# Implementation of the *PAHPA*: Public Health Preparedness and Response Systems Research Agenda



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#### **Outline**

- What is the Pandemic and All-Hazards Preparedness Act (PAHPA) legislation as it relates to public health preparedness and response systems research?
- What is the importance of research for public health preparedness?
- What are CDC's current research priorities and funding opportunities related to public health preparedness as required by PAHPA?





## Public Health Systems and Research

- Healthy People 2010: Understanding and Improving Health, 2001
- Institute of Medicine Report, The Future of the Public's Health in the 21<sup>st</sup> Century, 2002
- Public Health Systems Research: Setting a National Agenda, 2003
- Robert Wood Johnson Foundation funding for Public Health Systems and Services Research, 2005
- Congressional Mandate for DHHS Secretary to establish a public health systems research agenda based on Federal, State, local, and tribal public health preparedness priorities, 2006





## What is Public Health Systems Research?

"A field of study that examines the organization, financing, and delivery of public health services within communities, and the impact of these services on public health."

Mays, GP et.al. J Public Health Manag Pract 2003

"Public health systems are the constellation of individuals and organizations in the public and private sector that provide information and assets to promote population health, provide health care delivery, prevent disease and injury and include health care providers, insurers, purchasers, public health agencies, faith-based organizations, and entities that operate outside the traditional sphere of health care. Public health systems research investigates the functions, operations, structure, and interactions of public health systems."

CDC/COTPER, 2008





## Congressional Mandate: "Pandemic and All-Hazards Preparedness Act"

(PAHPA: Section 319F of the Public Health Service Act 42 U.S.C. 247d-6(d)(7)

Mandated that Centers for Public Health Preparedness (CPHP) conduct research

"(7) PUBLIC HEALTH SYSTEMS RESEARCH.

In consultation with relevant public and private entities, the Secretary shall define the existing knowledge base for public health preparedness and response systems, and establish a research agenda based on Federal, State, local, and tribal public health preparedness priorities. As a condition of receiving funding from the Secretary under this subsection, a Center shall conduct public health systems research that is consistent with the agenda described under this paragraph"





#### PAHPA Mandate for Public Health Systems Research:

- Define the knowledge base for public health systems preparedness at the Federal, State, local, and tribal level.
- 2. Determine gaps in the knowledge base and Determine priorities.
- 3. Develop a research agenda for the priorities.
- 4. Conduct research to address the priorities.





## Implementation of the PAHPA:

What is the importance of public health systems research in preparedness and response?





CDC Health Protection Goals
Healthy People, Healthy Places,
Preparedness, and Global Health

Public Health Policies, Programs, and Practices

Research

Innovation New priorities Threats & emergencies Achieve goals Inform policy Improve decisions, services, and response







Mobilizing State by State

A CDC Report on the Public Health Emergency Preparedness Cooperative Agreement February 2008

http://emergency.cdc.gov/publications/feb08phprep/





- Preparedness Challenge: "Disease Surveillance Systems need to be strengthened..."
- Possible Research Questions: What are the barriers to sharing health information across organizational lines? What are workable strategies to remove these barriers and to establish shared, compatible data systems and networks? How can resources be leveraged to maintain such networks?





- Preparedness Challenge: "Public health departments need to sustain a system for allhazards planning, training exercising, and improving."
- Possible Research Questions: What is the correlation between training modalities and exercises and improved response capabilities? What is the retention time for newly developed skills? What is the optimal frequency for retraining?





- Preparedness Challenge: "Public health professions need to continue planning and exercising with governmental agencies and the community..... To build and maintain relationships with response partners."
- Possible Research Questions: Which non-governmental organizations should health departments engage for preparedness? What is the best level for their involvement in preparedness activities? How do you demonstrate the value of these organizational relationships for enhanced preparedness and response capabilities?





- Preparedness Challenge: "...more progress is needed to expand interoperable communication across jurisdictions and levels of government."
- Possible Research Questions: What are the barriers to effective communication? What changes, strategies, or technological innovations can be implemented to improve communications across jurisdictions?





## Implementation of the PAHPA:

What are CDC's current research priorities and funding opportunities related to public health preparedness as required by *PAHPA?* 





## Examples of CDC priorities in public health preparedness systems research

- Measuring readiness
- Measuring and improving exercise fidelity
- Improving effectiveness of incident management
- Increasing worker preparedness and resilience
- Protecting vulnerable populations
- Optimizing supply chains
- Improving information or knowledge management





## Why public health preparedness systems research?

- \$7Billion in funds infused into state and local preparedness
- Need a rigorous and systematic investigation to:
  - quantitatively describe the complex system,
  - identify gaps and,
  - apply research findings to affect policy and programmatic improvements
- Young field fosters innovative approach





# Research Priorities in Emergency Preparedness and Response for Public Health Systems: Institute of Medicine Letter Report http://emergency.cdc.gov/planning/iomreport2008.asp

#### Recommended Priorities

- 1. Enhance the Usefulness of Training
- 2. Improve Communications in Preparedness and Response
- 3. Create and Maintain Sustainable Preparedness and Response Systems
- 4. Generate Criteria and Metrics to Measure Effectiveness and Efficiency





#### PAHPA Related Research at CDC

#### Purpose:

 Conduct public health systems research on preparedness and response capabilities at the Federal, State, local and tribal levels.

#### Focus:

- Public Health Emergency and Response Content
- Systems in the context of public health emergency preparedness and response
- Management of public health materiel, personnel, and information supply chains in complex and rapidly changing systems





#### PAHPA Related Research at CDC

- Research Funding Opportunity Announcement: TP08-001,
   *Preparedness and Emergency Response Research Centers:* A Public Health Systems Approach was published
   February 15, 2008 on <a href="www.grants.gov">www.grants.gov</a>
- Mechanism: Research Program Project Center Grants (P01) 5-7 Awards in a Program Totaling ~\$9 million\* Average award ~\$1.7 million with ceiling of \$2.0 million Core Component up to \$300K Up to five research projects, up to \$350K each, that are interrelated, interdependent, and multidisciplinary
- Awards announced by September 30, 2008
   All Awards are Pending the Availability of Funds





## CDC Preparedness Research

- □ Improving Public Health Practice through Translation Research (R18)
- Small Business Innovation Research





# Future Preparedness Research WWW.GRANTS.GOV





## Questions?





