery, including pre-hospitals, hospitals, long term care, urgent care, community health centers, behavioral health, mental health, treatment, and other facilities, as well as the doctors, clinicians, physicians, nurses, technicians, and other professionals practicing in healthcare delivery.

<sup>5</sup> World Health Organization. Health action in crises: Highlights No 288– 8–21 February 2010. Available at: [http://www.who.int/hac/donorinfo/highlights/highlights\\_288\\_8\\_21february2010.pdf](http://www.who.int/hac/donorinfo/highlights/highlights_288_8_21february2010.pdf)

<sup>6</sup> <http://www.cdc.gov/phap/>

## Introduction

CDC provides technical assistance and resources to state and local public health agencies to support their efforts to build prepared and resilient communities. CDC provides subject-matter expertise and assistance for domestic and global surveillance, laboratory, occupational health and epidemiology functions, and health threats including anthrax, smallpox, influenza and other infectious diseases, food-borne illness, and radiation, among others. CDC's Office of Public Health Preparedness and Response (OPHPR) leads the agency's preparedness and response activities by providing strategic direction, support, and coordination for activities across CDC as well as with local, state, tribal, national, territorial, and international public health partners.<sup>7</sup>

In the decade since September 11th and the anthrax attacks, significant investments have been made in the nation's public health system to respond to all-hazard threats.<sup>8</sup> Public health departments at all levels of government can now quickly staff public health emergency operations centers; there is improved proficiency in laboratories testing for biological and chemical agents across the nation and the globe; and states can receive urgent disease reports and rapidly communicate information about health threats and related preventive and protective actions to the public.<sup>9</sup>

As a result of these investments, CDC has responded to 296 incidents at the national and global levels. The global response to the 2009 H1N1 influenza pandemic that affected more than 214 countries and territories was the most rapid and effective response to an influenza pandemic in history. Investigations of the virus' origin, severity, and spread revealed those potentially at risk, and surveillance data were used to estimate the rate of illness and guide the response in real time. Within two weeks of detecting the virus, diagnostic tools were provided to laboratories in 146 countries resulting in over an 8-fold increase in specimen submissions<sup>10</sup>. Collaborative laboratory and clinical training was provided to more than 6,100 health professionals in 34 countries. Through an international donation program, the vaccine was made available to 86 countries. The lessons and experiences of the 2009 H1N1 influenza response continue to inform preparedness efforts for future influenza pandemics and other public health emergencies.

Federal and state budget cuts threaten these kinds of successes for the future. CDC's budget authority decreased by more than \$740 million in the 2011 fiscal year. Difficult funding decisions in preparedness research, education, and health department support are necessary in order to manage the budget decrease. In addition, we will also need to increase innovation and creativity to best use existing funds. Direct assistance in public health preparedness and response programs can be helpful in the short term, but is not sustainable over the long term. The continuous loss of a public health infrastructure runs the risk of eroding ten years of progress in preparedness and response.

<sup>7</sup> Centers for Disease Control and Prevention. Office of Public Health Preparedness and Response. Available at: <http://www.cdc.gov/phpr/>

<sup>8</sup> The Future of the Public's Health in the 21<sup>st</sup> Century. Institute of Medicine of the National Academies. Washington, DC: GPO 2003.

<sup>9</sup> Public Health Preparedness: Strengthening the Nation's Emergency Response State by State: A report on CDC-funded preparedness and response activities in 50 states, 4 cities, and 8 U.S. insular areas. Available at: <http://www.bt.cdc.gov/publications/2010phprep/>

<sup>10</sup> Jernigan, G. B. et al. Detecting 2009 Pandemic Influenza A (H1N1) Virus Infection: Availability of Diagnostic Testing Led to Rapid Pandemic Response. *Clinical Infectious Diseases (CID)*, Oxford Journal, 2011, S36-S43.

## Vision, Mission, and Values

CDC's preparedness vision for the nation is *people's health protected—public health secured*. This is consistent with the Presidential Policy Directive 8,<sup>11</sup> the Department of Health and Human Services' Healthy People 2020,<sup>12</sup> National Health Security Strategy<sup>13</sup>, and Strategic Plan,<sup>14</sup> the Department of Homeland Security's National Response Framework,<sup>15</sup> and other national preparedness and response plans and doctrine.

