

Disaster Myths and Hurricane Katrina 2005: Can Public Officials and the Media Learn to Provide Responsible Crisis Communication during Disasters?

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We are gravely concerned about the potential for cholera, typhoid and dehydrating diseases that could come as a result of the stagnant water and the conditions.

Secretary Michael Leavitt
US Department of Health and Human Services
01 September 2005¹

I want to make sure these dead bodies get taken out of the water before mosquitoes spread disease all over the South.

Mayor Ray Nagin
New Orleans, Louisiana
04 September 2005²

Introduction

At least one thing has become predictable about disasters in recent years—once a disaster begins to unfold, an outbreak of disaster mythology is likely to ensue.³

The life cycle of this misinformation has become disturbingly familiar. Shortly after the event begins, public officials at various levels of the government hold news conferences in which they make statements or call for actions that perpetuate any one of a number of misconceptions about disasters. Next, the media, serving as unwary vectors, not only fail to challenge the veracity of these falsities, but guarantee their dissemination to the greater population (in some cases worldwide) through television and radio broadcasts and newspaper articles. Upon hearing or reading these reports, the unwitting public, being poorly inoculated against disaster myths, and reluctant to question authority in the midst of a crisis, latch on to and maintain these fantasies. Then, these disaster myths become re-established in the reservoir of popular culture to await their re-emergence by uninformed public officials during the next disaster.

The first myth quoted above—*cholera and typhoid will occur after a natural disaster*—is based on a fundamental misunderstanding of the epidemiology of infectious diseases. Only infectious agents already endemic in the community are at risk of emerging during a disaster.⁴ Unless cholera or typhoid was endemic in the region affected by Hurricane Katrina before the flood (it was not), then there was negligible risk of a cholera or typhoid outbreak after the flood. Similar misinformation took place after the 1994 Northridge Earthquake, when the rumor was spread that cases of bubonic plague had occurred in metropolitan Los Angeles, an urban area in which the plague had not been reported for decades. Nevertheless, there was a small risk of

gastroenteritis after the New Orleans flood. The presence of carriers of common enteric viruses and *E. coli* were present in the community before the flood, the sanitation system was disrupted, clean water was scarce, and survivors were crowded in shelters.

The second myth quoted above—*dead bodies increase the risk of infectious disease outbreaks during a disaster*—has been dubbed, “the disaster myth that will not die”.⁵ As Dr. Claude de Ville de Goyet, former Director of the Pan-American Health Organization’s Emergency Preparedness and Disaster Relief Program, has pointed out, dead bodies not only present a low risk for infectious disease transmission, but actually may lower the risk of an infectious outbreak when carriers of disease are eliminated from the population. In other words, even if they carried cholera, typhoid, or some other dreaded infectious disease, their risk to the public evaporates when they are killed.^{5,6} Numerous other disaster myths are catalogued in articles by Claude De Ville de Goyet and Erik Auf de Heide.^{3,7,8}

Adverse Consequences of Disaster Myths

What is so terrible about disaster myths? Disaster myths generate a number of problems for the emergency management of disasters. They prompt policies or actions that waste or maldistribute resources. They complicate emergency response and recovery. They even may jeopardize the health and safety of the persons responding to the event. In some cases, they may provoke unfounded anxieties that increase the mental health burden.

For example, in 2001, urgent calls for medical volunteers by public officials in New York prompted legions of volunteer rescuers to race to Ground Zero after the twin towers collapsed, despite there being only a handful of survivors. The uncoordinated arrival of hundreds of physicians, nurses, and emergency medical technicians not only confounded the site management, but also placed these freelance volunteers at risk of injury and burns from the rubble pile, eye injuries from airborne dust and debris, and chronic respiratory disease from the inhalation of atomized toxins and dust.⁹ Auf de Heide has documented many other examples of the deleterious effects of convergent volunteerism.⁸

Following the South Asian Tsunami in December 2004, public officials in Thailand called for the immediate burial of the dead in mass graves, only to reverse themselves, producing the avoidable dual challenges of interring and then disinterring large numbers of dead bodies. In October

2005, Guatemalan officials not only elected to leave dead citizens buried within massive landslides in contravention to local customs concerning burial and grieving, but to spray the overlying earth with disinfectant.

Responsible Crisis Communication

Public officials and their media partners have a critical role as the *de facto* communicators of risk in disasters. Accordingly, they have the solemn responsibility to provide accurate crisis communication during disasters to an anxious or even traumatized public. This means that they have the responsibility to understand some of the fundamental facts about disaster medicine, emergency management, and public health before a disaster occurs, instead of learning this material on the job.

