

Response Willingness among the Public Health Workforce and Emergency Preparedness Laws

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Members of the study team have no financial relationships to disclose.



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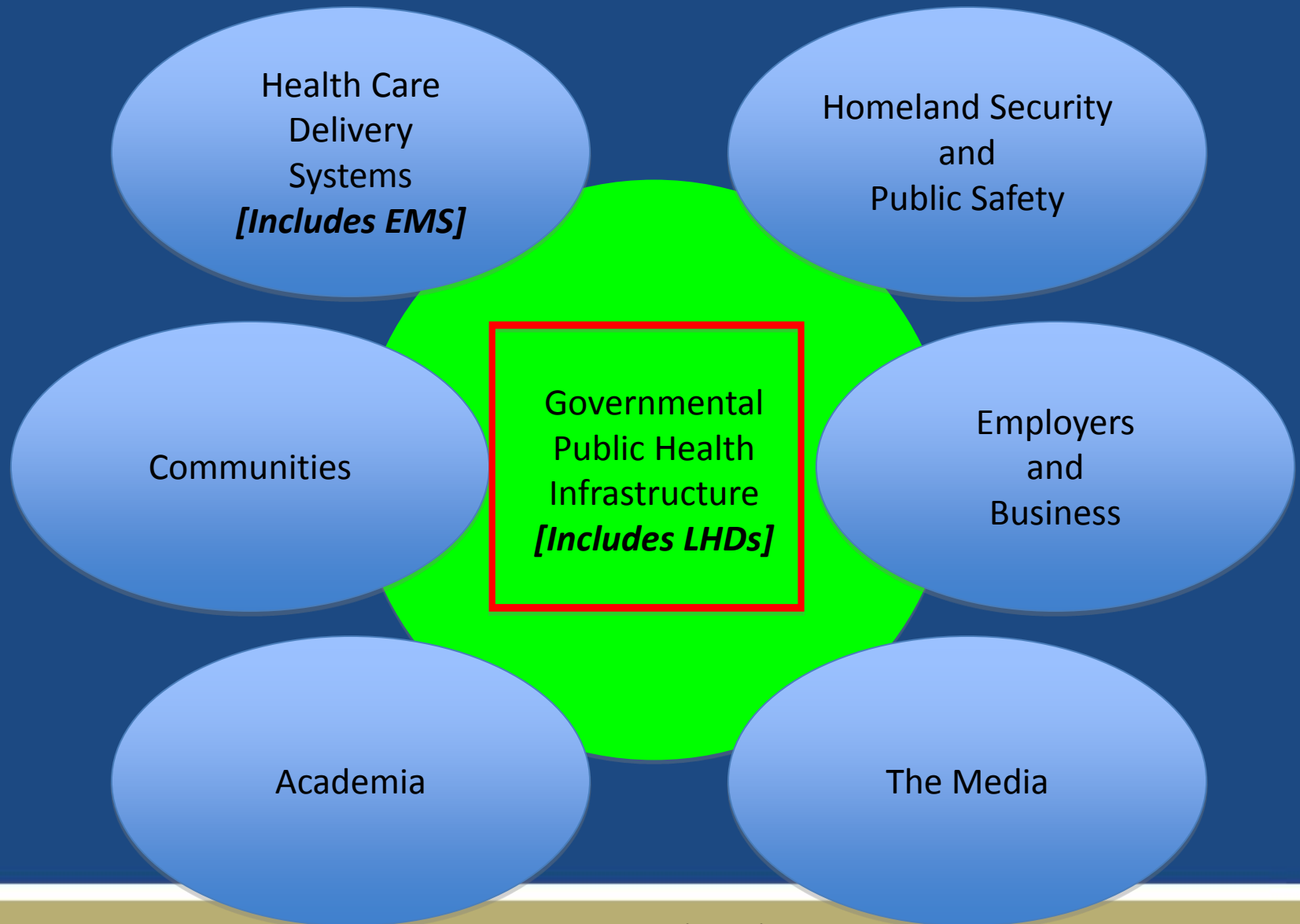


