READY, WILLING, AND ABLE: AN UPDATE FOR CLINICIANS ON EVIDENCE-BASED STRATEGIES TO STRENGTHEN MENTAL HEALTH AND BEHAVIORAL CAPACITY FOR PUBLIC HEALTH PREPAREDNESS

Clinician Outreach and
Communication Activity (COCA)
Conference Call
August 16, 2011



# Objectives

# At the conclusion of this session, the participant will be able to accomplish the following:

- Describe key influences affecting the willingness of healthcare providers to respond to public health emergencies
- Describe how a threat-and efficacy-based model can inform approaches to boosting health providers willingness to respond to public health emergencies
- Identify the five components of the Johns Hopkins Model of Psychological First Aid Training for Paraprofessional Disaster Volunteers
- Describe three major ideas proposed by representatives of local health departments to sustain project-initiated, disaster preparedness relationships with faith-based organizations

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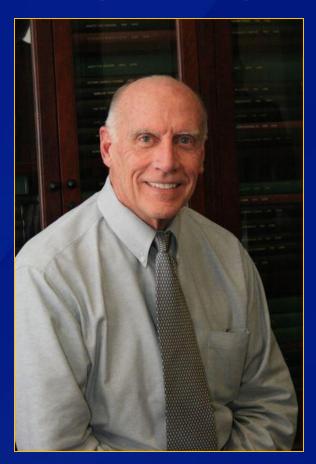


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# Ready, Willing, and Able: A Briefing for Clinicians on Evidence-based Strategies to Strengthen Mental Health and Behavioral Capacity for Public Health Preparedness

Johns Hopkins Preparedness and Emergency Response Research Center

Jonathan M. Links, Ph.D. Daniel J. Barnett, M.D., M.P.H O. Lee McCabe, Ph.D.

August 16, 2011

The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention

### The Challenge

Experience in the United States and other countries has shown repeatedly that, following disasters, the surge of demand for health services to treat psychological symptoms is much greater than for services to treat physical injuries.

North, Nixon, Shariat, Malonee, McMillen, et al., 1999; Galea, Ahern, Resnick, Kilpatrick, Bucuvalas, et al., 2002; Schlenger, Caddell, Ebert, Jordan, Rourke, et al., 2002; Shalev & Solomon, 1996; Bowler, Murai, & True, 2001; Ursano, Norwood, Fullerton, Holloway, & Hall, 2003; Watts, 1999



### One Possible Intervention: Psychological First Aid

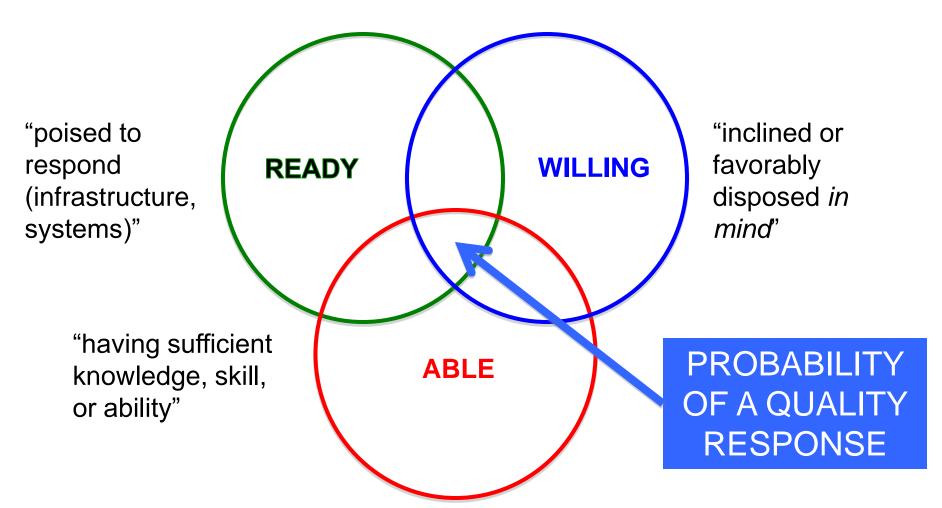
"In the past decade, there has been a growing movement in the world to develop a concept similar to physical first aid for coping with stressful and traumatic events in life. This strategy has been known by a number of names but is most commonly referred to as psychological first aid (PFA)."

