Preparing and Rebuilding After Natural Disasters: A New Public Health Normal!

See also Zolkinov, p. 27; Lichtveld, p. 28; Rodríguez-Díaz, p. 30; Dzau et al., p. 32; and Woodward and Samet, p. 33.

This January 2018 issue of *AJPH* comprises an initial set of reactions and questions about Hurricanes Harvey, Irma, and Maria, which ravaged the United States in 2017. The common message from our invited authors: natural disasters should no longer be viewed as extraordinary events that require exceptional responses. These storms not only have demonstrated the capacity for destruction of property and their aggravation of injustice but also have shown their lasting consequences to human health. The frequency and severity of recent disasters, coupled with science-based predictions that both characteristics will persist or worsen, have set the management of natural disaster as a new normal for public health.

Zolnikov (p. 27), who sheltered in place in her home in Florida during Hurricane Irma, describes what such calamity means for each individual and family in exposed zones, in terms of traumatizing experiences and need for planning. We have passed the disaster supply kits phase.[1] As Zolnikov writes, "The frequency of these disasters and the size of the populations affected have moved this public health issue from that of manageable emergencies into the realm of *humanitarian crises* [our emphasis]. The response to disaster outcomes needs to change as well as the preparatory work before beforehand and the funding, support, and rebuilding that occur afterward" (p. 28).

Lichtveld (p. 28) stresses that communities are not on an equal footing before the disaster occurs. The burden of health disparities, persistent environmental health threats, and societal challenges prevents already vulnerable communities from effectively preparing and then recovering from natural and technological disasters. Lichtveld concludes that "one potentially daring but promising strategy is to elevate *community resilience* [our emphasis] as an essential public health service," (p. 30) followed by performance benchmarks for federal, state, and local health agencies.

Rodríguez-Díaz (p. 30) draws a harrowing portrait of post-Maria Puerto Rico. He reports that this unincorporated territory of the United States, already juggling a postcolonial status, economic crisis, and huge public health problems, finds itself in profound disarray in the aftermath of Hurricane Maria. Rodríguez-Díaz argues that both immediate relief and future reconstruction of a healthy and sustainable Puerto Rico require grassroots initiatives of culturally relevant interventions.

All of these contributions resonate with the definition by Dzau et al. (p. 32) of the goal that should unite everyone who is dedicated to public health, independent of partisan affiliation: rebuild our communities as we want them! Rebuilding takes decades and may have to be started over and over in the eventuality of new disasters. The Louisiana Health Care Redesign Collaborative during the post-Katrina (August 2005) recovery focused on four key areas: prevention, care, health information technology, and insurance coverage. Flooded areas became family parks and meeting centers. Engineered berms now serve as walking trails. Devastated lots—formerly food deserts—became community orchards.

And climate change? As explained by Woodward and Samet (p. 33), there are practical reasons to see the imprint of climate change in these cataclysmic events as a whole. Moreover, even if the exact responsibility cannot be established for each disaster separately, the potential repercussions of climate change on the risk profile of hurricanes and floods and their potential impacts cannot be ignored, and need to be factored in when reconstructing resilient communities.

Hurricanes in the South, wildfires in the West. The balance would be worse without the past 15 years of preparedness orchestrated by the United States after the attacks of the World Trade Center on September 11, 2001, and of the letters containing anthrax that followed a month-later. As shown in the recent *AJPH* supplement "The Evolution of Public Health Emergency Management: From Preparedness to Response and Recovery," before 9/11 most Public Health Emergency Preparedness awardees reported limited preparedness capabilities. By 2014, the number of jurisdictions reporting established capability functions within the countermeasures and mitigation domain had increased from less than three percent in 2001 to more than 97% in 2016.[2] Between 2007 and 2014, the minimum overall scores for the Centers for Disease Control and Prevention's Technical Assistance Review among the 50 states increased from 51 to 89, and the mean from 86.6 to 98, on a scale of zero to 100.[3] These efforts, unfortunately jeopardized by funding reductions and capacity loss of many public health agencies noticeable since 2004,[3]

ABOUT THE AUTHORS

Alfredo Morabia is the Editor-in-Chief of AJPH. *Georges C. Benjamin is the Executive Director, American Public Health Association, Washington, DC.*

Correspondence should be sent to Alfredo Morabia, MD, PhD, Barry Commoner Center for Health and the Environment, Queens College, CUNY, 65-30 Kissena Boulevard, Flushing, NY 11367 (e-mail: amorabia@qc.cuny.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

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are essential, and must be sustained and strengthened. In addition, we need to move our efforts beyond just preparedness and response. It is time to build strong communities to contain the preventable consequences of these natural disasters.

