A document for discussion: Community Adjustment and Survival Following a Catastrophe

The theme of the 18th Annual Pacific Emergency Preparedness Conference held in Vancouver October 4 – 6, 2005 was Community Resilience – a Future For All. Eyewitness reports were provided at the conference on the Asian tsunami and the flooding in New Orleans after hurricane Katrina. Presentations were given on infrastructure destruction during an emergency and what needs to be done to manage the situation.

Attending these sessions against the background of writing a report on evidence-based best practices in emergency management and having flashbacks of media pictures resulting from hurricane Katrina slamming into New Orleans, as well as having been in South Asia during the Tsunami and having analyzed the impact the forest fires in BC in 2003, the immediate health and social service needs of persons caught up in such tragedies became the focus of attention for the author of this paper. Pictures presented in the media just after the conference of persons affected by the earthquake that hit parts of Pakistan, India and Afghanistan on October 7, 2005, and the landslides in Guatemala, highlighted the need for understanding what it must be like to be personally affected by such incidents. Living in Richmond BC further concentrated this effort. Similar to New Orleans, Richmond is built on flat lands reclaimed from the sea and is a meter below sea level at high tide. It is also the most earthquake prone part of Canada.

The following is a hypothetical assessment intended to help to define the strategies required to enable individuals and communities to recover after a catastrophic tragedy. For the purpose of this exercise communities are described as being comprised of people that fall into the following categories:

**Community collaborators:** These people are the leaders and / or the supporters who recognize the value of community collaboration and assume responsibility for improving the circumstances they are involved in.

**Infirmed and destitute:** These are in need of support even under normal circumstances and can only be expected to survive a major catastrophe through the help of others.

**Self-survivalists:** These are primarily concerned with their own survival above all, likely and in an extreme situation will forsake their families in order to survive; they are more likely to follow the “law of the jungle” than they are community collaborators.

**Criminals:** Besides the criminals resident in every community, some people will take advantage of a situation when the 911 police, fire and ambulance systems are not working.

As part of community mitigation planning, strategies need to be in place to deal with the reality of knowing how these kinds of people collaborate in order to survive the initial onslaught of a major catastrophic incident such as an earthquake. Besides the criminal element in society it is likely that under such circumstances people who would be model citizens in normal times may respond differently when their families and property have been harmed or are threatened. Possibly some psychosocial protocols can be identified that will help people who are experiencing a sudden and unexpected catastrophe? Such psychosocial protocols may be similar to the coping skills one has to acquire in order to overcome cancer, or the steps to recovery that alcoholics and drug addicts have to climb in order to get their life back.

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1. Fern Jefferies, South East Asian Tsunami – an eyewitness account.
2. Hurricane Katrina Rescue Mission, Canada Task Force One, Tim Armstrong, City of Vancouver, BC
3. Critical Infrastructure: Special Needs Continuity, S. Chan, School of Community & Regional Planning UBC
7. Vulnerable Population Barriers to Success, C S Tan, Chair, Disaster Mental Health, Mt. Baker Chapter ARC
When a catastrophic event occurs fatalities are usually inevitable. Survivors fall into two categories: the injured and the non-injured. The injured can be differentiated into: critically injured requiring immediate medical attention, non-life threatening but seriously injured, walking wounded and traumatized / worried well. Prior to such an event no one knows the category they will fall into. The primary objective of an emergency preparedness plan is to save the lives of as many people as possible.

People experiencing a major catastrophe need to be prepared to fend for themselves during the first 24 – 72 hours. The sooner some level of “community spirit” is developed the easier it will be to ameliorate the situation, reduce further harm and save lives. It is during this period that all peoples are equal.9

When a catastrophic event occurs and communities are broken there is a need to recognize the emotional steps that have to be taken in order for the community to recover. The purpose of this exercise is to build a platform on which individuals and communities in distress can hope for some resumption of normality following a catastrophic event. Recognizing that phases of emotions occur when catastrophic events happen may also serve to better design response capabilities at all levels, including the political.

Acknowledging that self survival and family survival would be the dominant emotions among most people caught up in a disaster, let us assume that the majority of people experiencing such situations fall into the first category above- community collaborators. Let us assume further that among this group there is recognition that sharing the experience, and helping those in need of support, is the better course for short-term and long-term recovery. This assumption seems reasonable in the short term relative to the law-of-the-jungle taking over.

Figure 1 illustrates the different stratified phases the surviving members of a community that has suddenly gone from a state of normality to a state of catastrophe could be expected to pass through. These phases are:

1. **Realization:** Amidst fear and panic individuals come to comprehend the situation.

2. **Acceptance:** Individuals acknowledge that they will need to play a role in improving the situation in order for themselves and others to survive until outside help arrives.

3. **Convergence:** Individuals recognize that they must collaborate and get along to survive and recover.

4. **Governance:** Individuals recognize the need to demonstrate leadership and to accept and support leadership while waiting for outside help to arrive.

5. **Logistics:** Individuals start to coordinate recovery and access to necessary requirements such as communications, water, food, transportation, power and a hygienic environment.