Institute of Medicine 2003

But who will **ready, willing, and able** to deliver PFA? And to provide other needed services?



### "Ready, Willing, and Able"



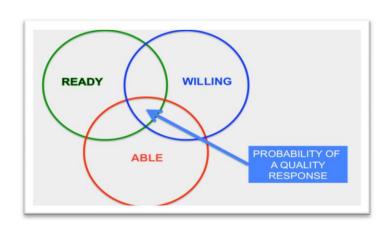




Willingness-to-Respond in Public Health Emergencies

### Willingness vs. Ability

- "Willingness" to respond
  - State of being inclined or favorably predisposed in mind, individually or collectively, toward specific responses
  - Numerous personal and contextual factors may contribute
  - Beliefs, understandings, and role perceptions
  - Scenario-specific
- Preparedness training focus nationally to date = ability
- But, willingness & ability are conceptually AND functionally distinct!



Source: McCabe OL, Barnett DJ, Taylor HG, Links JM. Ready, Willing, and Able: a framework for improving the public health emergency preparedness system. *Disaster Medicine and Public Health Preparedness 2010;4:161-168.* 



### 2005 Pilot Study in Md Health Departments

- Only 54% indicated they would likely report to work during influenza pandemic
- Only 33% considered themselves knowledgeable about public health impact of pandemic flu
- Perception of the importance of one's role in the agency's overall response was the single most influential factor associated with willingness to report
  - Those who perceived their response roles as important to agency were 9.5 X more willing to respond than those who perceived their roles as marginal.

Source: Balicer RD, Omer SB, Barnett DJ, Everly GS, Jr. Local public health workers' perceptions toward responding to an influenza pandemic. BMC Public Health 2006; 6:99



# Hospital-based Willingness: A Clinical Surge Capacity Concern

- Pandemic influenza
  - 32% of surveyed hospital workers were unwilling to respond to an influenza pandemic "regardless" of severity
    - Response rates were consistent across departments
    - One-third lower among nurses compared with physicians
- Radiological dispersal device ("dirty bomb")
  - One-half of hospital workers unwilling to respond regardless of severity



# Assessing LHD Workforce's Response Willingness: Overview

- 8 Clusters of local health departments (LHDs) nationwide identified for participation
  - 4 Urban (FL, IN, OR/WA, WI)
  - 4 Rural (ID, MN, MO, VA)
    - Each cluster randomly divided into control vs. intervention LHDs
- Johns Hopkins ~ Public Health Infrastructure Response Survey Tool (JH~PHIRST)
  - Online agency-wide survey of perceptions of threat and efficacy and related attitudes/beliefs regarding response willingness
  - 4 scenarios across all-hazards spectrum
    - Weather-related
    - Pandemic influenza

- Radiological ('dirty') bomb
- Inhalational anthrax



# Assessing LHD Workforce's Response Willingness: Overview

- Johns Hopkins ~ Public Health Infrastructure Response Survey Tool (JH~PHIRST) delivery timeline
  - All LHDs in a cluster are scheduled to receive baseline JH~PHIRST and three resurveys
    - Resurveys for a given cluster administered:
      - 1 week post-intervention
      - 6 months post-intervention
      - 2 years post-intervention



# JH~PHIRST Baseline (LHDs): Willingness Varies by Scenario / Context

Willingness-to-Respond by Scenario/Context (8 LHD clusters)

	Weather- Related	Pandemic Influenza	Radiological ('dirty') Bomb	Anthrax Bioterrorism
If required	93%	91%	74%	80%
If not required	83%	80%	62%	69%
Regardless of severity	77%	79%	53%	65%



# JH~PHIRST Baseline Findings: Greater Willingness in Rural LHDs

#### Willingness-to-Respond: Regardless of severity

	Weather- Related	Pandemic Influenza	Radiological ('dirty') Bomb	Anthrax Bioterrorism
Rural	81%	87%	59%	70%
Urban	75%	76%	51%	63%