Learning Objectives

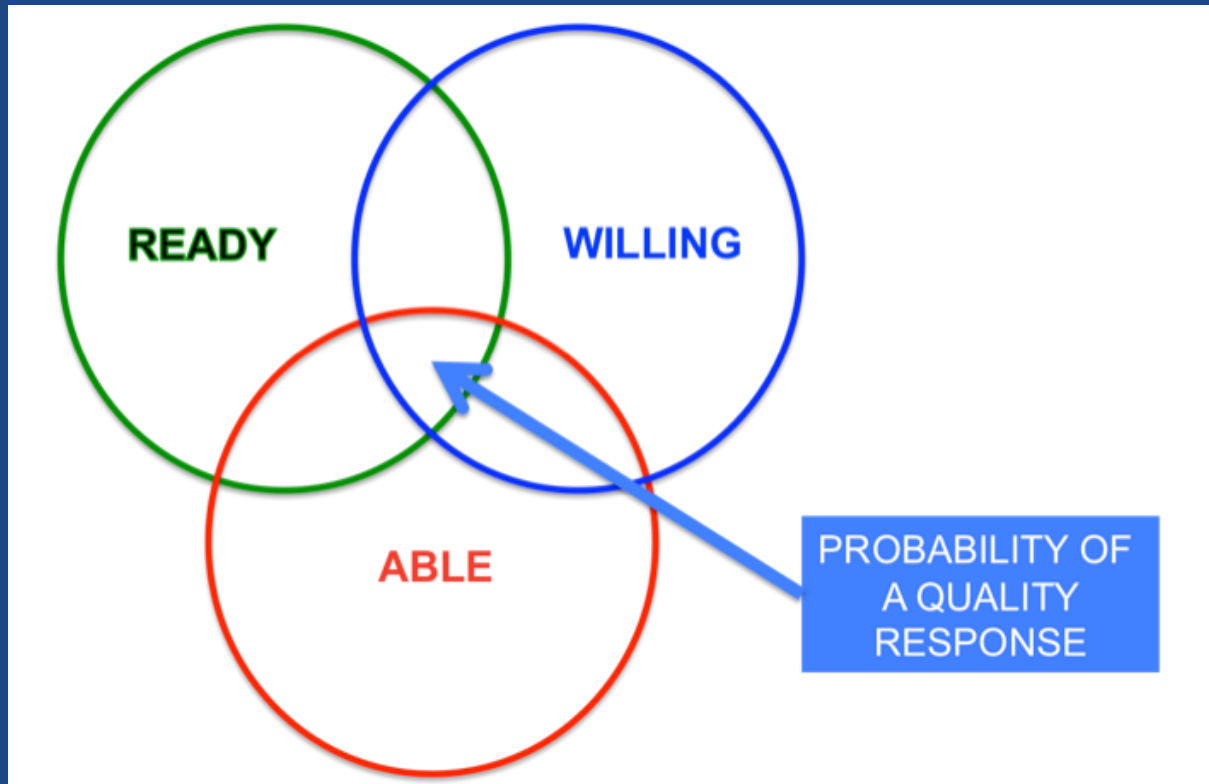
- Upon completion of this educational activity, you will be able to:
 - 1) Explain why willingness to respond among the local public health workforce is important to ensure an effective response to an infectious disease emergency.
 - 2) Describe state-level emergency preparedness laws that may influence willingness to respond among local public health workforce.
 - 3) Discuss how the discrepancy between the perceived and objective legal environments may affect local health department workers' willingness to respond.



Background: Public Health Emergency Preparedness System



Relevance of Willingness Among EMS Providers: 'Ready, Willing, and Able' Framework (McCabe et al., 2010)



Local Public Health Workforce Response

Willingness: Potential Legal Considerations

- Local health departments (LHDs) are the heart of governmental public health infrastructure
- Expanding research points to response willingness deficits among local public health workforce cohorts toward emergent public health threats, including pandemic influenza (Barnett et al. 2010; Watt et al. 2010; Basta et al. 2009; Balicer et al 2010; Stergachis et al. 2011; Barnett et al. 2012)
- Leading identified deficits among local public health and healthcare provider cohorts include concerns about worker safety considerations (Garrett et al. 2009; Barnett et al. 2010; Barnett et al. 2012) – an issue of legal relevance in public health emergencies
- However, recent research (Jacobson et al., 2012) on local public health and emergency management workforces indicates that knowledge and perception of emergency preparedness laws varies greatly, with “a clear disconnect” between the actual legal environment (i.e., codified law and accompanying regulations) and individuals’ perceptions or interpretations of the law.



