

Resilience Research & Public Health Preparedness

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Overview

- Public health emergency preparedness (PHEP) is a young field driven by events; research is lagging
- Some consensus exists around the notion of PHEP, but not for the concept of resilience
- Reviews of the U.S. PHEP literature reveal:
 - More reviews/commentary than primary research
 - Focus on preparedness/response vs. recovery/mitigation
- “Community resilience” is a phrase in circulation, most often in reference to the public’s psyche
- PHEP needs a more comprehensive framework for resilience—beyond psyche, beyond organization

I. PHEP is a Young Field Driven by Events; Research is Lagging

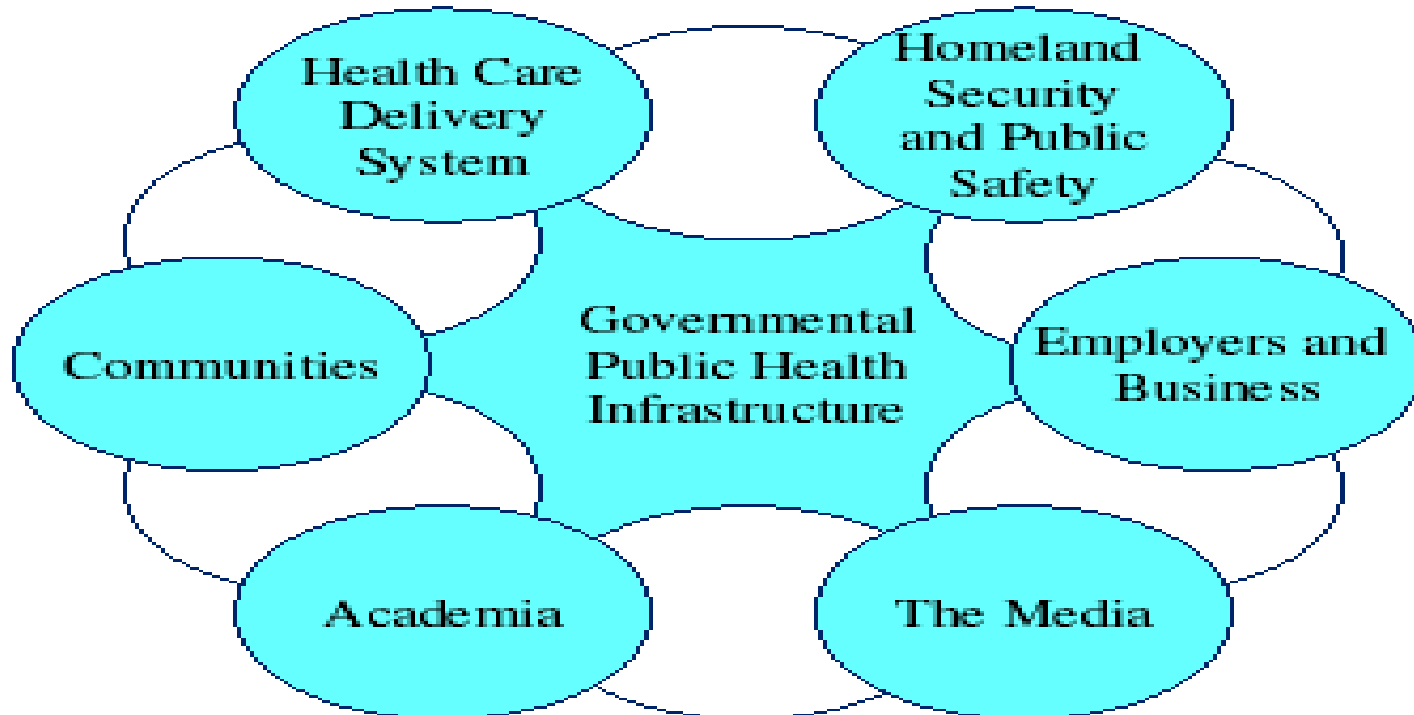
- 1990s: mass casualty terrorism; intel on BW programs; re-/emerging infectious disease
- 2001: 9/11 attacks & anthrax letter crisis
- FY2001-FY2008: ~\$9.1B on public health preparedness federal grants to states/locals
- Sustained interest in PHEP due to other focusing events: SARS, H5N1, Katrina, H1N1
- Nagging question re: grants: Are we better prepared? Which vulnerabilities still exist?