# Leading Modifiers of Response Willingness: JHPERRC Findings

- Most influential modifiers of willingness to respond among healthcare providers include:
  - Self-efficacy
  - Perceived importance of one's role in overall agency response (response efficacy)
  - Perceived safety
  - Psychological support during and after events
- In general, the threat/efficacy "profile" of a healthcare provider who is most willing to respond across public health emergency scenarios is high threat / high efficacy ("concerned and confident")



#### Curricular Intervention

- Johns Hopkins ~ Public Health Infrastructure Training (PHIT)
  - Designed to address the attitudinal and behavioral gaps in willingness-to-respond
  - Objective: Extend levels of threat awareness, self- and response-efficacy
  - Goal: Increased system capacity with higher numbers of workers who are willing to respond to all hazards
  - Train-the-trainer format
  - Seven hours of content delivered over a 6-month period
  - Combines a variety of learning modalities in three phases of training
    - Face-to-face lecture and discussion; online learning; independent activities; case scenarios; tabletop exercises; role-playing; knowledge assessments; peer critiques



#### PHIT Curriculum: TOC

- Phase 1: Facilitator-Led Discussion (2 hours)
  - Part 1: Overview of Scenarios and Public Health's Role
  - Part 2: Emergency Scenario Contingency Planning
- Phase 2: Independent Learning Activities (3 hours)
- Phase 3: Group Experiential Learning (2 hours)
  - Part 1: Tabletop Exercise
  - Part 2: Role-Playing Exercise
  - Part 3: Hotwash

While the content and phases are mostly fixed, local contextual examples are encouraged & formats for training delivery are flexible and scalable to meet the unique needs of health departments



# PHIT Implementation: Local Examples

- Interaction
- Participation
- Enthusiasm
- Communication
- Games
- Discussions













# PHIT Implementation: Local Examples







#### "Success Stories" to Date

- Feedback from Butler County (MO) HD Administrator
  - Relevance/utility of PHIT in connection with agency's response to MO flooding (April 2011)
- Feedback from PHP Summit Town Hall session (February 2011)
- Frederick County Health Department Training (December 2010)
  - "Factors That Influence Willingness to Respond and What the Health Department Can Do About It"
  - FCHD Newsletter re: "Ready, Willing, and Able" (January 2011)



# JH~PHIRST Baseline Comparisons to Resurvey: WTR (Severity)

#### Willingness-to-Respond: Regardless of Severity

	Weather- Related	Pandemic Influenza	Radiological ('dirty') Bomb	Anthrax Bioterrorism
6 clusters - CONTROL*	82% <b>V</b> 78%	83% <b>¥</b> 81%	60% <b>¥</b> 58%	75% <b>¥</b> 64%
6 clusters – INTERVENTION*	79% 🛧 81%	82% 🛧 83%	58% <b>↑</b> 72%	69% 🛧 74%

\*[BL(6) & FU1(6) – excludes OR/WA & IN for BL and respondents to only 1 survey]

#### Key:

BL(6) = Baseline (six clusters)

FU 1 (6) = Follow-up Survey # 1 (six clusters)

OR/WA = Oregon/Washington cluster

IN = Indiana cluster





Enhancing Disaster Mental Health Preparedness through Academic/Government/Community Partnerships

# **Project Overview**

- ➤ Actors/Agents: Faith-based organizations [FBOs], local health departments [LHDs], and academic health centers [AHCs];
- ➤ Activities: Refining, testing, & validating a portable, dual-intervention curriculum;
- ➤ Aims: To develop an evidence-based model for enhancing emergency preparedness capacity and competence at multiple levels of the public health system.





# **Motivational Preparedness Training [MPT]**

An intervention, with **Psychological First Aid** training at its core, capable of increasing participants' concern about, and willingness and ability to respond to (and plan for), the disaster behavioral health needs of their community.





