

# EDITORIAL

## “What’s Past Is Prologue”:

### William Shakespeare, *The Tempest*, Act 2, Scene 1

James J. James, MD, DrPH, MHA; Lauren Walsh, MPH

For so many of us who took part in the aftermath of Katrina, and worked prodigiously on medical and public health preparedness, Superstorm Sandy and its consequences once again put preparedness and response issues on the national agenda. Unfortunately, it apparently takes a major event with devastating impact to occur every few years to demonstrate the need for a truly integrated national disaster response system and for a substantive number of planners and responders with education and training in the discipline of Disaster Medicine and Public Health, as described in our journal.

We will return to this concept, where we are in the evolution of this discipline, and the transition of *Disaster Medicine and Public Health Preparedness* from AMA Publications to a new publisher. First, I would like to return to some comments about Sandy. These observations, which expand on the superbly written accompanying editorial by Drs Abramson and Redlener of Columbia University’s National Center for Disaster Preparedness, take the perspective of the editorial philosophy of our journal.

“ . . . \$50 billion in damages . . . 97 people died in the storm.” These early figures underscore the severity of Sandy, but also invite comparisons to Katrina, which had an estimated economic impact of \$81 billion in 2005 USD and 1033 deaths.<sup>1</sup> These two events were distinct and very different. To best inform future preventive and mitigating strategies, they need to be studied not only comparatively but also from a descriptive and analytical epidemiological approach.

“ . . . a hundred medically-fragile patients from adult homes who suddenly appeared at the shelter without medical records or accompanying staff.” If that observation does not evoke memories of Katrina, then you were likely not part of the response effort. The overwhelming problem was not only a lack of reliable medical information, but also patients’ inability to provide an adequate medical or medication history due to language barrier, mental illness, loss of consciousness, and myriad other reasons. Provision of timely and accurate chronic care was further impeded by both a scarcity of critical medications and difficulties with resupply. These findings have been documented from Katrina and again from Sandy.<sup>2</sup>

What is most disconcerting is that these issues are largely fixable. In the journal’s October editorial, a personal Health Security Card was described. This public health tool uses smart-card technology to provide information that enables responders to identify and medically assess individuals in a low-tech environment with limited available power.<sup>3</sup> The approach should

be seriously considered as a method to increase population resilience and readiness. Although a seemingly reasonable alternative, we cannot rely on the supposed ubiquity of smart phone technology for this type of intervention. Studies have shown that use of smart phones is higher among the financially well-off, the well educated, and those under the age of 45 years,<sup>4</sup> none of whom are among the most vulnerable populations in a disaster. A recent Nielsen survey found smart phone penetration of 16% or less for those 65 years and older with incomes less than \$50 000.<sup>5</sup> Furthermore, as seen during Sandy, power outages can lead to loss of cell phone service and prevent smart phone users from charging phone batteries.

“ . . . practices driven as much by good will or desperation as they were by science and evidence.” If our overarching preparedness and response policies have one universal failure, it is that they are more informed by and formulated on political and territorial considerations than by science and evidence. Many think that such evidence is absent and/or cannot be generated. I would strongly posit that much evidence exists but is discarded as not representing case-control and population-based outcomes. Methodologies that derive from, and are necessary in, the clinical environment may be transferable. While public health or population science depends on descriptive and analytical epidemiology, informed empiricism can certainly be used in its absence.

“Were we ready?” As I have stated many times, I believe this is the wrong question because (1) we must first address the question, “Ready for what?” and (2) as stated, the question implies a dichotomous answer of either yes or no. The number of potential scenarios that we could be ready for is essentially infinite, and the readiness requirements will vary dramatically across precipitating events: geography, climate, social, economic, political, and other factors. While an all-hazards approach addresses many common preparedness needs, and is inarguably a step toward improved capability and capacity, it cannot possibly consider every aspect of readiness in every population. I believe we need to rephrase the question and ask, “How prepared are we?” This question provides a more continuous model and allows the incorporation of generally accepted preparedness measures such as education and training and drills to help provide comparable measures.

Regarding lessons learned from Sandy, Abramson and Redlener make several salient points that underscore the need for integration, training as a unit, redundancy, and communication . . . all of the elements that create a system or response, as opposed to the well-intended, but uncoordinated, efforts that

continue to be the hallmark of our response efforts. Of course, criticism is easy, and defining solutions is not. I sincerely believe that the solution lies in evolving a discipline of Disaster Medicine and Public Health that cuts across all other health disciplines, and is based on a unique body of knowledge that incorporates an academic base and a research agenda. I further believe that all of the elements are in place to accomplish this, and I hope that the emerging society of Disaster Medicine and Public Health can provide the necessary framework. I am truly proud to say that *Disaster Medicine and Public Health Preparedness* will be the official journal of the new society. Details will be presented in the February 2013 issue, which will be the first from our new publisher.

A final note from the Sandy editorial, “. . . *true recovery from the large-scale disasters is invariably a prolonged and complex challenge.*” We need to better understand and appreciate that response must go beyond providing for immediate medical and public health needs. These needs will continue well into the future, but, in too many cases, the basic infrastructure to meet them will have been significantly diminished. All of us in this field need to understand the extended, long-term commit-

ment required to bring populations back to a state of normalcy. The rapid response teams may have left, and media interest waned, but we must always remember Shakespeare’s words, “Tis not enough to help the feeble up, but to support him after.”

## REFERENCES

1. Knabb RD, Rhome JR, Brown DP. Tropical cyclone report: Hurricane Katrina: 23–30 August 2005. Miami, FL: National Hurricane Center. [http://www.nhc.noaa.gov/pdf/TCR-AL122005\\_Katrina.pdf](http://www.nhc.noaa.gov/pdf/TCR-AL122005_Katrina.pdf). Accessed November 20, 2012.
2. Cooper A, Delauney S. Doctors Without Borders: First time in U.S. [interview]. New York, NY: Fox News; November 12, 2012. <http://www.youtube.com/watch?v=uB2L9C85ARA>. Accessed November 21, 2012.
3. James JJ. Advancements in the field of disaster medicine and public health preparedness. *Disaster Med Public Health Prep.* 2012;6(3):195-196.
4. Smith A. *Smartphone Adoption and Usage: Key Findings.* Pew Internet and American Life Project. Washington, DC: The Pew Research Center; July 11, 2011. <http://pewinternet.org/Reports/2011/Smartphones/Summary.aspx>. Accessed November 20, 2012.
5. Nielsenwire. Survey: new U.S. smartphone growth by age and income. New York, NY: Nielsen Co; February 20, 2012. <http://blog.nielsen.com/nielsenwire/?p=30950>. Accessed November 20, 2012.