



# **Developing Resilient Rural Communities: Lessons Learned and New Strategies for Emergency Preparedness and Beyond**

**Anita Chandra, Dr.P.H. and Jamie Aten, Ph.D**

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## ***Presentation Roadmap***

- **Why “community resilience” and why now?**
- **Community resilience and application to public health broadly**
- **What are the specific assets and vulnerabilities to consider in rural communities?**
- **Levers of community resilience**
- **Developing a community resilience action plan (*last 1.5 hours*)**

## *Activity – What if I lost...*

- ▲ You have been given three cards each of three different colors:
  - ▶ Blue Card - write the name of a person close to you on each card
  - ▶ White Card - write down one of your favorite belongings
  - ▶ Pink Card - write down something you enjoy, an activity, or hobby.
- ▲ After you have written on each card, place them face down on the table and shuffle them around.

## *Activity – What if I lost...*

- ▲ **These are the three things you will have lost in a disaster.**
- ▲ **Discuss with the group how you feel about losing these things or people**

# *Strengthening Community Resilience Is Critical in a Changing World*

- Acute or episodic disaster (tornado, flood)
- Slow moving changes due to climate (precipitation, sea level rise), resulting in demographic, health, and economic challenges
- Economic devastation (e.g., housing crisis)



# ***Enhancing Community Resilience Can Reduce the Consequences of These Stressors***

**Resilience -- the ongoing and developing capacity of the community to account for its vulnerabilities and develop capabilities that aid in:**

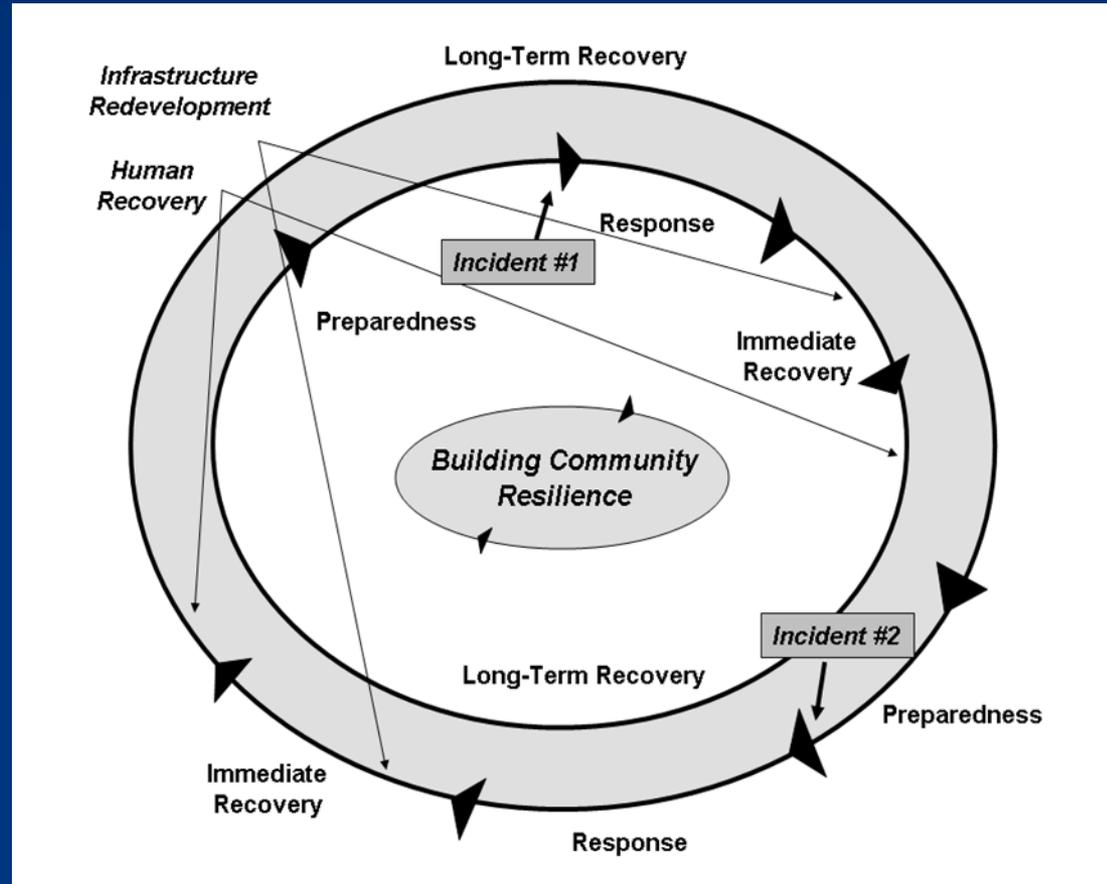
- preventing, withstanding, and mitigating the stress of an incident;**
- recovering in a way that restores the community to self-sufficiency and at least the same level of health and social functioning as before the incident; and**
- using knowledge from the response to strengthen the community's ability to withstand the next incident**