# **Guided Preparedness Planning [GPP]**

An intervention capable of increasing concern about, and the willingness and ability to support,



community planning efforts for disaster mental health preparedness and response.



#### Content Detail of the PFA Module of MPT



# Reflective Listening/Rapport-Building

Re-stating & Para-phrasing; Open- & Closed-Ended Questions

### <u>A</u>ssessment [Screening]

**Functional vs Pathological Orientation** 

#### Prioritization

Threats to Physical and Psychological Wellbeing

#### Intervention

Support; Guidance; Triage; Connection

### <u>D</u>isposition

Referral; Liaison; Advocacy





### Ability to Plan: Skills [n=44]

Skills Variable	Percent Agree		Pre-Post Change	Statistically Significant?
	Pre- Post- Test Test	%		
Self-Efficacy as a Planner	25	84	59	Yes***
Ability to Describe All Hazards Concept	21	82	62	Yes***
Recitation of ICS Titles	16	62	46	Yes*
Differentiating Good vs Inadequate Plans	43	65	22	No
Family Application of Planning Ability	59	98	38	Yes*
Self-Efficacy as a Planning Leader	30	85	55	Yes***

#### Sample Content: Physical vs Psychological First Aid



# Parallel Interventions Along the Care Continuum

Psych First Aid

**Crisis**<br/>**Intervention** 

Counseling

Psychotropic Meds & Psychotherapy

Physical First Aid

**Basic Life Support** 

Advanced Life Support

Medicine & Surgery

Everly, 2007



### Sample Content: Risk Factors [Adverse Outcomes]



#### **Pre-Event Factors**

- Children and elderly
- Persons w/physical conditions & disabilities
- Persons w/ Hx of psychiatric Dx & Tx
- Minority status
- Low socio-economic status
- Female gender

#### **Peri-Event Factors**



- Dose of exposure
- Dissociation or amnesia
- Physical injuries
- Human-caused event
- Randomness & unpredictability

#### Post-Event Factors

- Absence of psychosocial support
- Financial problems
- Job loss
- High levels of TV watching [disaster event]



# Sample Content: PTSD Criteria







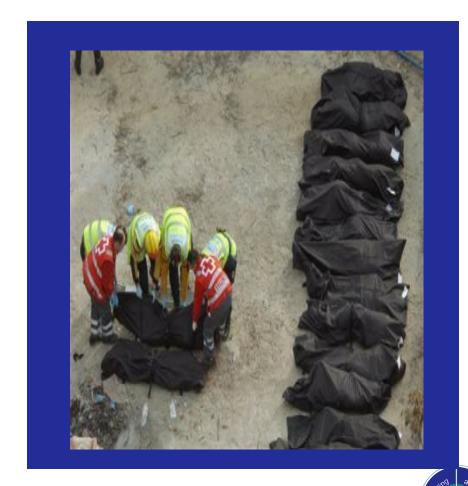
Re-experiences

**A**voidance

Unable to function

Month

**A**rousal



#### Sample Content: Suicide Warning Signs



#### "Is Path Warm?"

**I**deation

<u>S</u>ubstance Abuse

Purposeless

**A**nxiety

**T**rapped

<u>H</u>opelessness

**W**ithdrawal

<u>A</u>nger

Recklessness

Mood Changes



Courtesy Wilcox, H, 2009 (Orig refs: American Association of Suicide, 2006; Berman, 2006)



#### Ability to Respond: Rural MD Cohort 1 [n=53]



Skills	Percent Agree		Pre-Post Change %	Statistically Significant?
	Pre- Test	Post- Test		
Rapport Building	55	100	45	Yes
Reflective Listening: Understanding Meanings and Feelings	60	98	38	Yes
<b>Prioritization of Problems</b>	47	98	51	Yes
Differentiating Severe vs Moderate Symptoms	47	96	49	Yes
Diaphragmatic Breathing	57	100	43	Yes
Recognizing MH Referral Needs	53	100	47	Yes
PFA Self-Efficacy	30	98	68	Yes

#### Willingness to Respond, Rural MD Cohort 2



Immediate Post-Training MRC* Applications to be a Paraprofessional First-Responder		
Number of Submitted Applications	56	
Number of Program Completers		
Percent of Program Completers Applying		
Number Accepted into Medical Professional Volunteer Corps		

<sup>\*</sup> Note 1: Refers to Maryland's Medical Reserve Corps (*Medical Professional Volunteer* Corps) and those participants who submitted applications immediately following the PFA training intervention. [Data on number of deferred submissions are not presently available].