To achieve the vision by 2020, it is essential that partners and stakeholders across public health, healthcare, bio-defense, emergency management, and the private sector, work together. In the next decade, CDC will continue to lead partnerships in the public health system to carry out the public health preparedness mission *to strengthen and support the nation's health security to save lives and protect against public health threats*.

CDC will demonstrate leadership in public health preparedness and response by adhering to the following values:

- Making decisions with transparency and accountability
- Engaging partners and leveraging collaborations
- Championing effective communications and information sharing
- Basing decisions on the best available science
- Expanding the evidence base for public health security

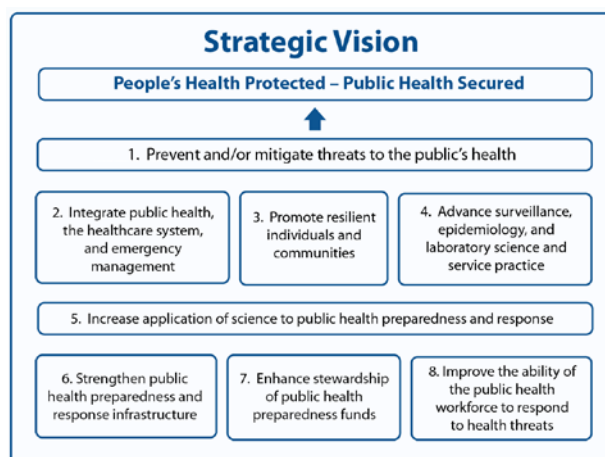
## Objectives

This plan describes eight strategic objectives. Each objective has a set of strategies to enable achievement of the objective. These objectives describe the outcomes needed to achieve the vision.

### 1) Prevent and/or mitigate threats to the public's health

Immediate or emerging public health threats can cause significant harm. Scale, timing, or unpredictability of these threats can overwhelm routine public health system capabilities and have substantial impacts on domestic and global economies, as well as national security. The public health system prevents and responds

to health threats every day, but significant work remains to be done. CDC will work with domestic and international partners in infectious disease, environmental health, food safety, water safety, agriculture, emergency management, homeland security, global



<sup>11</sup> Presidential Policy Directive 8. Washington, DC, 2011. Available at: [http://www.dhs.gov/xabout/laws/gc\\_1215444247124.shtm](http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm).

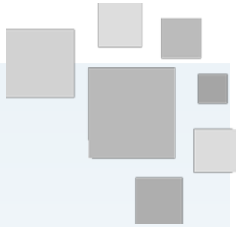
<sup>12</sup> U.S. Department of Health and Human Services. *Healthy People 2020 Summary of Objectives*. Washington, DC: GPO, 2010. Available at: <http://www.healthypeople.gov/2020/topicsobjectives2020/pdfs/HP2020objectives.pdf>.

<sup>13</sup> U.S. Department of Health and Human Services. *National Health Security Strategy of the United States of America*. Washington, DC: GPO, 2009. Available at: <http://www.phe.gov/Preparedness/planning/authority/nhss/strategy/Documents/nhss-final.pdf>.

<sup>14</sup> U.S. Department of Health and Human Services. *U.S. Department of Health and Human Services Strategic Plan Fiscal Years 2010-2015*. Washington, DC: GPO, 2010. Available at: <http://www.hhs.gov/secretary/about/priorities/strategicplan2010-2015.pdf>.

<sup>15</sup> U.S. Department of Homeland Security. *National Response Framework*. Washington, DC: GPO, 2008. Available at: <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>.





migration, worker safety, animal health, and the private sector to prevent or mitigate the effects of both acute and longer-term environmental and other emerging threats to health. Specifically, CDC will focus on the following strategies:

- Increasing public health involvement in national and global health security efforts
- Advancing the ability to measure and address gaps in public health preparedness

## **2) Integrate public health, the healthcare system, and emergency management**

Responding to public health threats and incidents requires public health, the healthcare system, and emergency management to work together under extraordinarily stressful conditions. CDC will collaborate with partners at the national, state, local, tribal, and territorial levels to prevent, protect, respond to, mitigate, prepare for, and recover from public health emergencies. Specifically, CDC will focus on the following strategies:

- Bolstering CDC grant and cooperative agreement coordination with federal and non-federal partners' grants and cooperative agreements
- Developing and promoting tools that enable integration of public health, the healthcare system, and emergency management

## **3) Promote resilient individuals and communities**

Communities need to be resilient in the face of crises. Individuals and communities will be more resilient when they are informed<sup>16</sup> and empowered<sup>17</sup> to cope with public health threats. Resiliency can be achieved at the community level, in part, by increasing integration of the public health and healthcare system, and emergency management, as well as strengthening public health preparedness and response. Public health agencies must be prepared to prevent, detect, respond to, mitigate, and recover from a variety of public health threats. To enhance the capabilities of state and local governments to respond to these threats, CDC administers the Public Health Emergency Preparedness Cooperative Agreement<sup>18</sup> (PHEP). The PHEP supports preparedness by providing technical assistance and funding to public health agencies. CDC will strengthen technical assistance and support to state and local health departments to enable communities to make better public health preparedness and response decisions around the 15 PHEP capabilities to serve as national public health preparedness standards. Specifically, CDC will focus on the following strategy:

- Enhancing public health and healthcare system, and emergency management networks for community public health preparedness

## **4) Advance surveillance, epidemiology, and laboratory science and service practice**

This objective enhances CDC's core public health mandate, including preparedness and response activities, by providing direction in health monitoring and surveillance, epidemiology (e.g., outbreak investigations), and laboratory science and service practices. CDC will work with state and local health departments, and other partners, to strengthen surveillance, epidemiology, and laboratory practices to improve integrated situational awareness, enabling decision makers at all levels take efficient and effective action. Specifically, CDC will focus on the following strategies:

- Integrating public health preparedness and response data reporting systems and processes
- Increasing surveillance, epidemiology, and laboratory science research, equipment, modeling, and tools

<sup>16</sup> Informed individuals: understand their personal responsibilities; know where to turn to for information; know where and when to seek medical attention; have the means to take such action; and help others who need assistance. Likewise, informed communities know how to respond and with whom to collaborate both during preparedness planning and response.

<sup>17</sup> Empowered individuals have the information, skills, resources, and authorities they need to protect their health and safety. Empowered communities have the appropriate authorities they need to be able to prevent, prepare for, and respond to an emergency.

<sup>18</sup> <http://www.cdc.gov/phpr/capabilities/index.htm>



## 5) Increase the application of science to preparedness and response practice

Because the current evidence/science base for public health preparedness is limited and insufficient, CDC will collaborate with partners and stakeholders to use evidence-based practice, applied research, and lessons learned to improve public health practice. The application of knowledge to practice has multiple components, including timely information distribution, diffusion, adoption, implementation, scalability, and sustainability. CDC will support and sustain research to build the evidence base for public health preparedness and response, including continuing a process through which research needs are continually identified and addressed. CDC will also collaborate with and enable partners and stakeholders to access and incorporate research findings into public health practice. The goal is improved capability<sup>19</sup> for CDC and state and local health departments in public health preparedness and response. Specifically, CDC will focus on the following strategies:

- Expanding knowledge that contributes to the reduction/mitigation of threats to the public's health
- Promoting tools and promising practices to improve public health preparedness and response practice

## 6) Strengthen public health preparedness and response infrastructure

CDC will support and enhance public health preparedness infrastructure. These efforts will include both physical and logistical capacity to prepare and respond to events. Physical infrastructure has multiple components, including communications, health information, and information technology infrastructures, emergency operations centers, and response and support staff. It is important to assess and assure the mobility and adequacy of this infrastructure continuously, as the risks of public health threats change over time. This objective, along with objectives seven and eight, forms the "resource base" that is necessary for public health security. Specifically, CDC will focus on the following strategies:

- Enhancing, global, national, state, local, tribal, and territorial preparedness and response capabilities (e.g., 15 PHEP capabilities, including but not limited to medical countermeasure dispensing, communications, and laboratory via the provision of resources, technical assistance, and training)
- Sustaining public health system capacities (e.g., laboratory, communications, health information, emergency operations centers, response and support staff, and information technology infrastructure) for preparedness and response, and continuously assessing the adequacy of the infrastructure and systems
- Enhancing the ability to redirect infrastructure, people, and systems when necessary to address a response in collaboration with partners