## ***“Preparedness” Community Has Made Progress in the Past Ten Years, But Cannot Go it Alone Without Broader Effort***

- **Percentage of households with emergency plans, or toolkits has only improved slightly (still under 30%)**
- **Public expectations for federal support remain misaligned with reality**
- **Populations considered at increased vulnerability are still not well-integrated into plans**
- **Preparedness planners have failed to fully leverage community assets in support of emergency operations, particularly those from outside government**

# Plus Recovery Time Can Take Years...

- With overlapping disasters, resources are limited to support recovery as part of a separate emergency function
- Public health role not clear either



# *National Strategies Now Focus on Building Community Resilience*



- **Healthy people are more resistant to illness and better able to survive disasters**

- **Robust health systems and social networks**

- **Resilient communities are prepared to take action after an incident**

- **Know how to reach and serve special needs populations**

- **Can mount a “bystander response” until emergency responders arrive**



# Community Resilience Represents Intersection of Community Health Promotion and Emergency Preparedness

Community Health Promotion	<u>Community Resilience</u>	Emergency Preparedness
Routine surveillance	<u>Assessment of population, structural vulnerabilities and assets</u>	Emergency risk assessment
Community education	<u>Education about ongoing mitigation</u>	Risk communication
Provision of direct health services (e.g., immunizations, home visiting)	<u>Ongoing assurance of health service access; skill building (e.g., PFA)</u>	Provision of shelters, evacuation plans, mass prophylaxis
Policy support re: health impact	<u>Policies that prepare for routine and emergency conditions</u>	Policy support re: disaster response and recovery

# Ongoing Resilience Strengthening At Key Points Along Preparedness Continuum Can Create More Efficient Plans, Shorten Recovery Time

Prepare  
Assessment of population and facility vulnerabilities  
Ongoing toolkit messages

Immediate Response:  
Sheltering and /or evacuation of population  
Provision of countermeasures

Time reduce

Recovery:  
Restoration of infrastructure and social functioning

- Education about the idea of ongoing risk continuum
- Integration of data about ongoing community health issues WITH emergency risk data (dual benefit)

- Pre-identification of where and how to serve populations
- Neighbor-to-neighbor support when disaster overwhelms

- Leveraging of social and organizational supports to restore sense of community
- Development of policies to support smart rebuilding

# National Preparedness Efforts Align Around Common Principles in Community Health

National Preparedness Effort	Language Specific to “Community Health”
National Health Security Strategy (2009)	Community resilience is supported by the promotion of healthy lifestyles, disease prevention, and access to culturally informed, timely and high-quality health care.
National Disaster Recovery Framework (2011)	Organizing principles of empowerment, resilience, emotional and psychological recovery (among others)
Presidential Policy Directive-8 (PPD-8) (2011)	Maximize the coverage of the U.S. population that has a localized, risk informed mitigation plan developed through partnerships across the entire community
FEMA Whole Community Engagement (2011)	Greater empowerment and integration of resources across the whole community
CDC Guidance (2011)	Create and implement strategies for ongoing engagement with community partners who may be able to provide services to mitigate identified public health threats

# ***Involvement of Community Based Organizations (CBOs) and Faith Based Organizations (FBOs) Enhance Both Response and Long-Term Recovery***

- Provide manpower and other resources
  - Information and referral
  - Direct services (e.g., case management, behavioral health)
  - Financial support

## **Examples from across the United States:**

- Using promotoras to disseminate disaster information in San Antonio
- Connecting residents to social and mental health services after Hurricane Katrina in New Orleans

***National strategies recognize need for greater CBO/FBO participation in disaster planning, response and recovery***

# ***Recent Legislation Called for Development of National Health Security Strategy (NHSS)***

- **Comprehensive strategy to protect people's health in the event of an emergency**
- **Guide coordination among various departments, agencies, programs**
- **Integrate existing health- and security-related strategies**
- **Set priorities for future investments**
- **Be a truly *national* strategy**