Our experience with Hurricanes Maria, Irma, and Harvey resulted in major tragedies. There is an opportunity to learn from them how to rebuild equitable and resilient communities able to dodge predictable devastation. Preparing to mitigate disasters and rebuilding *by design* is now a new public health normal. AJPH

Alfredo Morabia, MD, PhD
@AlfredoMorabia
Georges C. Benjamin, MD

CONTRIBUTORS

A. Morabia drafted the editorial, which was substantially edited by G. C. Benjamin.

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Reflections on the 70th Anniversary of the Nuremberg Doctors' Trial

See also Wilensky, p. 27; Crosby and Benavidez, p. 36; Annas, p. 42; Shuster, p. 47; and Grodin et al., p. 53.

Nuremberg was a geographic center for Nazi rallies and gave its name to the Nazi racial laws. Nuremberg also was the site of post–World War II trials that enunciated major human rights laws: the Nuremberg Principles and the Nuremberg Code. The authors of the series of articles in this issue were asked to reflect on the significance of one of the Nuremberg Trials—the Doctors' Trial (December 1946–August 1947)—and the use and meaning of its Code today. They quite reasonably sought to put the trial and its Code in historical and contemporary context.[1–4] The Doctors' Trial was the first of 12 "subsequent trials" conducted by the US Army before US judges.

The Doctors' Trial (also known as the Medical Trial) followed the International Military Tribunal in which judges from the United States, the United Kingdom, France, and the Soviet Union tried the major Nazi leaders. The tribunal ruled that there are such things as war crimes and crimes against humanity (including murder, torture, and slavery), that individuals can be held criminally responsible for committing them, and that "obeying orders" is no defense. In the Doctors' Trial, US physicians worked with US lawyers to prosecute Nazi physicians for murder and torture done under the guise of human experimentation. Sixteen of the 23 defendants (20 of whom were physicians) were found guilty, and seven were executed.[5]

THE CONTEXT OF THE TRIAL

Grodin's essay situates the trial in the context of the Nazi ideology of racial hygiene, and powerfully suggests that World War II practices of both "euthanasia" and eugenics continue to teach us lessons and warn us of predictable dangers inherent in contemporary practices.[2] We are not Nazis, but "the atrocities justified and performed by the health practitioners serving the Nazi eugenics and euthanasia programs exemplify how small steps along a slippery slope can lead to crimes against humanity."[2(p55)] Especially problematic are actions, like the Nazi "euthanasia program," that are carried out in secret.

The secret use of physicians and other health personnel for national security purposes is the theme of the article by Crosby and Benavidez. They paint a deep and profoundly disturbing picture of American physicians, psychologists, and lawyers working together to justify contemporary torture in CIA Black Sites.[4] They are not Nazis, but, as the authors note, "behaviors less severe than the Nazi atrocities can still easily meet the definition of torture and grossly violate ethical and professional standards of practice."[4(p36)] It is profoundly discouraging to learn that in our post-9/11 world the US government recruited health professionals to engage in crimes against humanity, and promised them legal immunity from prosecution (as the Nazi doctors faced in Nuremberg) if they got caught. Of course, the CIA torture was carried out in secret. As Crosby and Benavidez conclude, "on the 70th anniversary of the Doctors' Trial, basic provisions of international human rights law, including the prohibition on torture, are well worth reemphasizing."[4(p40)]

THE NUREMBERG CODE'S CONSENT REQUIREMENT

The Doctors Trial was more than just "a mere murder trial."[5] Its purpose was also, in the words of chief prosecutor General Telford Taylor, to "cut out and expose" the "ideas and motives which moved these [physicians] to treat their fellow men as less than beasts" so that they do not "become a spreading cancer in the breast of humanity."[5(p68)] This is why, as Shuster highlights in her article on the role of American physicians at Nuremberg, the prosecution called expert physician witnesses from the United States and Germany to testify about the ethical standards physicians employed before and during World War II when engaged in human experimentation.[3]

The American physicians at Nuremberg were intent on proving that nothing that American scientists and physicians did was comparable to Nazi concentration camp experiments, which had death as their end point.[3] Prevention of Nazi-like atrocities by future physicians and scientists, such as the freezing and high-altitude experiments, was as

ABOUT THE AUTHORS

George J. Annas and Michael A. Grodin are with the Center for Health Law, Ethics & Human Rights, Boston University School of Public Health, Boston, MA.

Correspondence should be sent to George J. Annas, Boston University School of Public Health, 715 Albany St, Boston, MA 02118 (e-mail: annasgj@bu.edu). Reprints can be ordered at http://www.ajph.org by clicking the "Reprints" link.

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