Public Health Workforce and Willingness to Respond to Emergencies: A 50-State Analysis of Potentially Influential Laws

- As of June 2013, in just under half of the states (n=22), the government can declare a public health emergency.
- About one-quarter of the states (n=13) require the development of a public health emergency plan.
- Every state provides some form of liability protection for first responders.
- 15 states grant responders priority access to health resources.
- Every state provides mechanisms for localities to collaborate during emergency responses, though the nature of that collaboration is quite varied.

Rutkow L, Vernick JS, Gakh M, Siegel J, Thompson CB, **Barnett DJ**. The public health workforce and willingness to respond to emergencies: a 50-state analysis of potentially influential laws. *J Law Med Ethics*. 2014;42(1):64-71.



Local Health Departments: Part 1

LHD Workers, Public Policy, and Willingness to Respond During Emergencies



Objective

- Determine whether an association exists between a state's authority to declare a public health emergency and local public health workers' response willingness.



Study Methods

- 2009-2010 Johns Hopkins~Public Health Infrastructure Response Survey Tool (JH~PHIRST)
 - online survey on response willingness towards 4 representative scenarios: weather disaster; pandemic flu; radiological ‘dirty’ bomb; inhalational anthrax bioterrorism
 - questions about demographics and attitudes/beliefs regarding local public health workers’ response willingness during public health emergencies.
 - Survey data merged with data about the presence or absence of a law granting states the ability to declare a public health emergency. Logistic regression analyses were performed with the presence/absence of the law and were adjusted for individuals’ demographic and locale characteristics.
- *Setting*: 8 clusters of local health department workers in 9 states.
 - For each local health department, U.S. Census data about its local poverty level were obtained through matches by Zip Code Tabulation Areas
 - Poverty level percentages were derived from five-year annualized estimates from the American Community Survey, 2005-2009
- *n = 2,993 LHD employees*



Results

- Overall response rate: 66%
- For naturally-occurring and man-made disasters, in unadjusted analyses, no statistically significant difference in willingness to respond between individuals living in states with a law that allowed for a governmental declaration of public health emergency and those living in states without such a law.
- Adjusted analyses yielded similar results.



Conclusion

- While laws allowing the state to declare a public health emergency are not associated with response willingness, findings may reflect the fact that states rarely declare public health emergencies, giving local public health workers few opportunities to become familiar with the implementation of these laws.
- In light of this, local health departments should consider altering their own internal policies to promote response willingness among their employees.



Local Health Departments: Part 2

Legal Protections to Promote Response Willingness Among the Local Public Health Workforce



Objective

- Examine whether the presence of 3 hypothetical legal protections influences local health department workers' self-reported response willingness for 4 emergency scenarios, and whether specific demographic factors are associated with local health department workers' response willingness given these legal protections.



Study Methods

- *Methods:* The 2011-2012 JH~PHIRST included questions about demographics and attitudes/beliefs regarding local health department workers' response willingness to four emergency scenarios given the presence of specific legal protections
 - ensuring priority healthcare for workers' families
 - granting workers access to mental health services
 - guaranteeing access to personal protective equipment
- Data collected from 3 clusters of local health department employees, totaling 1,238 workers in 3 states.
- Calculated descriptive statistics and fit logistic regression models with demographic and locale characteristics as predictors and agreement with greater response willingness, given the legal protection, as the outcome.



Results

- Among the 2,645 local health department employees who were eligible to participate in the JH~PHIRST survey, 1,238 (47%) answered at least part of the survey.
- Across scenarios, between 60% and 83% of LHD workers agreed that they would be more willing to respond given the presence of one of the three hypothetical legal protections.
- Among the three legal protections, a guarantee of personal protective equipment elicited the greatest agreement with improved response willingness
- Access to response-related mental health services yielded the lowest improvement in response willingness.
- In general, those self-identifying as first responders were significantly more likely to report greater response willingness across all four emergency scenarios and given the three legal protections.



Conclusion

- Specific legal protections, including priority response-related healthcare for family members, guaranteed access to response-related mental health care, and guaranteed access to personal protective equipment, augment a majority of local public health workers' response willingness.



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Thank You

- Questions?
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