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**Abstract:**

This article, and the nine that follow, represent a collaborative effort by experts in the field of emergency and disaster preparedness, many who were colleagues of the late Michael Shannon, MD, MPH, to complete this overview he had begun for this issue of Clinical Pediatric Emergency Medicine. Each article will address a specific topic area within the broad realm of pediatric disaster readiness, reviewing current challenges and future directions. This series of articles represents a tribute to Michael Shannon and his great legacy of excellence in patient care, teaching and research, and his outstanding leadership and advocacy for children and families.

# Pediatric Preparedness for Disasters: Where Are We Now? Current Challenges and Future Directions

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**O**n September 11, 2001, New York City teachers in the immediate vicinity of the World Trade Center evacuated 8000 school children to safety. The teachers rescued the children despite smoke and falling debris, sending some via ferry to Staten Island and Jersey City and walking with others 40 minutes north to Greenwich Village.<sup>1</sup>

The success of the evacuation cannot be overstated: it occurred during utter chaos as the twin towers collapsed and relied on the spontaneity and courage of the teachers. However, there was no comprehensive plan in place for evacuation and reunification, or for emergent care.

The days and years ahead would reveal that response to the mental health needs of children would be less than adequate.<sup>2</sup> In the terror attacks of 9/11 that killed 3017 individuals in New York; Washington, DC; and Pennsylvania, more than 2700 children suffered the immeasurable loss of a parent.<sup>3</sup> Countless others bore direct witness to destruction and death. These

children would be at increased risk of posttraumatic stress disorder.<sup>4</sup>

Until the World Trade Center disaster of 2001, pediatric preparedness was viewed primarily as a theoretical construct. The Agency for Healthcare Research and Quality was among the first federal agencies to advance the concept, issuing a 1999 request for proposals. Two years later, the disaster of 9/11 gave pediatric preparedness a frame of reference and an urgency. Public health agencies, schools, and hospitals discovered quickly that there were few to no comprehensive plans to prepare for or respond to a large-scale disaster involving children. Within the span of a decade, pediatric disaster preparedness has gone from principle to paradigm. As disaster plans—by necessity—continue to be developed, the unique issues of children are being brought into the discussion.

The term disaster has multiple meanings and can, in its strictest definition, be an event that affects only 1 individual. From a public health perspective, however, a disaster is defined as an event that overwhelms local response capabilities. Recent man-made and natural disasters have made clear the need to develop comprehensive response systems.<sup>5</sup> Equally important, the all-hazards approach to the 4 major aspects of disaster planning (preparation, response, mitigation, and recovery) have proven their ability to prepare response systems that are efficient and as inexpensive as possible. However, this approach to planning for all hazards and all victims may not always address unique pediatric needs and furthermore may not offer an effective solution for events that primarily target children. The nine brief articles that follow represent

a collaborative effort by experts in the field of emergency and disaster preparedness, many who were colleagues of the late Michael Shannon, to complete the overview he had begun on the current state of pediatric preparedness. Each article focuses on a piece of the larger puzzle and will discuss some of the current challenges and future directions in disaster preparedness for children.

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