It follows that a core competency in responsible crisis communication is the ability to recognize likely disaster myths and to avoid perpetuating them. A closely related competency is the ability to limit oneself to describing accurately what is known and to avoid speculating about an uncertain future, unless that speculation is based on a body of evidence about past events that are relevant to the present one. Members of the media have the additional responsibility of being able to detect and expose disaster myths as they are being generated through thoughtful questioning or astute commentary (e.g., "What is the medical basis for your statement that dead bodies pose a health risk?").

The purpose here is not to pick on the Mayor of New Orleans or the Secretary of Health and Human Services, who at the time of their comments were facing a crisis of unprecedented enormity and complexity in US history. Rather, the purpose is to suggest that there must be a better way. Among the many things that we must fix after the 2005 New Orleans flood is the knowledge gap about disasters that so clearly exists in the minds of many public officials and members of the media.

Training in Responsible Risk Communication

How can we train public officials and members of the media to provide responsible crisis communication during disasters? One approach would be for non-governmental organizations, which sponsor education and training programs in disaster medicine or emergency management, to develop and offer evidence-based training in disaster risk communication for public officials and members of the media before emergencies occur.

A huge potential exists for professional organizations in disaster medicine, public health, or emergency management to develop new education and training programs in responsible risk communication through distance learning, conference workshops, or training programs in partnership with specific government or media organizations.

Another option would be for professional organizations that already offer related education and training programs to piggyback this training on top of their existing programs. For example, the American Medical Association, which already offers a four-hour Core Disaster Life Support Course for the lay community, readily could add a module on the principles of responsible risk or crisis communication during disasters and the recognition and avoidance of common disaster fallacies and myths.

Since the livelihoods of public officials and members of the media depend on sound bites, it would be particularly helpful if such training provided sample sound bites that exemplify responsible risk communication during disasters in order to help risk communicators model their statements before disasters occur. For example, when a public official wants to comment on the public health risks after a flood, he or she might learn to say, "We are concerned about the potential for diarrheal diseases that could come as a result of the lack of clean water, a breakdown in the sanitation system, and overcrowding in shelters." Similarly, when a public official wants to comment on the risk of dead bodies in the water, he or she might learn to say, "Dead bodies pose only a limited risk to recovery workers in direct contact with them. I want to make sure that we recover all of the dead bodies, attempt to identify them, and provide them with a dignified burial or cremation in accordance with their family's wishes."

Barriers to training public officials and members of the media in responsible risk communication likely are to include the resources required, as well as the time and effort the trainees would have to devote to developing this competency before the disaster occurs. If for some reason, public officials or members of the media cannot become competent in responsible risk communication before a disaster strikes, then the next best option would be for them to surround themselves with experts in disaster medicine and emergency management, who may be able to assist in the provision of responsible risk communication. A good example of this is the hiring of James Lee Witt, former Director of the US Federal Emergency Management Agency by Kathleen Blanco, Governor of Louisiana, to serve as her emergency management consultant after the New Orleans flood (albeit he was not engaged by her until one week after the disaster began).

In fact, the approach of adding one or more incident consultants to the command structures of the incident command systems of responding governmental organizations probably should be adopted at every level of emergency management.¹⁰ With modern emergencies and disasters becoming greater in magnitude and complexity, it is clear that the contemporary incident commander requires immediate advice on overall emergency management (including risk communication) as well as on specific scientific issues relating to health, infrastructure, environment, and economics. It should be noted that surrounding the incident commander with expert consultants is different from surrounding the incident commander with politically-appointed leaders of various government bureaucracies. As we were reminded by the emergency response to Hurricane Katrina, many public officials are not experts in disaster medicine, public health, or emergency management. What is needed in a time of crisis is objective information and expert opinion, not spin or disaster fantasies.

Benefits of Eliminating Disaster Myths

What benefits do we expect to result if we can eliminate these disaster myths? In the absence of disaster myths, public officials will be more likely to base their estimations of need, capacity, and risk during disasters on previous

experience and current facts, instead of on speculation. Ultimately, public officials could improve their credibility. Members of the media will be more likely to ignore or expose disaster myths when they emerge. Media outlets that serve as watchdogs for disaster mythology also are likely to enhance their credibility. Members of the public will be more likely to recognize disaster myths as implausible, preventing their penetration into our collective imagination. They also will be immunized against the adverse psychic

effects that many disaster myths produce. Still, the most important benefit of eliminating disaster myths is likely to be accurate risk communication. This, in turn, will drive a rational approach to emergency management, including the establishment of policies, prioritization of interventions, allocation of funds, and consumption of resources. If we can retire these disaster myths to the dust bin of history, we will be one step closer to transforming our visceral reactions to disasters into sensible strategies for managing them.

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