

## **Perception of earthquake hazard and risk in the Province of Quebec and the need to raise earthquake awareness in this intraplate region**

Maurice Lamontagne (1) and Brian Flynn (2)

(1) Geological Survey of Canada, 615 Booth, Ottawa, ON, K1A 0E9, Canada, (2) Department of Psychiatry, Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Rd., Bethesda, MD 20814, United States

In 2014 and 2015, three telephone surveys were conducted by the Insurance Bureau of Canada to evaluate the perception of earthquake hazard and risk in the Province of Quebec, Canada. The surveys brought to light some sobering aspects regarding the perception and knowledge of earthquake hazard and risk, and of individual earthquake response. The surveys show that despite the large proportion (> 75%) of the population who live in medium to high hazard zones, most Quebecers remain unaware of this potential or downplay its associated risk of damage and falsely assume that their basic insurance policy includes earthquake coverage. Also, only a small proportion of the population (15%) know the appropriate actions to take during an earthquake (Drop, Cover and Hold on; DCH). This situation leads to the question of what role we, seismologists, can play to improve earthquake awareness and preparedness. To increase awareness of the proper reaction during an earthquake, we suggest that seismologists use every opportunity to communicate DHC, especially when the public's attention is high following felt or damaging earthquakes, either local or distant. This could be included in their post-earthquake media communications and in their public lectures. The low earthquake awareness is a major impediment to preparedness. Enhancing earthquake preparedness of the general population is a big challenge and communicating hazard information is just one element of a larger picture. Direct earthquake experiences, attitudes and beliefs, and the perception of personal risks are all important factors in message receptivity with respect to earthquakes. Improving general public's preparedness requires coordinated and well-considered strategies and actions derived from seismological and social sciences knowledge with the active participation of emergency management organizations.