## 7) Enhance stewardship of public health preparedness funds

CDC will improve stewardship of public health preparedness funds. This effort includes leveraging resources, reducing duplicative expenditures, improving economic justification for investments in preparedness, and promoting the use of resources. Public health preparedness and response activities rely on continuous and adequate funding and resources. Appropriate use and availability of resources are critical components in all preparedness and response activities. Specifically, CDC will focus on the following strategies:

- Promoting effective use of public health preparedness and response funding
- Strengthening the effectiveness and timeliness of communicating the importance of preparedness to the public, elected officials, and other policymakers

---

<sup>19</sup> Capability refers to effective use of knowledge obtained from research to improve practice, (e.g., effective use of epidemiologic and laboratory data for preparedness and response).

## 8) Improve the ability of the public health workforce to respond to health threats

Public health leadership will ensure that the public health workforce has the capacity and capability to prepare for, mitigate, respond to, and recover from emergencies. Gaps in worker competency and organization/system capabilities must be addressed.

Competency-based training in preparedness and response for the public health workforce will be developed and implemented. Strategies will be employed to ensure that public health training systems support national health security and are based on relevant, available, and accessible science, evaluation, and quality improvement methods. These efforts will support the everyday functions of public health application. Internally, CDC will recruit competent public health professionals and retain and develop staff through training and incentives such as experiential and leadership opportunities. Specifically, CDC will focus additional efforts beyond its routine activities through the following strategies:

- Enhancing public health preparedness and response workforce competencies
- Identifying strategies for greater distribution capacity for and timely provision of medical countermeasures

---

### Quick Wins

The strategies for each objective are supported by initiatives, or more specific activities and projects. While many remain under development, eight “quick win” initiatives are slated for completion in the coming months:

1. Provide targeted information to policymakers highlighting the contributions of public health preparedness as part of national security
2. Implement a communications campaign to raise awareness about public health preparedness and the role of citizens in preparedness
3. Develop a cadre of deployable CDC representatives to state emergency operations centers
4. Collaborate with the Federal Emergency Management Agency to define a position for health advisors in the Incident Command System<sup>20</sup>
5. Provide science-based guidance for medical countermeasure use and dispensing of products (utilization policy)
6. Achieve Food and Drug Administration approval of a core set of laboratory response network rapid molecular tests used by CDC to detect disease
7. Develop a risk-based triage system for Etiologic Agent Import Permit requests<sup>21</sup> to identify those that may require additional oversight activities such as on-site inspections
8. Develop and promote a toolkit for state and local public health departments around the 15 capabilities in the 2011 Public Health Emergency Preparedness Cooperative Agreement

In addition, there are examples of CDC-specific projects that will continue as ongoing and progressive efforts, including the following:

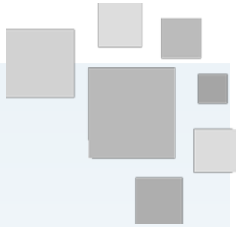
1. CDC will continue to conduct dose sparing/dividing studies for Anthrax Vaccine Absorbed with National Institutes of Health and Health and Human Services’ Biomedical Advanced Research and Development Authority in order to evaluate the potential to expand the existing stockpile
2. CDC will continue to provide site-specific technical assistance to state and local public health departments with the 2011 Public Health Emergency Preparedness Cooperative Agreement to support their grant requirements
3. CDC will continue to collaborate with other federal partners to enhance laboratory biosafety and biosecurity to prevent and mitigate threats to the public’s health

---

<sup>20</sup> <http://www.fema.gov/emergency/nims/IncidentCommandSystem.shtm>

<sup>21</sup> <http://www.cdc.gov/od/eaipp/docs/faqs.pdf>



- 
4. CDC will incorporate meta-leadership principles to enhance the communication and support with other federal agencies and organizations

---

## Implementation

---

The National Strategic Plan for Public Health Preparedness and Response is the road map for preventing the erosion of existing capabilities and to ensure the public's health remains secured from all hazards. The plan will be updated biennially to assess progress related to the plan's objectives. CDC is furthering development of a detailed plan, which will include example initiatives and proposed measurements for each objective.