# *We Developed a Definition of National Health Security*

*Communities are prepared for and protected from large-scale incidents with potential health consequences*

**Prepare**



**Protect**



# *We Then Developed a Definition of National Health Security*

*Communities respond effectively during an emergency*



# *We Then Developed a Definition of National Health Security*

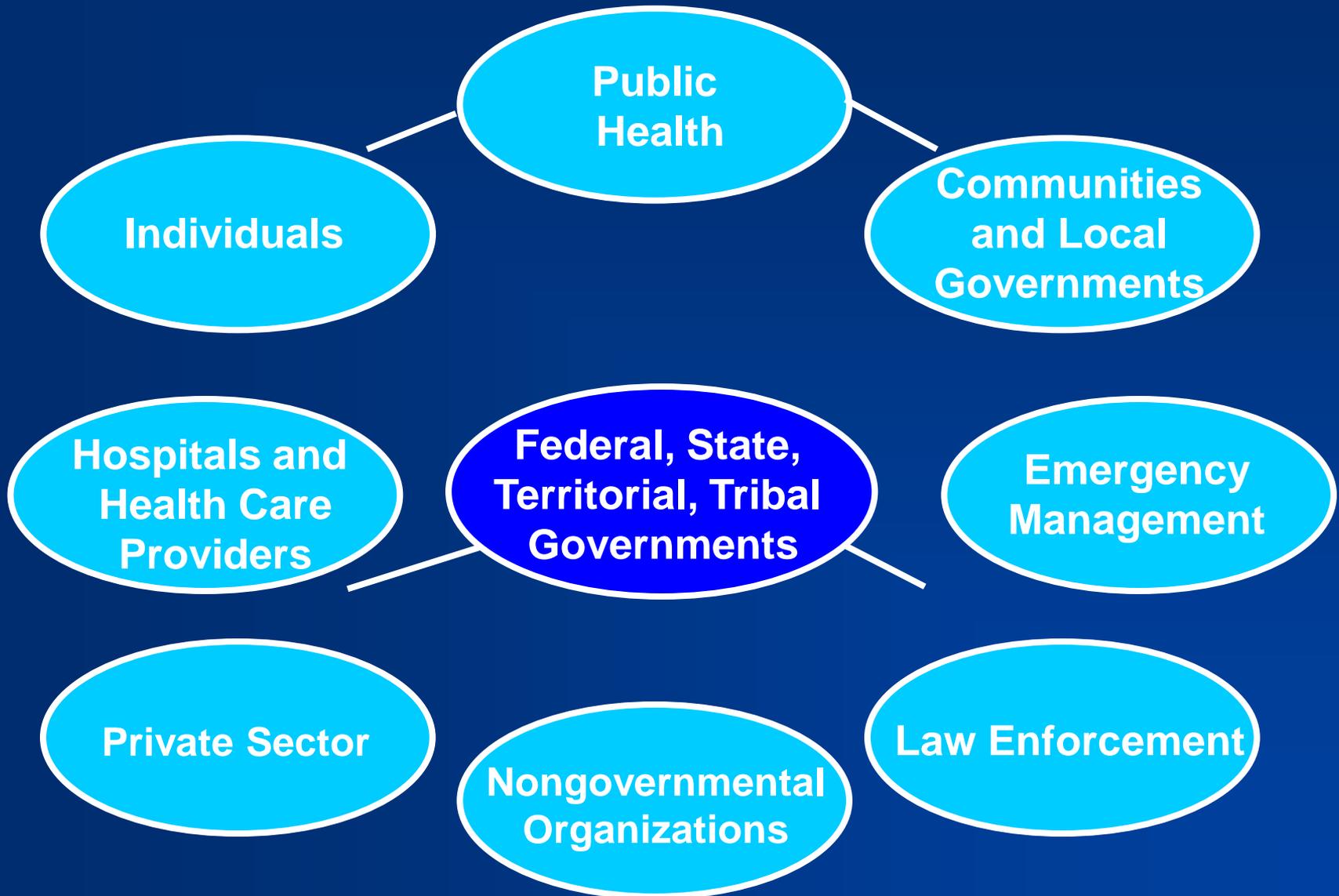
*Communities are able to recover after the incident*



