

Three Crucial Steps for Early Childhood Emergency Preparedness in Mississippi

Introduction

The impact of Hurricane Katrina on the early care and education sector revealed wide gaps in early childhood emergency preparedness. The emergency management infrastructure was largely unaware of the existence or needs of young children and child care facilities. Moreover, the very fragmented nature of the child care sector makes conventional emergency planning for this sector more difficult, because the locations, capacity, and specific services of early care and education facilities cannot be effectively integrated into interstate emergency management software for mapping and first response purposes. These gaps increase the risk for young children in geographic areas that are at moderate-to-high risk for natural disasters.

In Mississippi, two regions are at moderate-to-high risk of natural disasters: The Gulf Coast region is at risk of hurricanes and the northwestern corner of the state is at risk of earthquakes caused by the New Madrid Fault. (See Table 1 and Figure 1.) Fortunately, there are clear, feasible steps that public agencies can take to close the gaps in early childhood emergency preparedness and reduce the disaster risks for young children. These steps are to:

1. Integrate core data about early childhood services in one spatially enabled, interstate database
2. Develop and implement a joint protocol for first response, rapid referrals for displaced children, and damage assessments and restoration planning for the child care sector
3. Provide advanced emergency preparedness training to child care providers in moderate-to-high risk areas

Core Data

Integrated, geocoded data about early childhood services is essential for identifying the risks to individual child care facilities, projecting losses to different parts of the child care sector, performing rapid damage assessments and rapid referrals, and rapid restoration planning. Table 2 contains the essential early childhood services datasets and their availability in Mississippi.

Integrating and geocoding core child care data within Mississippi, or within individual Mississippi public agencies, is not enough to achieve genuine preparedness, however. A single interstate database is crucial for rapid response in interstate disasters such as Hurricane Katrina or a possible New Madrid earthquake. Emergency management agencies at the state and federal level need immediate access to a single source that can continuously collect, maintain, and update integrated early childhood services data. However, the highly fragmented nature and rapid turnover of the child care sector make it impractical for the Federal

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Emergency Management Agency to maintain these datasets in its mapping operation.

To fill this gap in early childhood emergency preparedness, the Mississippi State University Early Childhood Institute launched the Early Childhood Atlas Readiness Project in 2006. Through this project, ECI and its partner, the Community Information Resource Center of the Rural Policy Research Institute, University of Missouri, has integrated all available early childhood services data in 12 states, including Mississippi, and is ready to produce custom location maps and call lists for first responders to use in actual disasters in those states. (With additional funding, ECI and CIRC can make current datasets immediately available to FEMA and state emergency management for their own mapping and disaster response activities.)

Joint Protocol

Without deliberate, systematic planning, the special

needs of young children and their parents can be easily overlooked in public disasters. A joint protocol should identify the agency or agencies responsible for first response, referrals of displaced children to immediate services, damage assessments for child care facilities, and restoration of early childhood services in the disaster area. The protocol should include checklists for each agency, an organizational chart with clear reporting lines, and funding sources for each aspect of early childhood emergency preparedness.

Advanced Emergency Preparedness

In the aftermath of Hurricane Katrina, many agencies and nongovernmental organizations produced new materials for child care providers that encourage them to become better prepared for disasters. Many of these initiatives assumed that individual child care providers must shoulder the burden of disaster response alone. Without question, in a major disaster every adult must accept responsibility to

Table 1. Numbers of Mississippi Children Ages 0-4 at Moderate-to-High Risk of Selected Disasters, by Rurality¹

RURALITY	HURRICANE	EARTHQUAKE	BOTH RISKS
Urban Core	18,808	6,172	-
High Commuting to Urban Core	6,699	3,242	-
Low Commuting to Urban Core	642	-	-
Large Town	849	-	-
High Commuting to Large Town	363	-	-
Low Commuting to Large Town	1,290	-	-
Small Town	272	-	-
High Commuting to Small Town	-	-	-
Low Commuting to Small Town	674	-	-
Rural Area	1,767	346	-