## Appendix A: Contributors




Jerry Aben, CDC	Jennifer Brooks, CDC	Debra D'Alfonso, CDC
William J. Adams, CDC	Jae Brown, CDC	Richard Danila, CSTE
Peter Alvarez, CDC	Vance Brown, CDC	Nick Davidson, South Carolina DHEC
Glenn Amos, CDC	Sherrie Bruce, CDC	Harry L. Davis, CDC
Andrea Anason, CDC	Jeff Bryant, CDC	Xiaohong Mao Davis, CDC
Fred Angulo, CDC	Jim Buehler, CDC	Drew Dawson, DOT
Joe Anelli, USDA	David L. Bull, CDC	Kevin DeCock, CDC
Kenneth Archer, CDC	Paula Burch, CDC	Scott Deitchman, CDC
Aaron Arnold, CDC	George P. Burdell, CDC	Lisa Delaney, CDC
Janice Ashby, CDC	Bernadette Burden, CDC	Lynda Delaney, CDC
J. Rex Astles, CDC	Greg Burel, CDC	David DeSantis, CDC
Lynn A. Austin, CDC	Kelly B. Burkitt, CDC	Yvette Diallo, CDC
Mark E. Austin, CDC	Bruce Burney, CDC	Pamela Diaz, CDC
Christine Avers, CDC	Lane Burris, CDC	Kelly Dickinson, CDC
Heidi Avery, NSS	Karen Byers, AARP	Ed Dieser, CDC
Kerrethel Avery, CDC	Debra Byrd, CDC	Sue Dietz, CDC
Francis A. Bader, CDC	Vince Campbell, CDC	Bill Digioia, CDC
Frank Bailey, AARP	Kenneth G. Castro, CDC	John Donahue, CDC
Russell G. Baker, CDC	Doriel Chandler, CDC	Adrienne Donner, CDC
Gerrit Bakker, ASTHO	Mark A. Channer, CDC	Scott Dowell, CDC
James Banaski, CDC	Tom Chapel, CDC	Diane E. Dubinsky, AAP
Lori Bane, CDC	Carl B. Chapman, CDC	Emily Eisenberg, CDC
Jackie L. Barnes, CDC	Joni S. Charme, CDC	Barbara Ellis, CDC
Drue H. Barrett, CDC	Frances D. Chichester-Wood, CDC	Adele R. Etheridge, CDC
Mark M. Bashor, CDC	Brandon R. Childress, CDC	Rick Ehrenberg, CDC
Denise Beauvais, CDC	Glen Christie, CDC	Daniel B. Fagbuyi, AAP
Beth Bell, CDC	Joan Cioffi, CDC	Kenneth D. Farrey, CDC
Michael Bender, CDC	David W. Clark, CDC	Tony Fauci, NIH
Sherri Berger, CDC	Bruce Clements, Texas DSHS	Lindsay J. Feldman, CDC
Joseph Bertufllo, CDC	Nina Cleveland, CDC	Peg Fenner, CDC
Laura Biesiadecki, ASPH	Sharon R. Coleman, CDC	Kevin Fenton, CDC
Carolyn Black, CDC	Janet L. Collins, CDC	Norm Fikes, CDC
James Blaine, CDC	Joanne Cono, CDC	V. Scott Fisher, NACCHO
James S. Blumenstock, ASTHO	Barry Copeland, CDC	Shannon Fitzgerald, Pennsylvania DOH
Steven F. Boedigheimer, CDC	Cristin Corcoran, CDC	Aaron Fleischauer, CDC
Sandra E. Bonzo, CDC	Toby Crafton, CDC	Lynda Flowers, AARP
Coleen Boyle, CDC	James B. Crockett, CDC	Donald A. Flowers, CDC
Chris Braden, CDC	Sean Cucchi, CDC	Tina Forrester, ATSDR
Christine C. Bradshaw, CDC	Cecilia Curry, CDC	Mark Frank, CDC
Robert Briley, CDC	David Daigle, CDC	Rodrick Frazier, CDC
Jason E. Broehm, CDC	Jason Dailey, CDC	John E. Fredenberg, CDC

