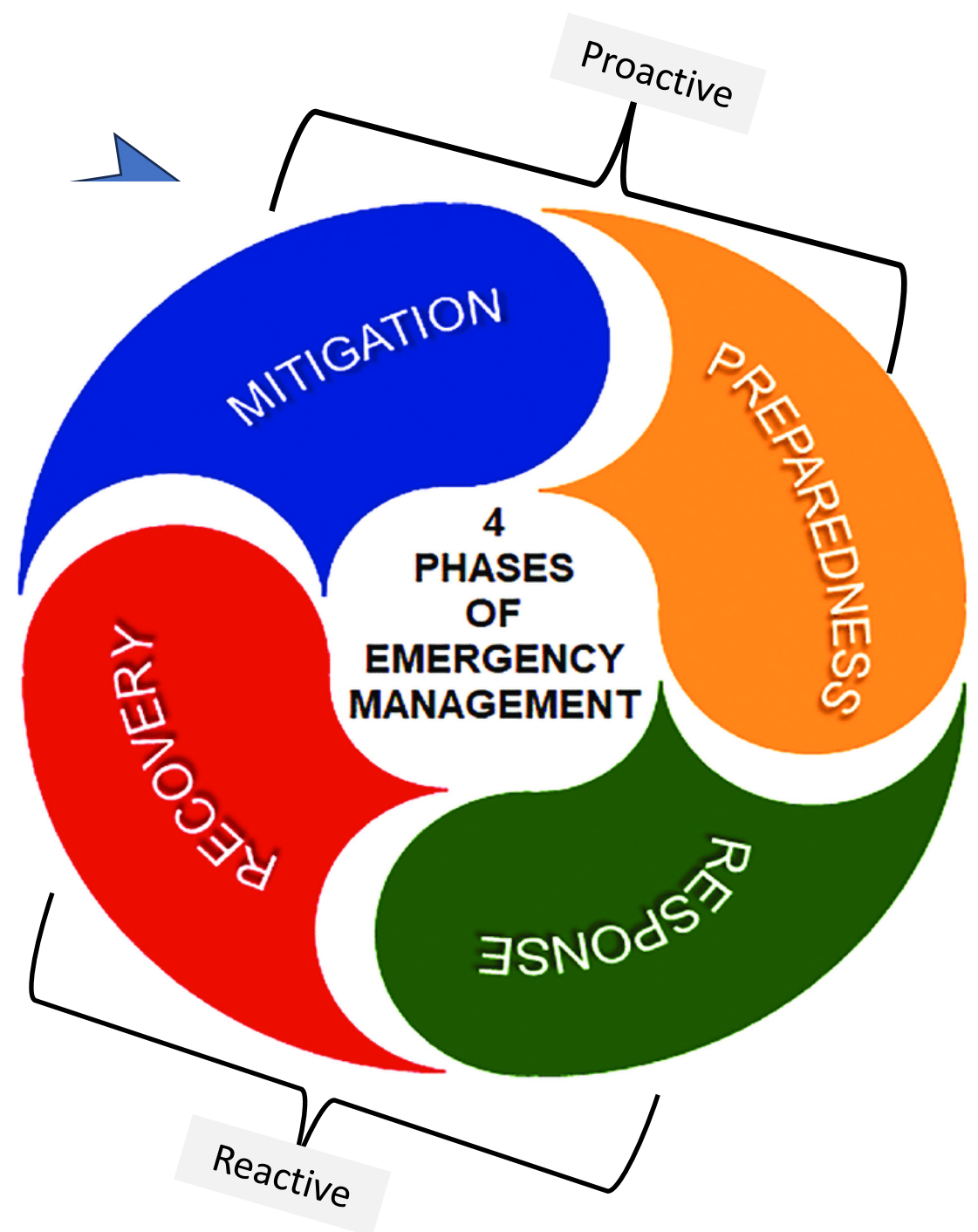


WHETHER HABS OR HURRICANES,
VIBRIOS OR VOLCANOES,
COMMUNITY-MANAGED DISASTER
RISK REDUCTION AS A GRASSROOTS
COMMUNITY ENGAGEMENT
FRAMEWORK

Daniel Kilpatrick, Department of Environmental Health Sciences,
University of South Carolina

Why is Disaster Risk Reduction important?

Disaster risk reduction is the concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters.
-UNESCO, 2023

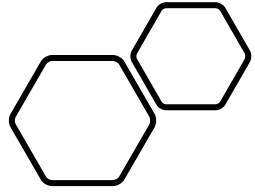




“Preventing the next 9th Ward”

Hurricane Pam exercise in July 2004: 55,000 people in New Orleans would need sheltering and 1,000 shelters would be required. In actuality, around 60,000 people were in 956 shelters during Katrina’s aftermath.

-IEM, 2006



Disaster Risk Equation

$$\text{RISK} = (\text{HAZARD} * \text{VULNERABILITY}) / \text{CAPACITY}$$

- **h = hazard strength**
- **v = location: time and place**
- **c = ability to respond and recover**

Community-
Managed
Disaster Risk
Reduction

CMDRR Training, Design and Implementation



**Module 1:
CMDRR Concepts, Principles, and Practices**

← Workshop 1



**Module 2:
Facilitating CMDRR: Method and Process**

← Workshop 2

FOUR MINIMUMS OF CMDRR

Participatory Disaster Risk Assessment (PDRA)	Formulating DRR Measures and Plans	Community Organizing for CMDRR	Self Monitoring, Evaluation and Learning
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← Field
Practicums
& Action
Planning
Meetings



**Module 3:
Sustaining CMDRR**

← Workshop 3



Workshop 4 – Train the Trainer

Successes

- Giving a voice to communities in the decision-making process
- Student involvement in community engagement and capacity building
- Application for math and flood tutoring with elementary students
- Networking for the purposes of sharing resources across communities
- Navigating hybrid workshops and webinars during the pandemic.

EJ Strong Products & Impacts

City of Charleston
Resilience Plan for
Rosemont

Lower Richland's
CERT training and
Early Warning System
Planning

CMDRR App
developed by Georgia
Tech computer
science majors

Clemson's Food
Security interactive
map

Shaping the trajectory
of intermediate
funding at EPA

Community-Led Resilience Planning



Matching Funds : \$217,000

Community Capacity Building for Nature-Based Flood Resiliency in Rosemont and Bridgeview, SC



Total Project Contributions: \$767,000

Lessons Learned

- International model with domestic relevance
- Extensive time to build community trust during the time constraints of grant deliverables was overcome
- Hybrid training modality supported the **engagement** of a variety of participants representing a variety of communities
- Hybrid approach required by the pandemic **enabled** a broader audience

Conclusions

- EJ Strong & CMDRR provide a framework, methodology, and curriculum for community engagement to increase involvement in environmental health, public health, and emergency management.
- Enables an all-hazards approach to build capacity at the neighborhood level for acute and chronic events
- Customizable and scalable (variety of hazards, variety of communities)

Acknowledgements

- LAMC
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- SC DHEC
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