## **Abstract:**

This article is part of a collaborative effort by experts in the field of emergency preparedness to complete an overview begun by the late Michael Shannon, MD, MPH, on the current challenges and future directions in pediatric disaster readiness. This particular article, "The Future of Pediatric Preparedness," will offer a perspective on future directions in pediatric preparedness.

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## The Future of Pediatric Preparedness

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ealth and hospital systems are already planning on preparing for disaster-driven surge needs. But few, if any, communities in the United States currently have sufficient pediatric surge capacity or plans in place to develop such strategies in the near term. That said, with persistent pressure from the American Academy of Pediatrics, the newly formed National Commission on Children and Disasters, regional and national pediatric advocates, and other organizations, it is presumed that eventually all hospital disaster planning will, as a matter of course, include specific pediatric surge issues. In addition, the future holds promise of substantially enhanced presence of pediatric subject matter expertise in all major federal, state, and local disaster planning, response, and recovery agencies. Pediatric experts will get a seat at relevant disaster planning tables as laws and agency regulations increasingly mandate that attention must be paid to the special needs of children.

It is well recognized that many medical therapeutic interventions and strategies used in clinical care for pediatric patients are often based on adult studies or underpowered pediatric studies. Barriers to this research are well documented by the National Institutes of Health, Food and Drug Administration, and federal lawmakers who have instituted laws, regulations, and guidelines to address this gap that have thus far not been effective. This lack of relevant research has been particularly apparent in disaster-related medical countermeasures guidance for children.

Clearly, the future of pediatric disaster medicine will include much more robust and aggressive strategies to improve the quality and reliability of medical countermeasure recommendations. More sophisticated research methodologies will yield guidance that is "evidence informed" if not "evidence-based." But in the absence of useable research, increasingly formal and ongoing strategies to reach expert consensus will drive optimal decision making under conditions of uncertainty.

Finally, it is apparent that preexisting social and economic conditions can affect vulnerability of children to a wide range of disasters. Poverty, poor health, and chronic stress are all recognized as factors that drive outcomes with respect to disaster impact. Eventually, elimination of negative preconditions will contribute to far greater resiliency of children, their families, and their communities.

As this is being written, the nation is preparing for a presumed huge surge of patients, primarily pediatric, who will be affected by H1N1 influenza. How we respond will allow us to evaluate how far we have progressed in our ability to respond and what lessons we need to relearn but, regardless, will clearly demonstrate the importance to all stakeholders to carefully understand and plan for the needs of our infants, children, and families.