

# Institute for Catastrophic Loss Reduction

20 Richmond Street East, Suite 210  
Toronto, Ontario M5C 2R9



Institute for Catastrophic  
Loss Reduction

Building resilient communities

[www.iclr.org](http://www.iclr.org)

---

## Outline

The Institute for Catastrophic Loss Reduction (ICLR) is a world-class centre for multi-disciplinary disaster prevention research and communications. ICLR was established by Canada's property and casualty insurance industry as an independent, not-for-profit research institute affiliated with Western University. Institute staff and research associates are international leaders in wind and seismic engineering, atmospheric science, risk perception, hydrology, economics, geography, health sciences, public policy and a number of other disciplines.

ICLR provides comprehensive disaster loss prevention advice to local governments, homeowners, and insurance companies. Actions have been identified to help homeowners and owners of small business reduce the risk of injury, damage, and interruption of business due to severe wind, hail, earthquakes, flood, wildfire and a number of other hazards. The Institute is also working to promote the construction of disaster resilient homes. ICLR is internationally recognized for its leadership in multi-disciplinary disaster prevention research.

ICLR provides support to dozens of academic researchers who are working to identify best practices. Quality research provides the foundation for better public policy and disaster management. ICLR's research findings are used to help consumers and owners of small businesses better understand the hazards they face, and to identify simple steps they can take to better protect their families, homes and businesses.

ICLR is committed to reducing disaster deaths, injuries and property damage through the development of disaster prevention knowledge, and the broad dissemination of its research findings. Moreover, the Institute is working to transfer this emerging scientific knowledge into information available to decision makers to support actions to build resilient communities. This research deals with damage from wind, snow, ice, earthquakes and a range of other hazards.

Nature's extreme events can be relentless and unforgiving, but need not result in disasters. Hazards demand that individuals prepare, and that communities and businesses invest in resilience and continuity measures. Knowledgeable individuals and resilient communities are the best way to prevent hazards from becoming disasters. ICLR works to enhance the disaster resilience of homes, communities and businesses across Canada.

## **Research Achievements and Challenges**

The Institute's four research and communications priorities:

- Identify and share best practices to reduce the loss and damage from urban flooding
- Promote the construction of new homes resilient to damage from storms and earthquakes
- Inform homeowners of actions to enhance the resilience of existing homes
- Support the insurance industry's management of natural hazards

In 2014 ICLR published 20 case studies on cities adapting to extreme rainfall. We supported development of a tool to adjust intensity, duration and frequency information to account for climate change to help local government manage their storm and waste water infrastructure.

The Institute submitted 5 recommendations for adjusting the Canadian building code to enhance resilience to extreme rainfall and severe winds.

ICLR partnered with a number of stakeholders to share information about actions property owners can take to enhance their resilience to damage from flood, wind, earthquake, wildfire and other hazards. This includes brochures and videos.

The Institute is actively working with the insurance industry to provide information and analysis of natural hazards. This information is used to support development of new products and refinement of existing coverage. Thousands of insurance staff participate in workshops, follow newsletters and participate in directing the Institute's research program.

## **Suggestions for the Disaster Research Roadmap**

It would be valuable if hazard research institutes could share information about recently completed studies, and planned research. This would enhance the quality of our work, reduce duplication of effort, and identify the potential for collaboration.

Research to support understanding about large, complex events appears to be particularly important. Society appears to be coping with frequent, smaller hazards, but large events can have a catastrophic impact. We must do better to anticipate and manage these catastrophic risks.

Research concerning decision-making and implementation is important. Many risk reduction practices are known but not implemented. Why?