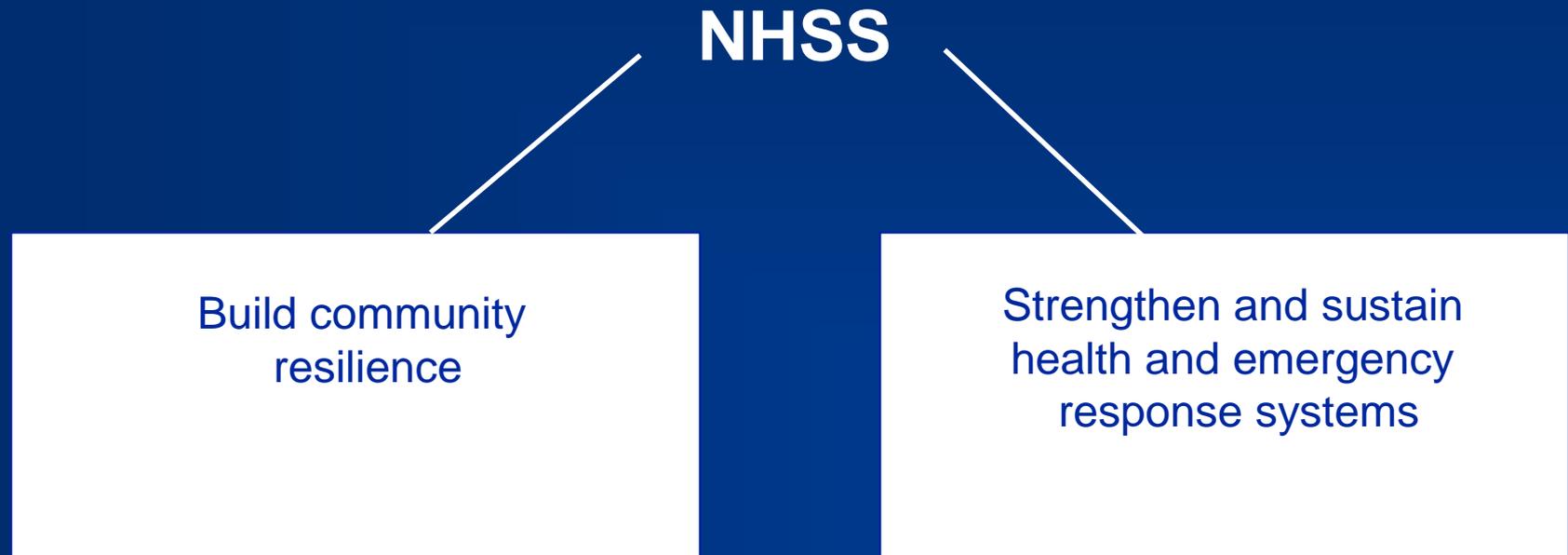
# *The NHSS Is a National, Not Just Federal Strategy. .*



# *... And Requires the Commitment of a Broad Range of Stakeholders*



# *The Strategy Has Two Broad Goals*



## ***Key Objectives Related to Resilience***

- 1. Informed and empowered individuals, communities**
- 2. National health security workforce**
- 3. Integrated, scalable health care delivery systems**
- 4. Situational Awareness**
- 5. Timely and effective communications**
- 6. Effective countermeasures enterprise**
- 7. Prevention/ mitigation of environmental, other health threats**
- 8. Post-incident health recovery in planning and response**
- 9. Cross-border and global partnerships**
- 10. Science, evaluation, quality improvement**

# *Objective 1: Informed and Empowered Individuals and Communities*

- **Community members are educated about health threats, with information about how to prepare, respond, and recover**
- **Partnerships and integrated cross-sector plans are in place at the community level**
- **Social networks are leveraged to enhance community education and awareness**



## *Community Members Are Educated ...*

- **Ensure that communications about community risks and threats are culturally and developmentally appropriate**
- **Incentivize communication that focuses on connections between individual and community preparedness (e.g., “neighbor to neighbor”)**

# *Partnerships and Integrated Cross-Sector Plans are in Place at the Community Level*

- Establish or participate in existing partnerships to conduct pre-event vulnerability assessments
  - **Identify the behavioral health assets and potential risks**
- Identify key outcomes for and measures of resilience



# *Social Networks are Leveraged to Enhance Community Education and Awareness*

- **Asses the location and robustness of social networks**
- **Consider how these networks are used for long-term recovery, particularly for “sense of community” restoration and information**



