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Although the only significant earthquake in Canada occurred off the West Coast in 1964, triggering a tsunami that killed 50 people, scientists predict that an earthquake in the Vancouver area is the most likely major disaster to hit British Columbia. Most quakes occur along seismic plate boundaries, and certain regions of the country are at risk - the West Coast, the St. Lawrence and Ottawa valleys, and the coast of Nova Scotia and Newfoundland, and certain parts of the Arctic.

Quakes are also unpredictable, but maps of their probability can be created using databases of past locations and magnitudes, and geomechanical models. These maps allow for the design of appropriate building codes, as well as the avoidance of development potentially hazardous areas.

The findings of the Canadian Natural Science Assessment Project clearly indicate that mitigating the risks of natural disasters in Canada requires more than advancements in science and technology. It requires us to create a culture that is aware of disasters and their risks, notified consistently from all levels of decision making. It requires the implementation of low-impact maps, such as the preservation of the natural environment and the avoidance of construction in areas that are not fit-for-purpose.

Most importantly, we must address the large gaps that exist in our understanding of the vulnerability of different regions of Canada by creating an interdisciplinary, forward community that involves both the physical and social sciences. By being aware of natural hazards and how the decisions we make affect our vulnerability, the losses and economic toll they impose upon us can be greatly reduced.

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