#### Content Detail of GPP Curriculum & Plans



- Background & Planning Assumptions
- Target Community & At-Risk Persons
- Roles & Responsibilities
- SWOT Analysis
- Communications
- Plan Evaluation & Sustainability
- Appendix: Preparedness Tools& Resources

# Developing an "All Hazards" Plan





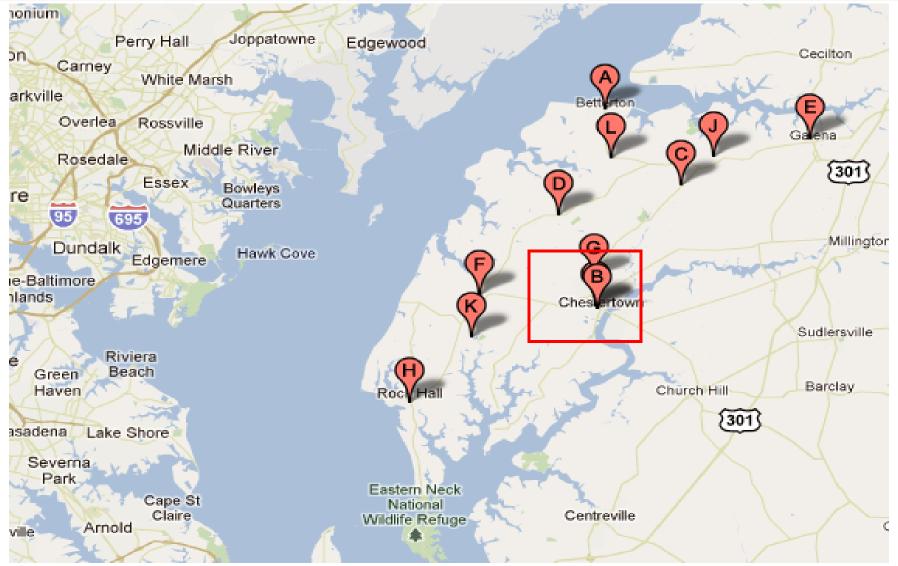


#### Sample Plan Content, SWOT Analysis



SWOT ANALYSIS	Completed	Partially Completed	Not Started	
Item	3	2-1	0	
<ol> <li>Strengths and Resource Surpluses: Identification of the community's (internal) strengths and resource surpluses that, under various disaster scenarios, is available to those in and (potentially) outside the community.</li> <li>Internal Weaknesses and Resource Shortages: Identification of the community's (internal) limitations, resource deficits, and needs that will need to be met by external sources in an emergency.</li> <li>External Opportunities: Identification of available (external) opportunities, resources &amp; agencies that could strengthen the capacity and capability of the community to respond to and recover from an emergency event.</li> <li>External Threats: Identification of specific (external) obstacles to the community developing a disaster preparedness plan.</li> <li>Resource Surpluses: Based on community "Strengths," the Plan identifies the human and material resources, assets, etc that can be made available to the 'community-at-large.'</li> </ol>				
Section/Column Sub-Totals:				

