

Crisis communication during volcanic emergencies: japanese earthquake

[Sociology](#), [Communication](#)



Abstract:

Increased exposure to volcanic hazard, particularly at Japan, is driving an urgent and growing need for improved communication between monitoring scientists, emergency managers and the media, in advance of and during volcanic crises. The findings of the Japan volcano surveys point up the critical importance, More than a week after the nation of Japan declared an emergency at the TEPCO Fukushima Daiichi Nuclear Plant in Fukushima prefecture, the “ haze” of the incident is just starting to clear. Power has been restored to two of six reactors at the Daiichi nuclear plant and slowly the nuclear situation is coming under control. While some good news is emerging from Japan recriminations and stories about TEPCO’s long history of “ false reporting” are now emerging. The worst of the nuclear crisis may now be resolved, but the war of words is just beginning. If it is in India it will take importance on (1) Bringing together monitoring scientists, emergency managers, and representatives of the media, well in advance of a volcanic crisis, and (2), ensuring that procedures and protocols are in place that will allow, as far as possible, effective and seamless cooperation and coordination when and if a crisis situation develops. Communication During Volcanic Emergencies is designed to promote and encourage both of these priorities through providing the first source-book addressing working relationships and inter-linkages between the stakeholder groups, and providing examples of good and bad practice.

Introduction:

The magnitude-9.0 offshore earthquake on March 11 triggered a tsunami that slammed minutes later into Japan's northeast, wiping out towns and knocking out power and backup systems at the coastal Fukushima Dai-ichi nuclear power plant. Police said more than 11,000 bodies have been recovered, but the final death toll is expected to exceed 18,000. Hundreds of thousands remain homeless, their homes and livelihoods destroyed. Damage could amount to \$310 billion — the most expensive natural disaster on record, the government said.

The plant has been leaking radiation that has made its way into vegetables, raw milk and tap water as far away as Tokyo. Residents within 12 miles of the plant were ordered to leave and some nations banned the imports of food products from the Fukushima region. Suspicions that dangerously radioactive water is leaking from damaged nuclear fuel rods. The contaminated water has been emitting radiation exposures more than four times the amount the government considers safe for workers and must be pumped out before electricity can be restored to the cooling system. That has left officials struggling with two crucial but sometimes-contradictory efforts: pumping in water to keep the fuel rods cool and pumping out contaminated water and safely storing it. Nuclear safety official Hidehiko Nishiyama said cooling the reactors had taken precedence over concerns about leakage.

Crisis in Japan:

Crisis communication as part of a larger crisis management plan has several key elements. The goal of public relations in a crisis is to both inform and to convey a larger sense of control over the unfolding incident. Public relations managers and Public Information Officers must act quickly and consistently to deliver accurate information and to set expectations. Good crisis communication should be forthcoming about what is known and not known. Disasters are hardly predictable and often decision makers are faced with complicated dilemmas in the absence of complete information.

Acknowledging the unknown and what is being done to address the knowledge gap is just as important as outlining what is known. Never in the context of crisis communications should the message be untrue or misleading. Finally, crisis communication should engage all of the stakeholders in an incident - everyone with an interest in the outcome of an incident. Between these stakeholders, messaging should be coordinated and consistent.

With the Fukushima Daiichi Nuclear Plant there were many issues in the communication to the outside world about what exactly was unfolding at the plant. Initially the flow of information was slow and inconsistent. Although the earthquake occurred at 2: 45pm local time followed closely by the tsunami which disabled the generators supporting pumps to cool the nuclear fuel at Daiichi, the first report of a significant incident did not occur until 8: 15pm. By 10pm the Japanese government initiated a limited 3km evacuation around the plant. TEPCO's 10pm press release indicated only that radiation monitors detected a " departure from normal". In press conferences TEPCO

held with the media, executives with the power company were vague about what was happening and were not prepared to answer questions posed by the media.

The clarity of messages about the unfolding nuclear disaster also contributed to the confusion about the severity of the incident. As an example, the Japanese government initially ordered an evacuation for 3km around the Daiichi plant. By 7am on 12-Mar, the day after the earthquake and tsunami, the evacuation order was expanded to 10km. By 13-Mar, the evacuation order was expanded to 20km. The creeping evacuation distances conveyed a message that the incident was growing out of hand. In the absence of objective information about radiation levels detected around the Daiichi plant, many people filled this gap with speculation that the incident was potentially growing into a nuclear cataclysm. A single proactive 20km evacuation order, on the other hand, would have conveyed a sense of decisiveness with the same outcome.