Sources: U.S. Census; USDA Economic Research Service; Colorado State University Tropical Meteorology Program (Aug. 3, 2006); United States Geological Survey Earthquake Hazard Program (2002)

Credit: Community Information Resource Center, Rural Policy Research Institute

¹ Rurality is defined for this table by the USDA Economic Research Services' Rural Urban Continuum Codes.

quickly protect the children in his or her care. However, the nature of child care, with ratios of 5, 10, or more children per adult, commonly with little or no administrative or support staff on site, makes it unrealistic that a child care director or teacher can simultaneously protect children, monitor a radio or television for announcements, take emergency steps to secure the facility, determine an evacuation route and shelter destination, and/or transport the children to that destination.

Real preparedness, or the state of readiness to perform or support in an emergency, depends upon a realistic assessment of the child care workforce’s potential to perform and support. The more information that individual child care providers in moderate-to-high risk areas have about evacuation routes, shelter locations, and other procedures relevant to the specific risks in their areas, the better they can protect the children in their care.

The Early Childhood Atlas Readiness Project identifies geographic areas that are at moderate-to-high risk for various types of disasters and locates the early childhood services in those areas. With additional datasets about evacuation routes and shelter locations, this project can provide individual child care facilities with customized maps for evacuations and instructions for responding to disasters most likely to occur in their areas. The difference with disaster-specific training for the child care sector is that it can be targeted to the facilities with different risk factors. For example, child care providers in hurricane risk zones have less need for evacuation information because the lead time with hurricanes makes parents better able to arrange evacuation for their own children. However, child care providers in hurricane evacuation zones need to be recruited in advance to provide emergency care and programming at shelters and to accept referrals of children who are displaced long-term from their homes. In

Table 2. Availability of Data for Early Childhood Emergency Preparedness in Mississippi

DATASET1	AVAILABLE IN MISSISSIPPI	SOURCE
Licensed / Registered Facilities	Yes	MS Department of Health
Head Start / Early Head Start Programs	Yes	Head Start Information and Publication Center
Quality-Rated Facilities	Yes (available in 2007)	MS Department of Human Services
Public Pre-K Programs ¹	Not Applicable	-
Child Care Subsidy Facilities ²	No	MS Department of Human Services
Food Subsidy Facilities ³	Yes	MS Department of Education
Family Child Care Homes ⁴	Yes (partial data only)	MSU Extension Service
All Datasets in Tab-Delimited Files or Electronic Spreadsheets	No	-
All Variables in One Dataset	No	-
Designated Evacuation Routes	Yes (state-level only)	MS Emergency Management Agency
Designated Shelter Locations	No	-

