Disaster Myths That Just Won't Die

by Donna Eberwine


"Dead bodies cause epidemics." "Any aid is better than none." When it comes to disasters, these and other popular misconceptions abound. Relief experts say these myths not only are misguided but also can lead to actions that add to the suffering of survivors.

It was South Asia's worst natural disaster in memory—the earthquake and tidal wave that claimed more than 280,000 lives in a dozen countries last December. But as the death toll climbed in the days following the disaster, media reports warned that a second calamity was in the making: dangerous disease outbreaks caused by the legions of rotting bodies.

"International organizations urged that the thousands of bloated corpses littering beaches, streets and make-shift morgues be disposed of quickly to stem the threat of disease," Agence France-Presse reported on the second day after the disaster. According to "experts" interviewed by the news agency, "the decomposing bodies contaminating water would provide ideal conditions for water-borne diseases such as cholera, typhoid and malaria."

A CBS/AP report the same day quoted a microbiologist at a Bangalore, India, hospital saying that unburied corpses could spread diseases including cholera, typhoid, hepatitis A and dysentery. "There is a very high risk of epidemics breaking out in all these places. Decaying bodies are bacteria factories. The bodies must be quickly disposed of."

The next day, the Los Angeles Times reported from Nagappattinam, India: "Worried that rotting corpses could take more lives by spreading disease, health officials ordered them collected in city trucks and dumped in mass graves. Many were buried before they could be identified."

It was all based on myth.

The notion that dead bodies pose an urgent health threat in the aftermath of a disaster is one of several enduring myths about disasters and relief efforts that the Pan American Health Organization (PAHO) and the World Health Organization (WHO) have been trying to counter for nearly two decades. In 1986, PAHO produced a video titled "Myths and Realities of Natural Disasters" that debunked some of the most common misconceptions and explained how they exacerbate problems following a disaster. Yet 19 years later, many of these myths persist (see sidebar at the end of the page).

Perhaps the most enduring and consequential of these myths is the idea that dead bodies cause epidemics.

"Survivors are much more likely to be a source of disease outbreaks," says Jean-Luc Poncelet, chief of PAHO's Emergency Preparedness and Disaster Relief program.

Most victims of natural disasters die of trauma, drowning or burns rather than infection, he explains, and victims are no more likely to carry infectious agents than survivors. "Someone who died without cholera isn't going to produce it after they're dead."

Oliver Morgan, an environmental epidemiologist at the London School of Hygiene and Tropical Medicine, reviewed the scientific evidence on the issue in a recent article in the Pan American Journal of Public Health (May 2004, p. 307).

The microorganisms that are involved in decomposition are not the kind that cause disease, Morgan's article explains. And most viruses and bacteria that do cause disease cannot survive more than a few hours in a dead body. An apparent exception is the human immunodeficiency virus, HIV, which has been shown to live up to 16 days in a corpse under refrigeration.

Morgan points out that blood-borne viruses, such as HIV and hepatitis B and C, as well as tuberculosis and gastrointestinal infections, do pose a slight risk for relief workers charged with handling bodies. But the risk of contagion can be minimized with basic precautions and proper hygiene.
One valid concern is that fecal matter from decomposing bodies may contaminate water. "Getting clean water to people should be a high priority regardless of the source of contamination," says Poncelet.

Despite the scientific evidence, the belief that dead bodies spread disease remains a chronic problem in disaster relief efforts.

"What happens is the mass media will publish alarming news about the risk of massive disease outbreaks, and authorities then rush to bury bodies in mass graves," says Claude de Ville, who headed PAHO's disaster program from 1976 to 2002. "This adds to people's anguish and to the chaos. It becomes one more blow to the affected population."

The rush to bury bodies can use up valuable resources—vehicles, fuel and human effort—when the priority of relief work should be finding and treating survivors, according to de Ville and other experts. Following the 2001 earthquake in India that claimed nearly 100,000 lives, for example, so much wood was used to cremate recovered bodies that many survivors were left without enough fuel for cooking or heating.

But there is a larger problem: mass burials and cremations can make identification of remains all but impossible, and they prevent survivors from burying loved ones according to local customs and beliefs. Even in the aftermath of a major catastrophe, says de Ville, these are important considerations. "Identifying victims is critical for legal, social and psychological reasons." Indeed, he insists, "it should be considered a basic human right."

Survivors have a strong psychological need to identify lost loved ones and to grieve for them in customary ways, says Jorge Rodríguez, a mental health specialist in PAHO’s Panama office. "Societies all have funeral rituals that have developed over many generations to help people cope with death and loss. Denying survivors the right to carry out those rituals can add significantly to mental health problems that occur after a disaster."

The effects can be similar to those suffered by families of the "disappeared." "Family members may know that the missing person is almost certainly dead, but living with the ambiguity makes the loss much more difficult to bear," says Rodríguez. "Not knowing how the death occurred and what happened to the corpse leads to unresolved grief. And this can lead to serious mental health problems." He adds that in large-scale catastrophes, these problems can become collective, affecting entire communities.

Failure to find and identify a victim can have material consequences as well, leaving survivors in a kind of legal limbo with respect to property ownership, inheritance, or family benefits. A widow without her husband’s death certificate may not be able to collect her spouse’s life insurance or social security benefits. Children may be unable to access their parents’ financial assets without going through a lengthy legal process to formalize a presumed death. In many cases, these problems add to the economic hardship caused by the disaster itself.

Seeking closure

Much of the news coverage of South Asia’s tsunami catastrophe propagated the myth of dead bodies and epidemics, particularly in the first days following the disaster. But the coverage also reflected the enormous importance survivors place on identifying lost loved ones. Media reports were filled with stories and images of survivors searching desperately in hospitals and morgues, perusing bulletin boards with victims’ photos, and posting pleas on the Internet for help in finding lost loved ones.

They also showed many instances in which relief workers tried to facilitate this process. At a Buddhist foundation in Thailand, "workers photographed the bodies [of 30 children killed in the disaster] before placing them in coffins and taped the photos on top so weeping parents could identify them," according to an Agence France-Presse report. An Associated Press report on more than 1,000 passengers killed when their train was submerged in Sri Lanka noted that authorities "took fingerprints of the dead so that they could be identified later if possible."

Ciro Ugarte, a PAHO advisor on emergency preparedness, notes that although authorities may feel public pressure to dispose of bodies quickly, families, neighbors and immediate community members are likely to resist efforts to bury victims en masse. He
recalls an incident following Hurricane Jeanne in Haiti last September in which residents of Gonaives reportedly stoned a truck trying to dump corpses into a mass grave.

"Relief workers tried to persuade the people that it was necessary, but their strong desire was to give the bodies a proper burial." Ugarte adds that, in his experience, "families never agree to having their own loved ones buried in this way, and they may eventually make legal demands if it is done against their wishes."

Ugarte acknowledges that, especially in cases of mass fatalities, dealing with large numbers of corpses is a critical challenge for disaster relief. The approach to this task, he insists, should be based on scientific evidence, not unfounded fears, and should recognize the rights of survivors.

"Every survivor's hope is that they will find someone alive. But when that hope fades, there is a nearly universal human need to learn the fate of a missing loved one and to somehow say good-bye. This is something that has to be recognized along with all the other needs that people have in the aftermath of a disaster."