## ***Objective 5: Effective Risk Communication***

- **High-quality communication with the public**
  - **Regular information exchange with the public**
  - **Accurate, credible, understandable, and actionable information is provided to the public in a timely way**
- **Secure, sustainable, interoperable, and redundant systems/equipment**
- **Effective communication within and across all response organizations**

## *High-Quality Communication with the Public*

- Identify, collect, and disseminate successful strategies/practices for receiving information from the public both routinely and during an incident
- Develop and disseminate methods to effectively monitor for and address rumors and misperceptions circulating during an incident
  - **Identify ways to lessen anxiety, other stressors**

## ***Objective 8: Post-incident Health Recovery***



- Each community will have a capacity plan for health, behavioral health, and social services recovery
- A plan will be developed that describes how health, behavioral health, and social services will be transitioned and coordinated
- A monitoring and evaluation plan of recovery efforts will be in place

# *Transition and Coordination in the Acute and Long-Term Post-Incident Phases*



- Incorporate transition-to-recovery planning into emergency plans
- Establish guidance on roles and responsibilities among local, state, territorial, tribal, and federal government as well as non-governmental partners to ensure continuity of health and social services

# ***Community Resilience in Rural Contexts***

# *Threats to Rural Resilience*

## **Natural disasters**

- e.g., Harrisburg tornadoes

## **Technical Disasters**

- e.g., 2006 Sago Mine Disaster in West Virginia

## **Pandemics**

- e.g., H1N1 outbreak

## **Terrorism**

- e.g., chemical threats

## **Economic Crisis**

- e.g., loss of crops, farm crises

# *Rural Vulnerabilities*

## **High risk facilities:**

- **Nuclear power facilities**
- **Oil refineries**
- **Uranium and plutonium storage facilities**
- **U.S Air Force missile storage and launch facilities**

## **Boarder locations:**

- **Many rural communities located near high-traffic areas with bordering countries**

# *Vulnerabilities Cont'*

## **Agriculture-related hazards:**

- **Chemical threats**
- **Droughts**
- **Floods**
- **Livestock diseases**
- **Food insecurity**

## **Rural demographics:**

- **SES**
- **Trends in social problems**
- **“flight” of you and aging population**
- **Lack of comparative support for returning veterans**
- **Less human, political, financial, cultural, and social capital**

## *Vulnerabilities Cont'*

### **Emergency disaster infrastructure:**

- **Resources historically distributed based on population density**
- **Less research and training opportunities**
- **Lack of stable emergency workforce (e.g., first responders and HAZMAT units)**
- **Preparation of local and community governance**
- **Lacking emergency and contingency response plans and resources (e.g., rural school systems)**
- **Fewer public health professionals (& allied professionals)**
- **Evacuation shelter capacity (including surge capacity)**
- **Hospital surge capacity**