#### Geo-distribution of Completed Disaster Plans, Kent County, MD





#### Recent Advances in GPP: Iowa Cohort

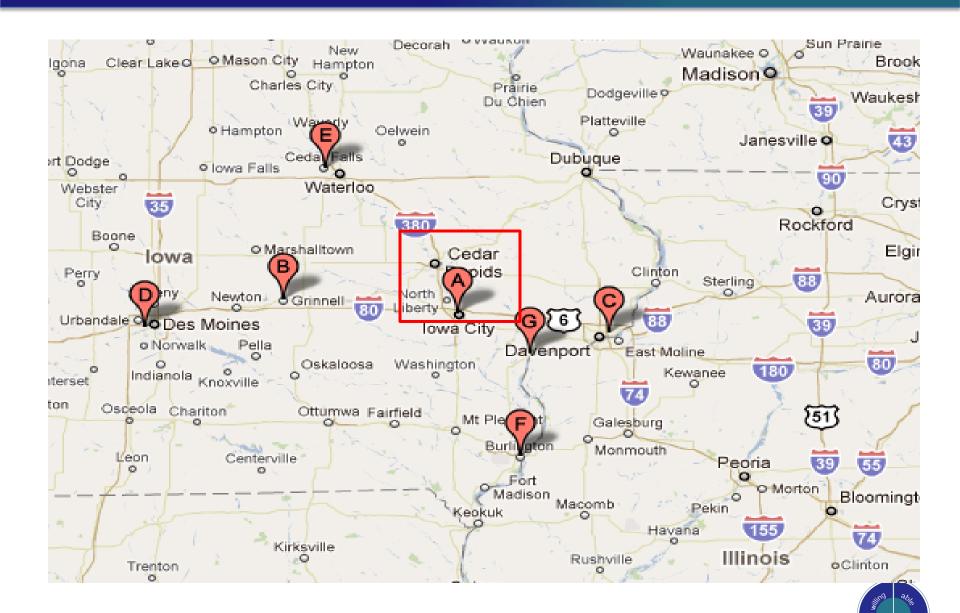
Participation and Plan-Submission Data							
Starting Co	Parishes Completing	Parishes Submitting Plans At End of 1-day Program	Plan Scores**				
	Program*		Range	Mean	Med	Mode	
7	7	7	74-100	90.6	95.5	100	

<sup>\* &</sup>lt;u>Note 1</u>: Submitted plans represent 6 health jurisdictions in Iowa: Black Hawk, Des Moines, Johnson, Muscatine, Powesheik, and Scott



<sup>\*\*</sup> Note 2: Scores derived from the Johns Hopkins Quality Assessment Scale for Disaster Mental Health Plans [Maximum score: 100 points]

#### Geo-Distribution of Completed Preparedness Plans, IOWA



#### Sustainability Ideas of Government Partners

- Conduct quarterly meetings with faith leaders to assess ongoing needs, set goals, & provide support.
- Collaborate with FBOs in exercises and drills to evaluate and improve their plans.
- Foster the development of relationships between FBOs and other emergency preparedness agencies.
- Recruit new FBOs through community health outreach workers.
- Strive to have FBO/LHD mutual help agreements codified in memoranda-of-understanding.



#### Conclusions

Findings, to date, indicate that the companion interventions of MPT/PFA and GPP delivered within the framework of a faith-government-academic partnership show promise of being a viable model for enhancing emergency preparedness capacity and capabilities at multiple levels of the US public health system.





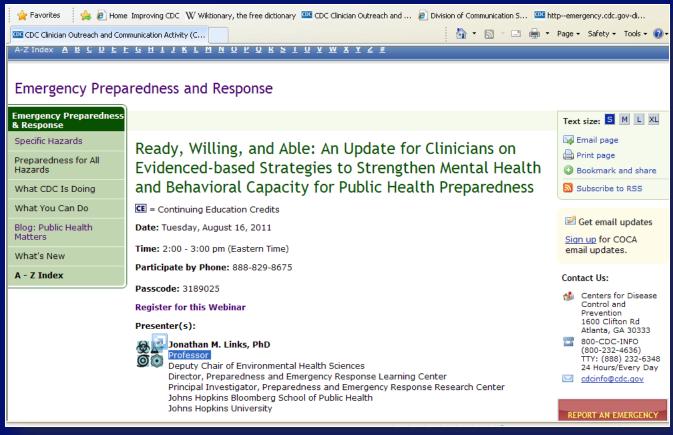
Centers for Disease Control and Prevention Atlanta, Georgia

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http://emergency.cdc.gov/coca/callinfo.asp

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