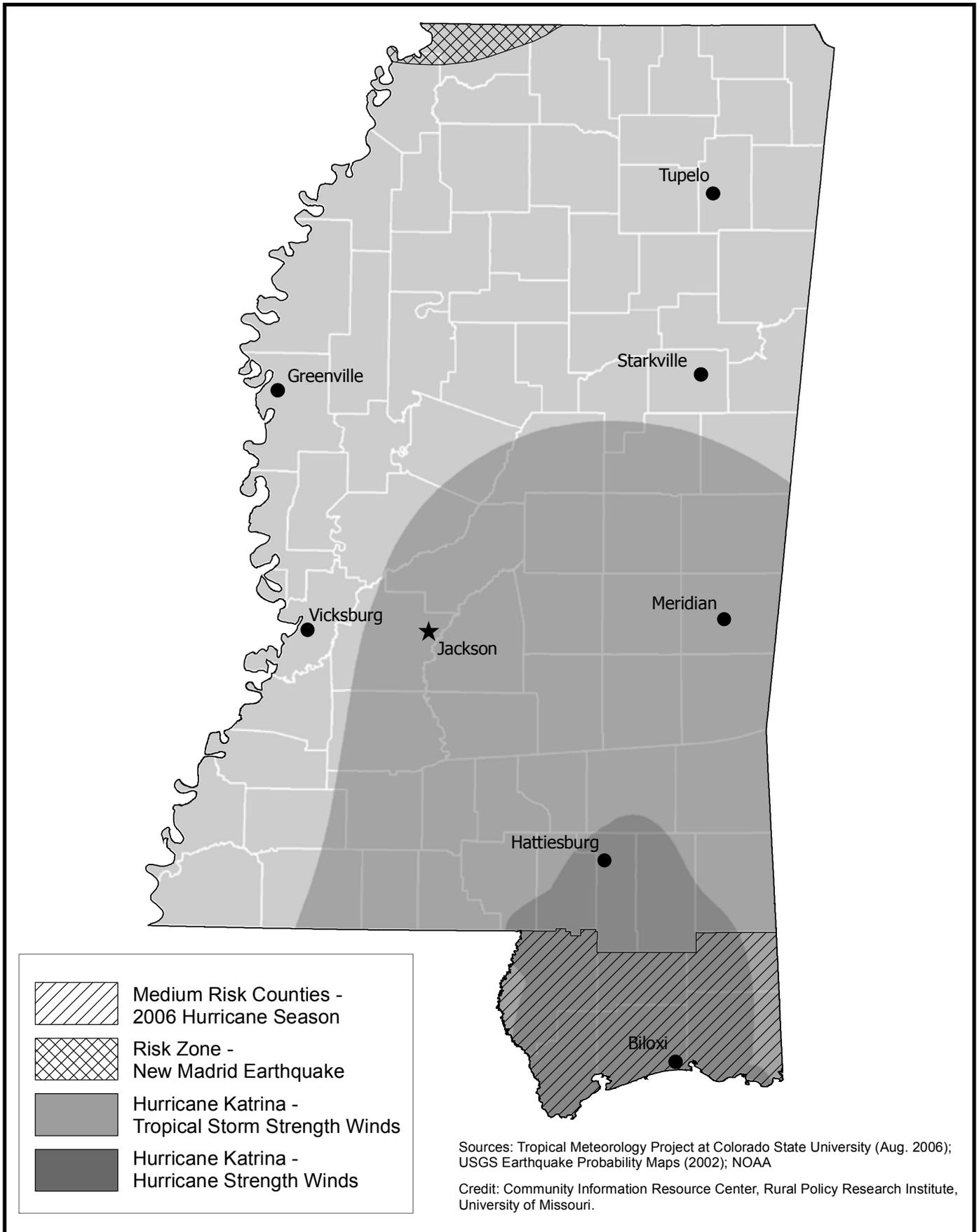
¹ State-funded public prekindergarten programs, all types and locations

² Child care facilities that participated in federally funded, state-administered child care subsidy programs

³ Child care facilities that participated in the federally funded, state-administered Child and Adult Care Food Program