# *Potential Strengths and Weaknesses of Rural Cultural Values*

## **Cultural values:**

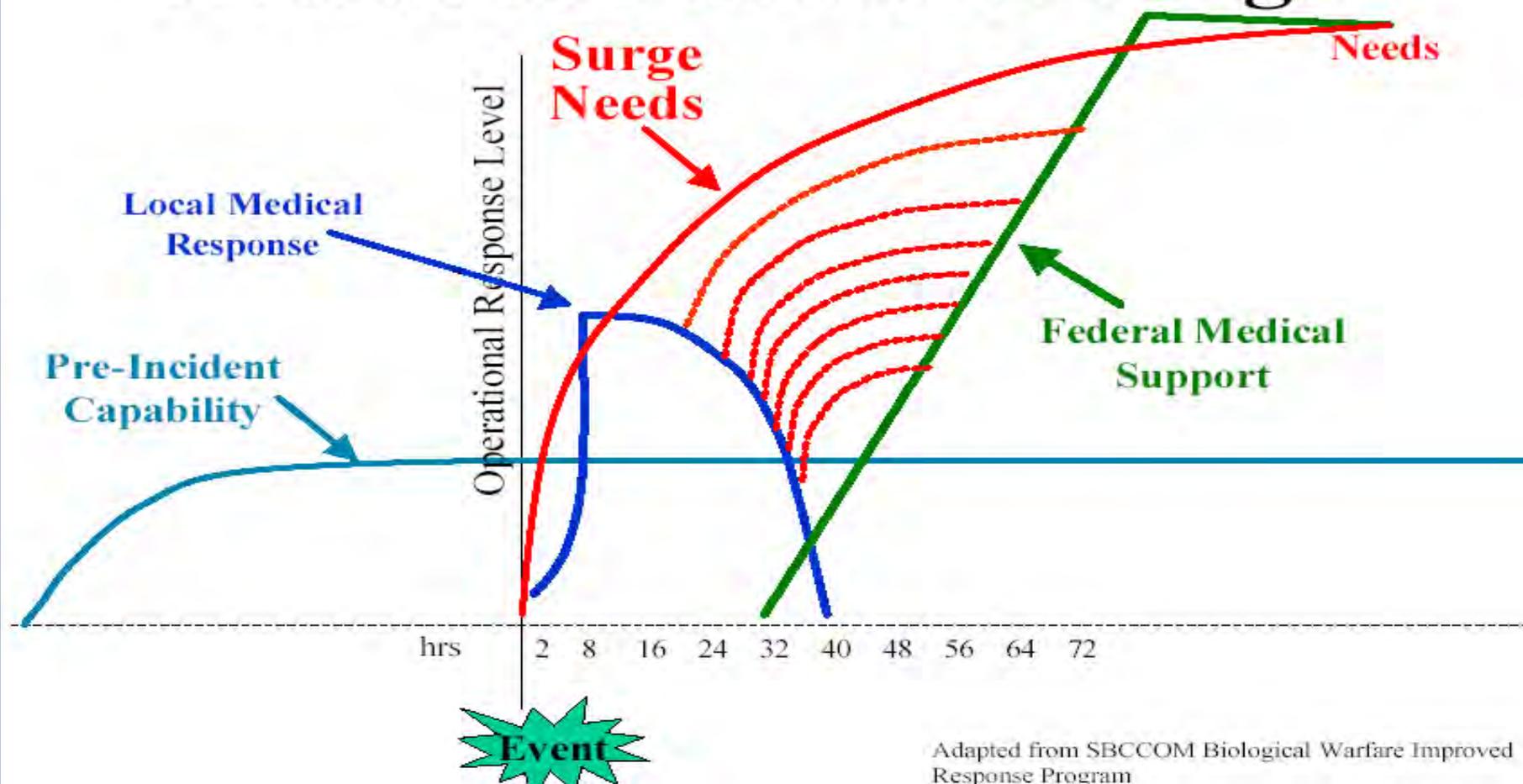
- **Self-reliance**
  - Can care for self –VS– Reluctant to seek help
- **Community**
  - Enhanced social support –VS—Can be “closed system”
- **Family**
  - Support system—VS—Keep problems “in the family”
- **“Tie” to land**
  - Source of identity and livelihood—VS—Hesitant to evacuate
- **Faith**
  - Positive Meaning-making—VS—Negative Meaning-making

# Understanding Disaster Phases in Rural Communities



# Scalability

## Health and Medical Surge



# Whole Community Planning in Rural Communities



# Common Rural Stakeholders Involved in Local Plans

Government

Faith Based

Community

Business

# Government Agencies Examples



Funding Source!



Helps Care For Citizens



Resource For 1<sup>st</sup> Responders



Local Collaborator

# Community Based Orgs. Examples



Shelters and Food



Collaboration and sometimes command structure.



Supplemental Finances & Volunteers



Local Collaborator

# Faith Based Orgs. (FBOs) Examples



Mass feeding and supplies



Mass feeding. General services



United Methodist Committee on Relief.  
Cleanup, repair.



Warehouse Support



Local Collaborator

# Bringing Rural Stakeholders Together

**Government**

**Faith Based**

**Enhanced Community  
Resilience**

**Community**

**Business**

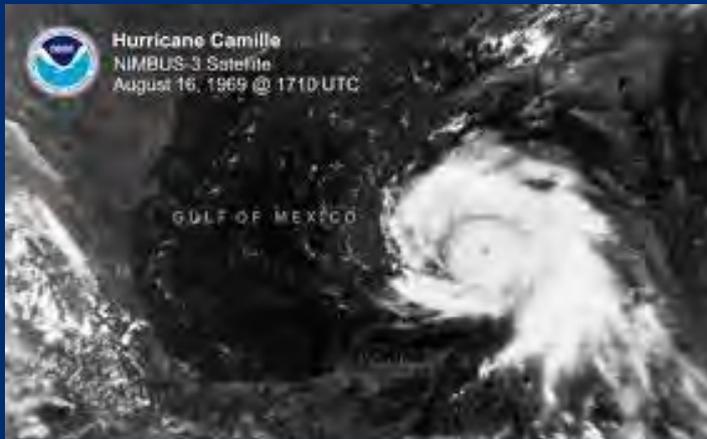
***Role of FBOs in Building  
Rural Community Resilience  
following Hurricane Katrina***