Renee Funk, CDC  
 Kevin Gallagher, CDC  
 Donna Garland, CDC  
 Alex Garza, DHS  
 Jean A. Gaunce, CDC  
 Jane Getchell, APHL  
 Neelam D. Ghiya, CDC  
 Paul Giannone, CDC  
 Jerilyn Gilbert, CDC  
 Randy Glascock, CDC  
 Carol Glazer, NOD  
 Tonica Gleaton, CDC  
 Tom Gomez, USDA  
 Richard A. Goodman, CDC  
 Jesse Goodman, FDA  
 Erin K. Grasso, CDC  
 Michael Grayson, CDC  
 Margaret Griffin, CDC  
 Linnet P. Griffiths, CDC  
 Margaret Grimes, CDC  
 Stephanie Griswold, CDC  
 John Halpin, CDC  
 Douglas H. Hamilton, CDC  
 Derek Hardy, CDC  
 Joe Henderson, CDC  
 Sarah Henderson, CDC  
 Roy A. Herman, CDC  
 John Herring, CDC  
 Jack Herrmann, NACCHO  
 Allen Hogan, CDC  
 Daniel Holcomb, CDC  
 Laura Holgate, NSS  
 John Horan, CDC  
 Jennifer Hornsby-Myers, CDC  
 Harvey Howard, CDC  
 Richard Hunt, CDC  
 Ed Hunter, CDC  
 Robin Ikeda, CDC  
 John Iskander, CDC  
 Annette Jacek, Pennsylvania DOH  
 Bassam M. Jarrar, CDC  
 Michael F. Jelley, CDC  
 Matthew Jennings, CDC

Daniel B. Jernigan, CDC  
 Laura Jevitt, LRN  
 Alison Johnson, CDC  
 Elise Johnson, FDA  
 Rudy Johnson, CDC  
 Alison Johnson, CDC  
 LaBrina M. Jones, CDC  
 Brian Kamoie, NSS: Resilience  
 Directorate  
 Theresa Kanter, CDC  
 Kathi Kellar, CDC  
 Mim Kelly, CDC  
 Veronica Kennedy, CDC  
 David N. Kennedy, CDC  
 Rima Khabbaz, CDC  
 Ali S. Khan, CDC  
 Ron Kinney, South Carolina DHEC  
 Margaret Kitt, CDC  
 Richard Klomp, CDC  
 Bob Kobelski, CDC  
 Howard Koh, HHS  
 Denise Koo, CDC  
 Chris Kosmos, CDC  
 Michael Kurilla, NIH  
 Derrick Lake, CDC  
 Randy Langston, South Carolina DHEC  
 Gregory Paul Lanman, CDC  
 Mike Latham, CDC  
 Max Learner, South Carolina DHEC  
 Sherline Lee, CDC  
 John R. Lehnher, CDC  
 Laura Leidel, CDC  
 Dennis D. Lenaway, CDC  
 Deborah A. Levy, CDC  
 Dara Alpert Lieberman, TFAH  
 Kim Lindsey, CDC  
 Joe Little, CDC  
 Patty Lolas, South Carolina DHEC  
 Patrick Ludford, CDC  
 Nicole Lurie, HHS  
 Pamela Lutz, CDC  
 Kevin W. Lyday, CDC  
 Carmen Maher, FDA

Beth Maldin Morganthau, New York City  
 DOHMH  
 Chris N. Mangal, APHL  
 David L. Maples, CDC  
 Betty A. Marshall, CDC  
 Lise Martel, CDC  
 Gordon May, CDC  
 Lisa McCants, CDC  
 Vondgaurus McClee, CDC  
 Janice McMichael, CDC  
 Nabiha Megateli-Das, ICF Macro  
 Michael Melneck, CDC  
 Chuck Menchion, CDC  
 Toby Merlin, CDC  
 Joy Miller, HHS  
 Lee T. Miller, CDC  
 Mark A. Miller, CDC  
 Yoon Miller, CDC  
 Judith A. Monroe, CDC  
 Margaret Moore, CDC  
 Glenn Moore, CDC  
 Lorenzo Moore, CDC  
 Robert Morris, CDC  
 Eric Morrissey, CDC  
 Melanie A. Moser, CDC  
 Tony Moulton, CDC  
 Dara L. Murphy, CDC  
 Nia Murphy, CDC  
 Shivani Murthy, CDC  
 Phil Navin, CDC  
 Lew K. Newlin, CDC  
 Glen Nowak, CDC  
 Matthew Nunn, CDC  
 Jennifer Nuzzo, UPMC  
 Ann O'Connor, CDC  
 Jean O'Connor, CDC  
 Ralph O'Connor, CDC  
 Stephen Papagiotas, CDC  
 Sarah Park, Hawaii DOH  
 Anita Patel, CDC  
 Don Peace, South Carolina DHEC  
 Harry Peagler, CDC  
 Amy B. Peeples, CDC



