Preparedness 101:
Promotion, Funding, and the Future

Joanne D. Andreadis, PhD
Senior Advisor for Laboratory Preparedness
Office of Public Health Preparedness and Response

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THEN AND NOW
### Progress in Preparedness

<table>
<thead>
<tr>
<th>Then</th>
<th>Now</th>
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<tbody>
<tr>
<td>Funding for public health preparedness programs was non existent before 1996. Before 1999, CDC did not provide funding to all states for public health preparedness.</td>
<td>After the 2001 attacks, Congress appropriated funding for CDC to provide to all states to improve their response capabilities.</td>
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<td>Before 1999, there was no national stockpile of medical supplies to be used during emergencies. In 2001, few states had written plans for receiving, distributing, and dispensing stockpiled assets.</td>
<td>CDC’s Strategic National Stockpile now ensures availability of key medical supplies. All states now have plans to receive, distribute, and dispense stockpiled assets.</td>
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<td>Before 1999, CDC performed the majority of testing to detect and confirm the presence of biological threat agents. Rapid molecular testing methods were not generally available.</td>
<td>More than 160 laboratories across the nation in CDC’s Laboratory Response Network-B can now perform these tests.</td>
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<td>Before 1999, public health laboratories did not have clinical chemistry emergency response capabilities.</td>
<td>LRN-C establishes national capacity that includes 54 laboratories with 13 CLIA accredited analysis methods for 50 toxicants including chemical warfare agents, naturally occurring toxins, toxic elements, and industrial chemicals.</td>
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<td>Before 2000, no secure system was available to share information about emerging health threats.</td>
<td>Epi-X now provides a secure, web-based communication system that allows sharing of preliminary health surveillance information.</td>
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<td>In 2001, CDC coordinated state and local response efforts from an ad-hoc emergency operations center with limited equipment.</td>
<td>CDC now operates a state-of-the-art command center 24/7/365 to monitor health threats and coordinate emergency response.</td>
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How OPHPR Supports Preparedness

The Office of Public Health Preparedness and Response (OPHPR) helps the nation prepare for and respond to urgent public health threats by providing strategic direction, coordination, and support for all of CDC’s preparedness and emergency response activities.

- **Strategy and Policy**
  - Establishes strategy and policies to support federal, state, and local preparedness

- **Funding**
  - Manages and monitors Preparedness and Emergency Response funding appropriated each year by Congress of approximately $1.3 billion to support CDC and state and local activities

- **Operations**
  - Manages key operational and regulatory public health preparedness programs
OPHPGR Operational & Regulatory Functions

- State and Local Readiness
- Strategic National Stockpile
- Select Agents and Toxins
- Emergency Operations Center
Range of Public Health Threats

2001
- World Trade Center Attacks
- Anthrax Attacks

2002
- West Nile Virus

2003
- Columbia Space Shuttle Disaster
- SARS; Monkey Pox; Northeast Blackout
- Hurricane Isabel
- Influenza
- California Wildfires; Ricin; Tularemia; Anthrax; BSE (Mad Cow Disease)

2004
- Influenza Vaccine Shortage
- Guan Typhoon
- Ricin Domestic Response
- G8 Summit
- Summer Olympics
- Democratic National Convention
- Republican National Convention
- Hurricanes Charley, Frances,

2005
- Marburg Virus
- Hurricanes Katrina, Rita, and Wilma

2006
- Tropical Storm Ernesto
- Mumps
- E.Coli

2007
- XDR/MDR TB
- Hurricane Dean

2008
- Satellite Interception
- Salmonella Outbreak
- E. coli Outbreaks
- Hurricane Dolly
- Tropical Storm Edouard
- Hurricanes Fay, Gustav, Hanna, and Ike
- Presidential Inauguration
- H1N1 Influenza

2009
- Salmonella Typhimurium outbreak

2010
- NH Anthrax, Haiti Earthquake, Deepwater Horizon Oil Spill, Haiti Cholera Outbreak

2011
- Japan Earthquake and Tsunami
Preparedness Pays Off

- **H1N1 Pandemic (2009)**
- **Foodborne Outbreak: Cantaloupes (2011)**
- **Anthrax: Minnesota (2011)**
Preparedness Funding

- Congress appropriated funding to CDC to support preparedness nationwide in state, local, and territorial public health departments.

- CDC provides funding and technical assistance for state and local public health departments through the Public Health Emergency Preparedness (PHEP) cooperative agreement.

- As of 2012, CDC provides ~$657 million/year to maintain critical front-line staff and preparedness systems.
Amount Allocated Per Capability *

Non-Pharmaceutical Interventions (1%)
Fatality Management (1%)
Medical Surge (1%)
Mass Care (1%)
Community Recovery (1%)
Responder Safety and Health * (1%)
Volunteer Management (1%)
Emergency Public Information and Warning * (4%)
Medical Materiel Management and Distribution * (4%)
Medical Countermeasure Dispensing * (6%)
Emergency Operations Coordination * (6%)
Information Sharing * (7%)
Community Preparedness * (13%)
PH Surveillance and Epi Investigation * (25%)
Public Health Laboratory Testing * (26%)

* Preliminary analysis of self-reported data for FY11
Self-Reported Impact on Laboratories

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<tr>
<th>Percentage of SPHLs Reporting</th>
<th>Impact Category</th>
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<tbody>
<tr>
<td>33%</td>
<td>Unable to participate in national meetings or conferences</td>
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<tr>
<td>35%</td>
<td>Unable to provide or reduce the number of training courses or outreach within your jurisdiction</td>
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<tr>
<td>40%</td>
<td>Unable to attend training courses</td>
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<tr>
<td>40%</td>
<td>Lost full-time staff position</td>
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<tr>
<td>44%</td>
<td>Unable to renew service/maintenance contracts for instrumentation</td>
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2011 APHL Annual All-Hazards Laboratory Preparedness Survey
Self-Reported Workforce Challenges that Impact Preparedness

2011 APHL Annual All-Hazards Laboratory Preparedness Survey
Future Reductions

Future reductions to state and local preparedness and response funding, primarily through PHEP grant to state and local health departments, could result in the following:

- Continue to compromise national health security, jeopardize lives, and lead to increased health, economic, and societal impact of public health threats
- Elimination of the Level 1 chemical laboratory program
- Elimination of some or all of the 38 mid-to-senior Career Epidemiology Field Officers (CEFO) and public health advisors placed within state and local public health jurisdictions
- Degrade national capability for rapid disease detection, monitoring, and real-time situation awareness through access to existing data from health care organizations
FUTURE
Ongoing Challenges

- New and emerging infectious diseases
- Anthrax and radiological/nuclear preparedness gaps
- Continuing economic crisis and impact on public health
- Erosion of highly skilled public health work force
- Technology advancement creating new hazards
- Globalization (people, food, pets) allowing rapid dissemination of health threats

Opportunities

- Improve linkages between domestic and global health security
- Leverage infrastructure investments across USG
Path Forward

- Steadfast determination
- Prioritize and coordinate investments
- Improve efficiency through innovation
- Capability-driven all hazards approach
- Partnerships
- Granular metrics
- Communication
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Joanne D. Andreadis
jandreadis@cdc.gov
http://blogs.cdc.gov/publichealthmatters