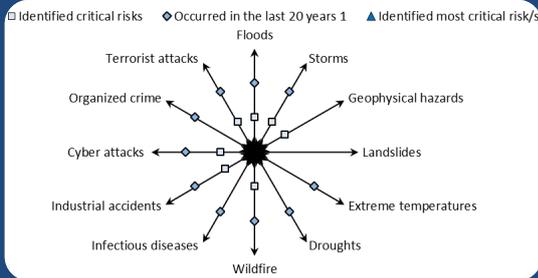


Canada

Canada: Critical risks at a glance



Natural hazards: Owing to its diverse geography and climate, Canada faces a range of natural hazards. During the winter, snow and winter storms are dominant hazards and in spring and summer tornadoes, hail and wildfires are major threats. Floods are a hazard for all regions and may occur throughout the year. Infectious diseases, such as the West Nile Fever and acute respiratory syndrome (SARS), are also hazards Canada faces.

Man-made hazards: Canada is exposed to cyber-attacks, industrial accidents and terror attacks.

Most critical risk: Not identified.

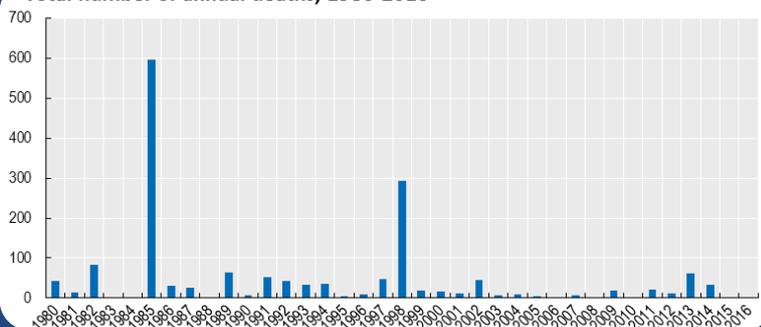
Sources: OECD Survey on the Governance of Critical Risks, 2016; Public Safety Canada, 2017; Criminal Intelligence Service Canada, 2014

Disaster-related socio-economic losses

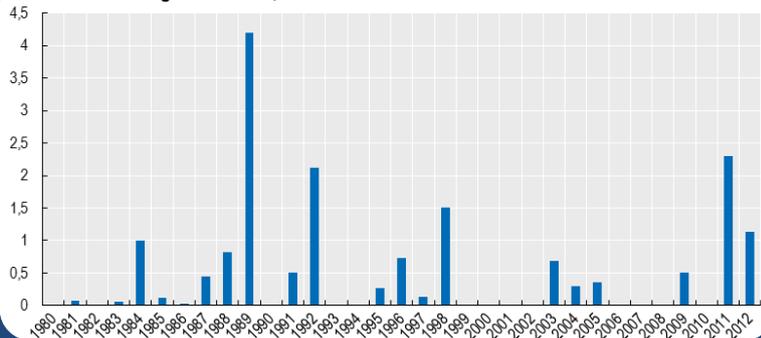
Deaths are mostly caused by floods and storms, but transport accidents, such as the 1998 crash of Swissair Flight 11 and the Lac-Mégantic rail disaster, have caused spikes in the deaths recorded. Average deaths per million inhabitants between 1995 and 2015 were below the OECD average.

Damage was to a large extent caused by wildfires, floods and storms. Floods are the most costly natural disaster in terms of property damage, but wildfires have caused significant spikes in the recorded damage. Overall, damage caused by disasters as % of GDP between 1995 and 2015 was below the OECD average.

Total number of annual deaths, 1980-2016



Total annual damage USD billion, 1980-2016



Major disasters

Forest Fires

- May – July 2016 in Fort McMurray, Alberta
- 4 billion US\$ damage (est.)

Lac-Mégantic rail disaster

- July 2013 in Lac-Mégantic, Quebec
- 47 deaths
- 235 million US\$ damages (est.)

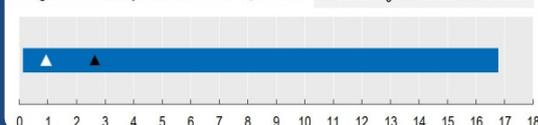
Floods

- June 2013 in Calgary, Alberta
- 4 deaths
- 5.7 billion US\$ damage (est.)

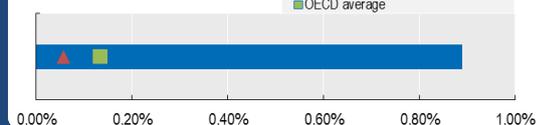
Arrow Air Flight 1285 Crash

- December 1985 in Gander, Newfoundland
- 256 deaths

Average annual deaths per million inhabitants, 1995-2015



Average annual damage in% of GDP, 1995-2015



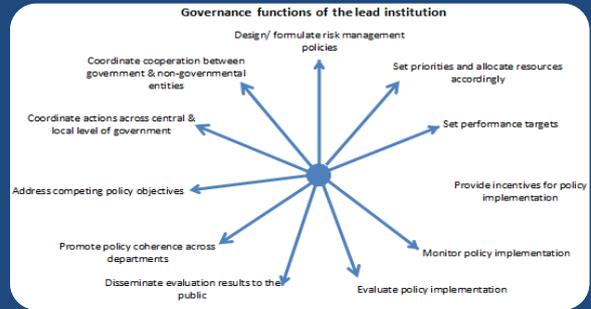
Notes: For 68% of disaster events registered for Canada in EM-DAT between 1995 and 2015, damage data are not recorded. Owing to differences in the measurement of damage, estimations for individual events may differ across sources. Due to methodological differences in the attribution of deaths to heatwaves, the figure comparing average deaths per million inhabitants against the OECD average excludes these deaths.

Sources: OECD Survey on the Governance of Critical Risks, 2016; EM-DAT: The International Disaster Database, 2017; GTD: The Global Terrorism Database, 2016; OECD Statistics 2017

Institutional lead for risk management



Public Safety Canada (PS) is the **lead institution** responsible for the governance of critical risks. Founded in 2003, PS ensures effective coordination across all federal departments and agencies responsible for national security and the safety of Canadians, as well as with the responsible actors across levels of government. To do so, PS sets priorities and performance targets, monitors and evaluates policy implementation and communicates the evaluation results to the public. To enable Canada's safety and to confront threats to national security, it also cooperates with non-governmental stakeholders and other nations.



Sources: OECD Survey on the Governance of Critical Risks, 2016; Public Safety Canada, 2017

Risk anticipation

Yes No	Horizon scanning exercises	Emergency response exercises	National Risk Assessment	Local risk assessment	Research on risk interlinkages	Research on emerging risks
Canada						
Responding Countries						

Risk communication

Yes No	Target vulnerable population	Media briefings	Platforms for two-way communication	Information to stimulate investment in self-protective measures	Information on protective measures against imminent major hazards	Public education system
Canada						
Responding Countries						

Critical infrastructure protection

Yes No	Critical infrastructure protection programme	Standards/toolkits for business continuity	Capabilities to ensure function following a shock	First responders required to be stationed	Information on exposure to natural hazards provided	Information on exposure to terrorist threats provided	Mandatory emergency preparedness requirements	Mandatory information sharing about vulnerabilities	Voluntary information sharing about vulnerabilities
Canada									
Responding Countries									

Source: OECD Survey on the Governance of Critical Risks, 2016
 Note: Data from the OECD Survey on the Governance of Critical Risks is only available for 33 OECD countries plus Colombia and Costa Rica.