# *Early Interests in Disasters and Trauma*



# Welcome to Mississippi...





Hurricane Camille



Hurricane Katrina

## *Examples of Disaster Event: 2005-2010*

- **Hurricane Gustav**
- **H1N1**
- **Economic Crisis**
- **2010 Delta Tornadoes**
- **Deepwater Horizon Oil Spill**

# *Building Capacity for Responding to Disaster Emotional and Spiritual Needs*

- **Developed a Clergy, Academic, and Mental Health Partnership (CAMP) Model**
  - **MS IDTF, USM, Local FBOs facilitated:**
    - Learning collaboratives
    - Targeted trainings
    - Community outreach
    - Care for caregivers
    - Direct services

## *Cont'*

- **Learning collaboratives:**
  - **Clergy-Mental Health Partnership**
  - **Disaster Chaplain Network**
  - **Congregational Disaster Care Coordinators**

## *Cont'*

- **Targeted trainings:**
  - **Disaster Pastoral Care Conference**
  - **Annual Summit**
  - **Psychological First Aid (PFA) and PFA for Community Religious Professionals**

## *Cont'*

- **Community outreach activities**
  - **Church Disaster Mental Health Project**
  - **Suicide warning signs**
  - **Trauma awareness**
  - **Peer listening**
  - **H1N1 workshops**
  - **Community Wellness Health Fair**
  - **Suicide risk awareness**
  - **Online social networking tool**

## *Cont'*

- **Care for caregivers**
  - **Clergy retreat**
  - **Mental health CEU workshops on self-care**
  - **Experiential community self-care workshops**