Messaging during the incident differed between stakeholders. Information from TEPCO, the operator of the Fukushima Daiichi Nuclear Plant, was understated and incomplete. The Japanese Ministry of Economy, Trade and Industry, which oversees nuclear plants in Japan, was widely absent from information dissemination. The IAEA, the UN's nuclear monitoring organization, accused Japan of not being forthcoming about what was happening at the Daiichi plant. In the US, the Surgeon General suggested people in California should buy potassium iodine while the CDC said exactly the opposite. These different voices fostered a sense of confusion and

suggestions by many that TEPCO and the Japanese government were hiding something. More than any other communication problem, the mismatch of messages from different sources caused the greatest damage to the credibility of everyone involved.

My own country (INDIA) can handle the communication crisis in the following way:

1. India will identify stakeholders in the crisis communication process well ahead of any incident. Train these stakeholders in the crisis management process and educate them about the importance of consistent message between organizations.
2. Clarity of actions and words is important. Public relations personnel and Public Information Officers must be prepared with information to answer questions from the media. If the answer to the question is unknown, acknowledge it. If the answer requires research, find out then follow up with the requestor.
3. The small incidents are as important as the big incidents. Although small incidents do not always warrant much media attention, failing to address them can be a problem when major incidents strike. The day before the Daiichi nuclear plant disaster no one was writing about TEPCO's history of false reports. In the weeks to come, media stories and exposes will reveal the gaps in TEPCO handling of small incidents. If TEPCO had handled the small incidents well or at least worked to improve over time, there would be little to write about.

4. Practice. Any process or plan is only as good as the execution. Improve the odds of solid execution at time of crisis by practicing crisis communication often.

The best thing is to have a plan of action prepared in advance. That way, you can react swiftly and smartly when a crisis hits.

Conclusion:

Population rise and increasing urbanisation are driving a marked upward trend in the incidence of natural disasters. This trend is already being reflected in the numbers of lethal volcanic events and in a rise in the number of volcano-related deaths. The average number of deaths per year due to volcanic activity, in the 17th-19th centuries, was 315, this figure has climbed to 917 for the 20th century and 491 volcanic 'events' during the 20th century, in which people were killed, injured or affected in some way, and more than half of which resulted in loss of life. At least 500 million people currently live within the danger zones of active volcanoes, and this number is certain to climb substantially.

Most importantly, emergency plans must address the issue of seamless communication between the main stakeholder groups, and ensure that the mechanisms that underpin effective communication during a volcanic crisis are in place long before a volcano shows signs of unrest. Where eruptions are frequent, such measures need to be in place now or in the very near future. Messages from all the stakeholder groups must be as simple and concise as possible and must address instructions and recommendations on

what to do next as well as inform of the prevailing situation. All efforts need to focus on the building of trust between stakeholders, the maintenance of good working relationships, and the safeguarding of an open and continuous information flow between all key players.

REFERENCES:

Fearn- Banks, Kathleen, 2006, Crisis Communications: a case book approach, 3rd Edition, New Jersey: Lawrence Erlbaum.

Nichen, 2009, Institutionalizing Public relations: A case Study of Chinese government crisis Communication on the 2008 Sichuan Earthquake, Public relations review, Vol 35, 3, 187-198.

Otto, Lerbinger, 1997, The Crisis Manager: facing risk and responsibility, New Jersey: Lawrence Erlbaum.

Ray, Sally J., 1961, Strategic Communication in Crisis Management: lessons from the airline industry, USA: Green wood Publishing group.

Robert R. Ulmer, Seeger. W, 2007, post-crisis communication and renewal: Expanding the parameters of post-crisis discourse, Public relations review, Volume 33, issue 2, P. P 130-134

Seeger, Matthew W, 2003 Communication and organizational crisis, Westport: Praeger Publishers.

SEEGER W, Barbara Reynolds, 2005, Crisis and Emergency risk Communication as an integrative model, Journal of Health Communication, 10: 43-55.

Voight, 1989 B. Voight, The 1985 Nevado del Ruiz volcano catastrophe: anatomy and retrospection, Journal of Volcanology and Geothermal Research, 42 (1989), pp. 151-188

W. J. Mc GUIRE, solama. M. C, 2009, Improving communication during volcanic crisis on small, Valnerable islands, Journal of Volcanology and Geothermal Research, Vol 183, Issue 1-2, P. P 63-75.

W. Timothy, Coombs, 20011, Ongoing Crisis Communication, Planning, Managing, and responding, 3rd edition, P. P-139, USA: Sage Publications.