

The Haiti Earthquake: Disaster Lessons and Response from an Emergency Medicine Perspective

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The 7.0 earthquake on January 12, 2010 left the capital city of Haiti in ruins, affecting over 3 million people. International aid has begun arriving in Haiti, but the situation remains critical. As emergency physicians, we receive basic training in disaster medicine as part of our residency education. We may be better equipped than any other specialty to not only understand and learn from this disaster, but to also help. What can we learn from this disaster? What can we do to help as emergency physicians? To answer these questions, we spoke to the disaster medicine experts at the University of California, Irvine, Kristi L. Koenig, MD, FACEP, Carl Schultz, MD, FACEP, and Christopher Kahn, MD, MPH, FACEP, FAAEM. Dr. Koenig is the Director of Public Health Preparedness and Professor of Clinical Emergency Medicine. Dr. Schultz is the Director of Disaster Medical Services and a Professor of Clinical Emergency Medicine. Dr. Koenig and Dr. Schultz recently co-authored the book, "Koenig and Schultz's Disaster Medicine: Comprehensive Principles and Practices." Dr. Kahn is an Assistant Professor of Clinical Emergency Medicine and Base Hospital Director.

As in all disaster responses, two important issues include effective communication and the maintenance of infrastructure, both of which were adversely affected during the Haiti earthquake. Communication is essential to coordinate rescue and relief efforts while infrastructure affects the ability of aid to reach the victims. Haiti is the poorest country in the Western hemisphere and its infrastructure is already at a disadvantage. The earthquake not only affected Haiti's roads and airport, but also damaged its ports, making effective relief efforts difficult. Dr. Kahn summarized it with the saying, "all disasters are local: an effective disaster response depends on local disaster plans and preparedness." Outside rescue and relief efforts take time to mobilize, leaving victims ill-equipped to cope with disasters if there is no local disaster plan. Haiti has limited local disaster organization or leadership, making organized relief efforts and managing those efforts much more challenging.

Since the earthquake hit there have been many aftershocks with the largest at the time of this writing being

8 days following at a magnitude of 6.1. In the initial days after there were no flights allowed into the country due to the devastation of the airport. Now aid is arriving by land and sea. The airport is marginally functional and one of the two ports into the capital city is accepting ships laden with aid and supplies. Slowly supplies are being distributed, but it is an arduous and sometimes dangerous task. Clinics and hospitals which survived the initial quake are overrun with injured patients as well as those with chronic medical conditions. Many are running low on supplies and are not equipped with enough staff to treat everyone who arrives. With such poor infrastructure, minimal resources, pockets of looting and crime increasing daily and thousands injured and dying, many people feel compelled to help.

How can we help as emergency physicians? Should we volunteer for relief missions? Or should we contribute money to relief organizations? The safest and probably most helpful way to contribute to the relief effort is by donating money to legitimate relief organizations like the American Red Cross (www.redcross.org) or the Clinton-Bush Haiti Fund (www.clintonbushhaitifund.org). However, some of us may feel compelled to go to Haiti to volunteer. The most important part of a joining a relief mission is to be prepared and to join a team from a well-established relief organization. Legitimate relief teams consist of personnel specifically trained, equipped, insured, and prepared for the mission, and the best volunteers have been trained before the disaster occurred. Showing up unsolicited can prove dangerous for yourself and put a strain on already minimal resources. "Convergent volunteerism is fraught with problems. Unless you're part of a formal team before the disaster happens, you're going to be part of the problem, rather than the solution" Dr. Koenig notes. ACEP's policy advises against unsolicited volunteering for disasters as these unsolicited volunteers are often ill-prepared and lack training, creating safety issues. The ACEP section on Disaster Medicine includes an article on how to choose and join an international medical team (www.acep.org/ACEPmembership.aspx?id=25150). You can also contact International Medical Corps at www.imcworldwide.org or Partners in Health at www.pih.org, as they are currently

accepting applications for qualified volunteers.

If you are able to be part of an organized group and you are planning on going to Haiti or any other disaster relief mission here are some things to keep in mind:

- Vaccinations must be up to date. Visit www.cdc.gov/travel for the required vaccinations in the area you will be traveling. For Haiti, malaria prophylaxis, hepatitis A & B and typhoid.
- Mosquito net, permethrin treated if you are unsure of sleeping conditions. This will minimize spread of insect born diseases such as dengue fever.
- Daily medications and other over-the-counter medications, especially anti-diarrheals. Wear an identification bracelet if you have pre-existing medical condition.
- Sunscreen, insect repellent, sunglasses, long-sleeved shirts
- PPE such as N95 respirator, gloves, protective eye wear, good work boots
- Your own personal first aid kit with – bandages, gauze, antiseptic wipes, tweezers, hydrocortisone, cold compresses, suture kit
- Drink only bottled water if possible or use water purifying tablets or filters.
- Some food, MRE's (meals ready to eat) or protein bars
- Copies of important documents (passport, license, prescriptions)
- Camera with extra batteries
- Good book – you may actually have some downtime
- Ear plugs/eye mask – you never know where or when you may be sleeping

This is just a small list of some of the most important things. The agency you are traveling with may also have other suggestions or requirements. Your personal safety is most important. Dr. Kahn advises, "Always know who the safety officer is for your group, attend and pay attention to every safety briefing, know your escape routes and meeting places, and ensure that you have good situational awareness to what's going on around you." Always remember you are there to help, the minute you are not helping or becoming incapacitated to due poor preparation you are hurting.