

# Preparedness and Emergency Response Research Centers (PERRCs)

The 2006 Pandemic and All-Hazards Preparedness Act (PAHPA) created the basis for the Centers for Disease Control and Prevention (CDC) to expand research into the public health systems necessary for any emergency response. Following the passage of PAHPA, CDC partnered with the Institute of Medicine to define the field of public health preparedness systems research and prioritize a subset of research themes for investigation.

In 2008, CDC's Coordinating Office for Terrorism and Preparedness Emergency Response (COTPER) funded seven accredited schools of public health in universities to evaluate the structure, capabilities, and performance of public health systems for preparedness and emergency response activities, through the creation of a Preparedness and Emergency Response Research Center (PERRC) at each university. Two additional PERRCs were funded in 2009. The broad research priorities being addressed by these PERRCs are: enhancing the usefulness of training; improving timely emergency communications; creating and maintaining sustainable response systems; and generating criteria and metrics for the effectiveness of preparedness and response activities.

## PERRCs

**Emory University**  
**Rollins School of Public Health**  
*Principal Investigator: Ruth L. Berkelman, MD*

*A Public Health Systems Approach.* This PERRC is examining the organizational characteristics of local and state public health systems for preparedness and emergency response.

- ❖ **Project 1:** Assessing the Utility of Incident Command Systems (ICSs) and Emergency Operations Centers (EOCs) in Public Health Crises.
- ❖ **Project 2:** Academic-Community Partnerships in Preparedness.
- ❖ **Project 3:** Improving Disaster Planning for Nursing Home, Home Health, and Dialysis Providers.
- ❖ **Project 4:** Immunization Systems and Public Health Preparedness.

**Harvard School of Public Health**  
*Principal Investigator: Kasisomayajula Viswanath, PhD*

*Linking Assessment and Measurement to Performance in Public Health Emergency Preparedness Systems (LAMPS).* Researchers are generating valid and reliable criteria and metrics to assess and improve public health emergency preparedness.

- ❖ **Project 1:** LAMPS Systems Improvement.
- ❖ **Project 2:** LAMPS Engineering Systems Analysis.
- ❖ **Project 3:** LAMPS PHEP Communications.
- ❖ **Project 4:** LAMPS PHEP Drills and Exercises.

**Johns Hopkins Bloomberg School of Public Health**  
*Principal Investigator: Jonathan M. Links, PhD*

*Mental and Behavioral Public Health Systems Preparedness Research.* Researchers are working on building the capacity, competency, and coordination of the public health systems' ability to prepare for and respond to mental and behavior health aspects of emergencies.

- ❖ **Project 1:** Applying the Extended Parallel Process Model to Willingness to Respond in the Public Health System.
- ❖ **Project 2:** Fostering Coordinated Mental Health Preparedness Planning.
- ❖ **Project 3:** Role of the Media in Resistance.
- ❖ **Project 4:** Legal and Ethical Assessment Concerning Mental and Behavioral Health Preparedness.

**University of California, Berkeley (New in 2009)**  
*Principal Investigator: Tomas Aragon, MD, DrPH*

*Achieving Public Health & Community Readiness for Today's Challenges and Future Threats.* This PERRC's research is examining communications to vulnerable populations, epidemiology networks in preparedness, and the California Exercise Laboratory systems using statewide operations-based exercises.

- ❖ **Project 1:** All-Hazards Communication to Improve the Resilience of Vulnerable Populations.
- ❖ **Project 2:** Fostering Early Warning, Investigation, Surveillance: Epidemiology Networks in Action.
- ❖ **Project 3:** Closing Chemical, Biological, Radiological, and Nuclear Gaps of Public Health All-Hazards Preparedness.
- ❖ **Project 4:** California Exercise Laboratory (EXLAB): Systems Research Using Statewide Operational-Based Exercises.

**University of California, Los Angeles**  
**(New in 2009)**

**Principal Investigator: Kimberly Shoaf, DrPH**

*Preparedness and Emergency Response Research Centers: A Public Health Systems Approach.* This PERRC's research is focused on creating and maintaining sustainable preparedness and response systems with focus on school systems and faith-based organizations. Additional work is focused on developing environmental health resilience.

- ❖ **Project 1:** Fostering Collaboration between Public Health and School Systems for Preparedness.
- ❖ **Project 2:** Building Effective Public Health - CBO/FBO Partnerships for Disaster Readiness.
- ❖ **Project 3:** Community Based Participatory Research (CBPR) to Develop Environmental Health Emergency Resilience.

**University of Minnesota School of Public Health**

**Principal Investigator: Debra K. Olson, DNP, MPH, RN**

*Simulations and Exercises for Educational Effectiveness.* Researchers are working to identify best practices for the conduct of training and identify metrics for measuring the dimensions of effectiveness and efficiency in improving and sustaining high-level performance of public health preparedness systems.

- ❖ **Project 1:** Retrospective Cohort Study of Responders Training and System Performance.
- ❖ **Project 2:** Effectiveness of Simulated Disaster Response Scenarios.
- ❖ **Project 3:** Creating High Reliability Teams for Public Health Preparedness.
- ❖ **Project 4:** Preparedness and Emergency Response Using Simulated Environments (PERUSE).

**University of North Carolina at Chapel Hill**  
**Gillings School of Global Public Health**

**Principal Investigator: Edward L. Baker, MD, MPH**

*Preparedness and Emergency Response Research Center.* This PERRC supports research in four areas to apply state-of-the-art public health systems research methodologies to study the specific elements of the North Carolina public health preparedness system.

- ❖ **Project 1:** Accreditation Systems and Public Health Preparedness.
- ❖ **Project 2:** Surveillance Systems Research.
- ❖ **Project 3:** NC Public Health Regional Surveillance Teams.
- ❖ **Project 4:** Engineering the North Carolina Health Alert Network.

**University of Pittsburgh**  
**Graduate School of Public Health**

**Principal Investigator: Margaret A. Potter, JD**

*A Public Health Systems Approach.* Researchers are generating criteria and metrics for measuring the effectiveness and efficiency of preparedness and emergency response systems with applications for both evidence-based preparedness planning and information-based emergency response decision-making.

- ❖ **Project 1:** Public Health Systems Indicators Project (PHSIP).
- ❖ **Project 2:** Legal and Ethical Indicators for Adaptive Public Health System Response (LEIP).
- ❖ **Project 3:** Preparedness and Adaptive Response Model.
- ❖ **Project 4:** Decision Support Dashboard.

**University of Washington**  
**School of Public Health**

**Principal Investigator: Mark W. Oberle, MD, MPH**

*Northwest Preparedness and Emergency Response Research Center.* This PERRC's research is focused on identifying how best to reach essential or vulnerable diverse audiences, specifically health care providers and vulnerable populations, with critical information for emergency situations.

- ❖ **Project 1:** Effective Emergency Communications with Limited English Proficiency (LEP) Populations.
- ❖ **Project 2:** A Randomized Trial of Communication Methods Between Public Health and Health Care Providers.
- ❖ **Project 3:** SMS Text Messaging for Public Health Emergencies.



For more information visit:

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