6. **Reaching out:** Individuals provide focus for outside support agencies to link up with the situation and to coordinate distribution of essential supplies.

7. **Building bridges:** Individuals work with and locally coordinate outside responses coming to the community’s assistance.

8. **Setting foundations:** Local individual leaders and outside leaders assess the situation and collaborate on the developing plans for rapid restoration of necessary infrastructures such as housing, transportation, communication, health care and police.

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9 James K Boyce, Let Them Eat Risk? Wealth, Rights and Disaster Vulnerability, Disaster, 2000, 24(3) 254-261
9. **Political leadership:** Elected representatives provide a vision of how survivors will be provided with support in getting their lives back to some degree of normality.

10. **Short term plans:** Decision-making is seen to be following a logical path of reasoning.

11. **Financial transparency:** Donor agencies, public and private, are assured that their donations and taxes are being used to support the people that have experienced tragedy.

12. **Long-term plan:** Elected representatives present plans for dealing with the immediate future as well as that outline the road to restoration.

The above phases are not mutually exclusive and their time frames will vary. They illustrate the kinds of changes in responsibility from the individual (1-3.5) to the community collective (3.5 – 7.5) before evolving into some local institutionalization of leadership (7.5 – 9.5) that can be merged with the body politic that serves all people in a democracy (9.5 – 12).

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**Figure 1: Community Recovery Following a Catastrophe – 12 steps of resilience**

1. Realization
2. Acceptance
3. Convergence
4. Governance
5. Logistics
6. Reaching out
7. Building bridges
8. Setting foundations
9. Political leadership
10. Short-term plan
11. Financial transparency
12. Long-term plan

Following the initial feeling of panic and fear, some sense of reality develops and there has to be some recognition that the routine of life is fundamentally disrupted. The management of these emotions will be affected on such factors as knowing what to do in such a situation, and on individual character.

No matter how strong a character one has under normal times, having witnessed the loss of home and family members will take its toll. A survivor of a hurricane, tsunami, earthquake, fire or bomb blast can experience a sense of guilt as a survivor when confronted with bodies that are crushed, drowned, burned or separated. The psychological impact of such an experience could live on for many years to come.

Coping with the experience will evolve more effectively, and taking a role in the solution will reduce tragedy. Having had previous training in volunteerism emergency management could help in this regard. Some knowledge and appreciation of what the larger emergency management infrastructure is doing to help those
in trouble will provide valuable hope and some strength to endure and survive. Beyond this point it is up to
the state organized emergency response capability to respond efficiently and affectively when disasters
happen.

This attempt to analyze community recovery following a catastrophe tries to place the reader in the position
of experiencing such an incident and having to cope with the circumstance. At some stage it is likely that
individuals experiencing such an incident will ask questions like:

1. What could I have done to prevent or reduce the impact of this situation on my life?
2. What could I have done to prevent or reduce the impact of this situation?
3. To what extent does my personal insurance cover this tragedy?
4. What actions could have been taken within my community to prevent this situation from occurring?
5. What actions could have been taken within my community to prepare for and reduce the impact of
this situation?
6. What actions could have been taken by local government agencies to reduce the impact of this
emergency on my family and me?
7. What actions could have been taken by local government agencies to reduce the impact of this
emergency on my community?
8. What responsibility does the provincial government have for reducing the impact of this situation on
my life?
9. What responsibility does the federal government have for reducing the impact of this situation on my
life?

Trying to evaluate the human cost and / or any attempt to conduct a cost analysis by having in place an
emergency preparedness infrastructure, nationally, provincially and at the community level, will, to some
degree, depend on the answers to these kinds of questions. Attempts at trying to answer such questions
and appreciate the emotional roller coaster described above have to take into account complex cultural and
socio-political values and priorities of the jurisdiction(s) involved. 10

Some of the skills needed in the “ground zero” vicinity of a catastrophe can be obtained through
volunteering to be trained for handling a catastrophic situation in one’s community. In BC these kinds of
community initiatives are coordinated through Emergency Social Services (ESS) that is part of the
province’s Provincial Emergency Program (PEP). In preparation for such events, it may be advisable to
institute training programs in workplaces and local neighbourhood volunteer organizations that are based on
these twelve steps as a means of getting people to think about what they will do when the “big one”
happens.

Postscript: This document was included as an appendix to the “knowledge synthesis” section of a literature
review on evidence-based best practices in health emergency management. The literature review was
compiled in support of a prototype Health Emergency Management (HEM) Best Practice Matrix, October 30,
Inc. to develop the HEM Best Practices Matrix and supporting literature review. This discussion paper
served to support a Poster Exhibit at the 2nd Annual Canadian Risk and Hazard Network Symposium.
Toronto, Ontario: November 17-19, 2005. Please forward any comments you may have about the concepts
described in this paper to Tim Lynch via Email tim@infolynk.ca or Tel. 604.916.9302.

10 The Hidden Costs of Coastal Hazards: Implications for Risk Assessment and Mitigation, The H. John Heinz III Centre for Science,

Info-Lynk Consulting