⁴ Licensed and/or registered family child care homes

Figure 1. Natural Disaster Risk Areas in Mississippi



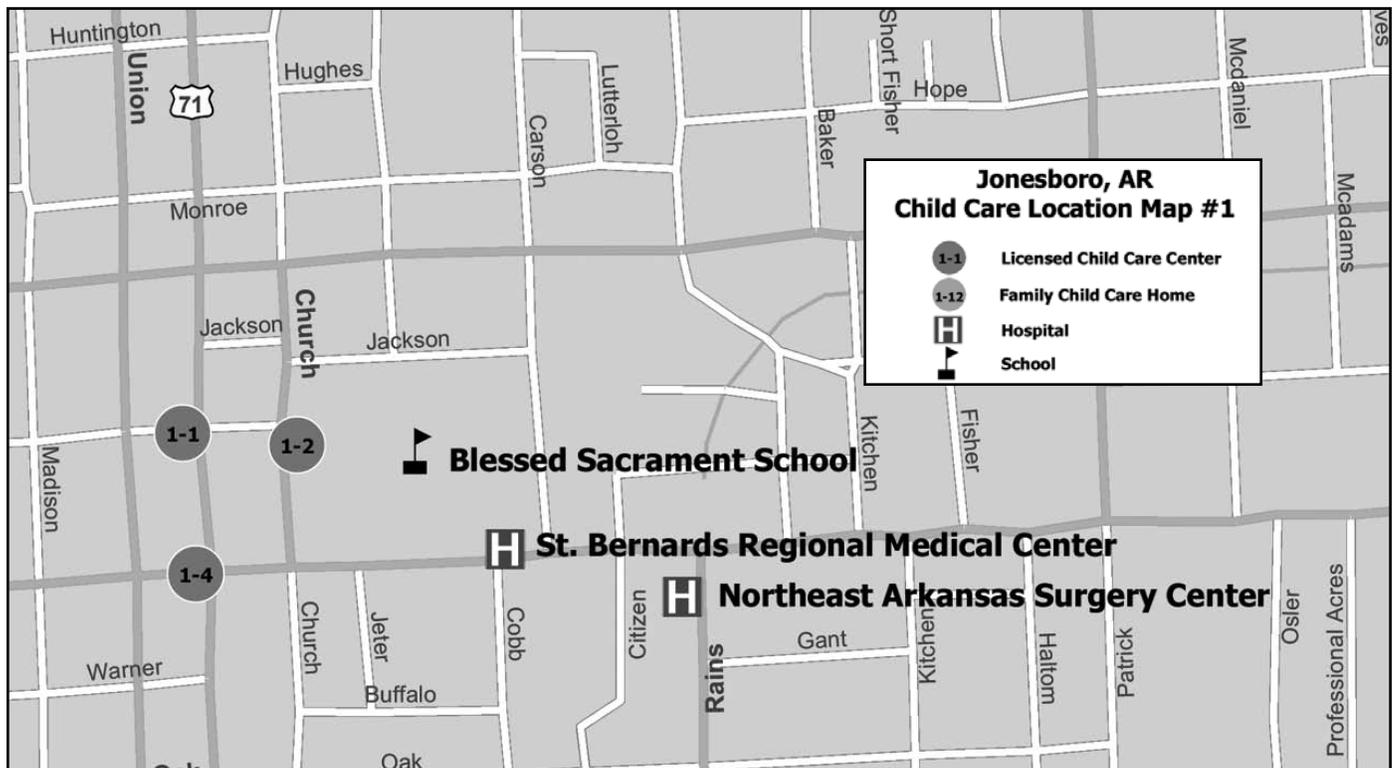
contrast, child care providers in earthquake risk zones need very different information: How to protect children during an earthquake, how to safely evacuate damaged buildings, the safest evacuation routes, and locations of designated shelters.

The State of Mississippi can take advantage of the Early Childhood Atlas Readiness Project by funding advanced emergency preparedness training to at-risk providers. A special feature of advanced emergency preparedness training can be joint sponsorship by lead agencies for child care and emergency management, so that the training facilitates interagency collaboration at the same time that it gives child care providers concrete information before disasters occur. Further, successful completion of this advanced emergency preparedness training should be a new criterion for quality rating, by the Mississippi Child Care Quality Step System, for providers in moderate-to-high risk areas.

Conclusion

Hurricane Katrina uncovered severe gaps in emergency preparedness in the early care and education sector in Mississippi. In the 16 months since the storm, the Mississippi State University Early Childhood Institute has investigated the obstacles to early childhood emergency preparedness and worked to foster better preparedness in Mississippi and across the nation. In three steps – data sharing, establishment of a joint protocol, and delivery of advanced emergency preparedness training for child care providers in moderate-to-high risk areas – the State of Mississippi can lead the nation in dramatically improving the disaster readiness of facilities where children under school-age are located. The Mississippi State University Early Childhood Institute is ready to help in this three-step process.

Figure 2. Sample Location Map for Use in First Response



SOURCES: Arkansas Division of Child Care and Early Childhood Education (Oct. 5, 2006); U.S. Census Bureau; U.S. Geological Survey (2002); ESRI

Close-up location maps can help first responders find child care facilities and help child care providers find the nearest shelters. (Community Information Resource Center)



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