Nicki Pesik, CDC  
Ted Pestorius, CDC  
Paula Peters, CDC  
Todd Piester, CDC  
Harald Pietz, CDC  
Jim Pirkle, CDC  
Jennifer Pitcher, Indiana DOH  
Kristin Pope, CDC  
Diane Porter, CDC  
William Porter, CDC  
Diane Porter, CDC  
Bill Porter, CDC  
Joe Posid, CDC  
Michael J Primeau, New York State DOH  
Beverly Pritchett, Washington, D.C. DOH  
Nathan Pyles, CDC  
Patricia Quinlisk, CSTE  
Marilyn Radke, CDC  
Steve Redd, CDC  
Andy Rein, CDC  
Steven L. Reynolds, CDC  
Bill Rich, CDC  
Cyndi Rilling, CDC  
George Roark, CDC  
Shawn T. Robinson, CDC  
Terri L. Rodney-Brown, CDC  
Henry Rolka, CDC  
Cassandra Rolle, CDC  
Kenneth Rose, CDC  
Jason Rothbard, CDC  
Lisa Rotz, CDC  
Edward N. Rouse, CDC  
Tom Russo, South Carolina DHEC  
Peter Rzeszotarski, CDC  
Michael H. Sadagursky, CDC  
Michael J. Sage, CDC  
Cecelia Sanders, CDC  
Lee Sanderson, CDC  
James Scales, CDC  
Laurie Schnepf, CDC  
Anne Schuchat, CDC  
Tina Scott-Morgan, CDC  
Laura Segal, TFAH

Dean Seneca, CDC  
Rick Serino, DHS  
Trina R. Sheets, NEMA  
Charles Shepherd, CDC  
Craig Shepherd, Tennessee DPH  
Reed Sheridan, CDC  
Pattie Simone, CDC  
Jennifer Sinibaldi, ASTHO  
Tom Sinks, CDC  
Thomas W. Skinner, CDC  
Jessica Smith, CDC  
Duane Smith, CDC  
Lee Smith, CDC  
Gray Smithson, CDC  
Robyn Sobelson, CDC  
Dan Sosin, CDC  
James S. Spahr, CDC  
Joseph Spalviero, CDC  
Ross Spears, CDC  
Scott Sproat, Oklahoma DPH  
Raffi L. Standifer, CDC  
Jason Stear, CDC  
Lander Stoddard, CDC  
David Strickland, DOT  
Felicia A. Suit, CDC  
Mark Swanson, CDC  
Todd Talbert, CDC  
Robert V. Tauxe, CDC  
Mark Teachman, USDA  
Stephen B. Thacker, CDC  
Rene Tharpe, CDC  
John Theofilos, CDC  
Craig Thomas, CDC  
Eric Toner, UPMC  
Jonathan Trapp, CDC  
Tracee Treadwell, CDC  
Dana Tulis, EPA  
Richard M. Turner, CDC  
James Tyson, CDC  
Joe Vital, CDC  
Steven Wagner, Ohio Dept. of Health  
Lisa Walker, CDC  
Eli W. Warnock, CDC

Carolyn M. Washington, CDC  
Keith West, CDC  
Rob Weyant, CDC  
Jamie White, CDC  
Gamunu Wijetunge, DOT  
Sarah D. Wiley, CDC  
Craig Wilkins, CDC  
Gail Williams, CDC  
Janet Williams, CDC  
Kristin N. Williams, CDC  
Mildred M. Williams-Johnson, CDC  
Angela Wood, CDC  
Rick Woolman, DHS  
Mark T. Wooster, CDC  
Brenda Wyatt, CDC  
Andrea Young, CDC  
Robert L. Young, CDC  
Stephanie Zaza, CDC  
Beth Zimmerman, DHS