II. Some Consensus Exists Around PHEP Concept But Not Resilience

...the capability of the public health and health care systems, communities, and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities...

Nelson et al., AJPH, 2007, p. S9

Public Health Preparedness System



IOM 2008

III. Reviews of PHEP Literature Reveal...

- More reviews & commentary than primary research
- Research closely follows federal program funding streams & policy initiatives
- Focus on preparedness/response vs. recovery/mitigation

Abramson et al, 2007 Review, n = 303 articles, 01/01/02 to 03/10/07

- Rsch methodology: commentary or review (32%), case study (24%)
- Rsch objective: descriptive (36%), organizational or policy development (25%), policy/program/protocol evaluation (20%)
- Analytical unit: the individual (provider/patient) or an organization (~75%) vs. community or polity
- Hazard phase: preparedness (44%), response (39%)
- General observations:
 - Emphasis on evaluation of federally supported activities (e.g., workforce development, organizational capacity)
 - Narrow focus on readiness/response of public health sector vs. broader societal perspective (e.g., social vulnerability)

PHEP Research Priorities — IOM Letter Report (Jan 2008)

Conduct research that identifies & develops:

- Best practices for the design & implementation of training (e.g., simulations, drills, and exercises)
- Communications—effective exchange of vital & accurate info in a timely manner w/ diverse audiences
- Sustainable systems & infrastructure that facilitate a community's ability to manage health emergencies
- Criteria for evaluating PHEP, response & recovery; metrics for measuring their efficiency & effectiveness

**Cross-cutting: workforce needs, public involvement, vulnerable populations, behavioral health

Savoia et al, Aug 2009 Review, n = 547 Articles, 01/01/97 to 12/31/08

- Most common type of article was commentary (62%) vs. primary research
- Growth rate of PHEP publications since 2001 of ~33% per year
- 57% of articles were able to be classified into at least 1 of the 4 IOM PHEP rsch priorities
 - Bulk of remainder focused on healthcare delivery systems (e.g., surge capacity, HCP roles)
- Least developed category among the 4 IOM priority rsch categories = criteria and metrics
- Very little federal investment in research to assure states/locals are using grant monies wisely

IV. 'Comm'y Resilience' is Circulating; Typically Refers to Public's Psyche

- HSPD-21, National Strategy for Medical & Public Health Preparedness (Oct 2007)
- IOM PHEP research priorities letter report (Jan 2008): "...CR after an episode..."
- IOM Forum on Medical & PH Preparedness for Catastrophic Events: "Psychological trauma is a major risk..."
- Community Resilience Roundtable on HSPD-21 Implementation (Apr 2008)

HSPD-21 on What Constitutes Community Resilience

“Where local civic leaders, citizens and families are educated regarding threats and are empowered to mitigate their own risk, where they are practiced in responding to events, where they have social networks to fall back upon, and where they have familiarity with local public health and medical systems, there will be community resilience that will significantly attenuate the requirement for additional assistance.”

Community Resilience Roundtable on HSPD-21 Implementation, 04/08

- 4 main themes in attendees' own definitions of a resilient community
 - Agile & rugged
 - Prepared for risks
 - Invested in its institutions
 - Inclusive & integrated
- Attendees' amendments to HSPD-21
 - Active engagement of local civic leaders, citizens & families in health emergency planning, so that they feel co-ownership of protective policies
 - Material need for vital, interconnected public health, public safety & medical institutions

V. PHEP Needs a Comprehensive Framework for Resilience

- Beyond the organizational and inter-organizational level represented in majority of PHEP literature...
- Beyond a default understanding of resilience as the public's state of mind...

References

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Thank you.