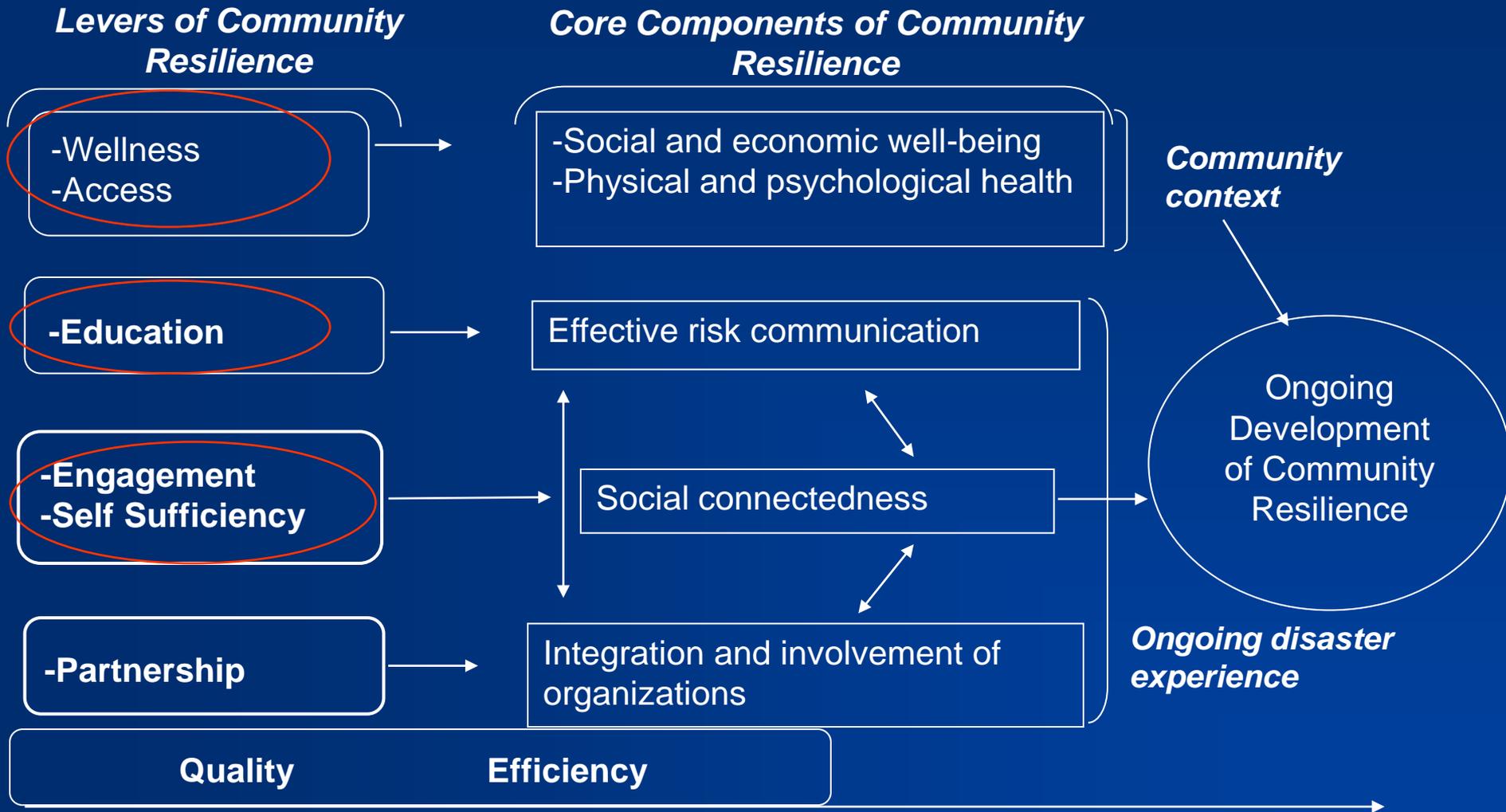
## *Cont'*

- **Direct services to vulnerable populations:**
  - **Bilingual services (Boat People SOS, Inc)**
  - **Peer listening training services (Coastal Family Health Centers, Inc)**
  - **Child adolescent services (Memorial Behavioral Health)**
  - **Affordable services (Singing River Hospital)**



# **Pulling it All Together: Towards Community Resilience**

# We Note Eight “Levers” Or Means of Achieving Community Resilience



From: Chandra et al. (2011). Building Community Resilience. RAND TR-915.

# Potential Community Resilience-Related Activities

Promote community **wellness** by:

- developing public health messaging to promote healthy lifestyles
- bolstering psychological wellness, particularly coping skills and resilience attitudes through public campaigns
- integrating health and social services better around ESF-6 functions



# *Potential Community Resilience-Related Activities (2)*

Ensuring **access** to high quality behavioral health services, including:

- ensuring PFA or other behavioral health interventions are provided to those during and after disaster
- creating plans for continuity of behavioral health care
- educating individuals about appropriate forms of social and emotional support

# *Potential Community Resilience-Related Activities (3)*

Build effective **community education** programs by:

- developing and disseminating messages that improve understanding between individual and community health
- training lay health advisors about appropriate risk communication techniques
- supporting and promoting the use of using social media among vulnerable communities and organizations
- emphasizing recovery communication, with attention to behavioral health messages

# Potential Community Resilience-Related Activities (4)

Increase **self-sufficiency** by:

- helping individuals become educated on behavioral health
- identifying the links between individual and community preparedness for preventing and responding to the negative health consequences of disaster, fostering community self-reliance





# **Developing a Rural Community Resilience Action Plan**

## *Thinking about All You Just Heard....*

- **What could you do adopt or integrate community resilience into your public health plans?**
- **How could you partner better in resilience-building activities?**
  - **With other public health leaders**
  - **With partners outside of government**

## ***Lever: Wellness***

- **This lever focuses on promoting population health before and after an incident, including behavioral health**
- **One element is: *Promote public understanding of health and wellness and relationship to preparedness***
- **Use the community prioritization tool to consider what you are doing in your community**

## *Lever: Engagement*

- This lever focuses on promoting participatory decisionmaking in planning, response, and recovery activities
- One element is: *Involve community members in planning and decisionmaking on issues relating to response and recovery activities*
- **Use the community prioritization tool to consider what you are doing in your community**

## *Lever: Partnership*

- This lever focuses on developing strong partnerships within and between government and other organizations
- One element is: *Assess the extent of existing networks and social routines among community members and organizations, with attention to identifying strategies to reinforce them*
- **Use the community prioritization tool to consider what you are doing in your community**