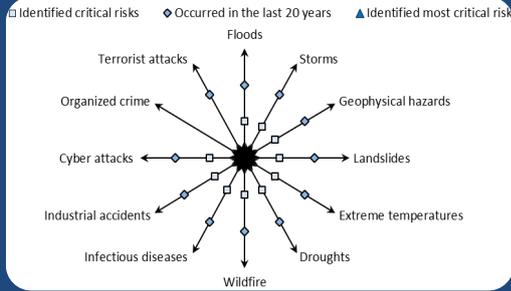


Japan

Japan: Critical risks at a glance



Natural hazards: Owing to its geographical location along the joint of four tectonic plates, Japan is exposed to a high level of seismic and tsunami risk and is susceptible to landslides. Some active volcanoes are located near highly populated areas. Storms, including cyclones and typhoons, as well as floods have happened in the past. Extreme temperatures and associated events, such as wildfires and snow, are also identified in the Disaster Management Plan as critical risks.

Man-made risks: Cyber-attacks as well as industrial accidents, such as those triggered by sudden on-set natural hazard pose a threat.

Most critical risk: not identified.

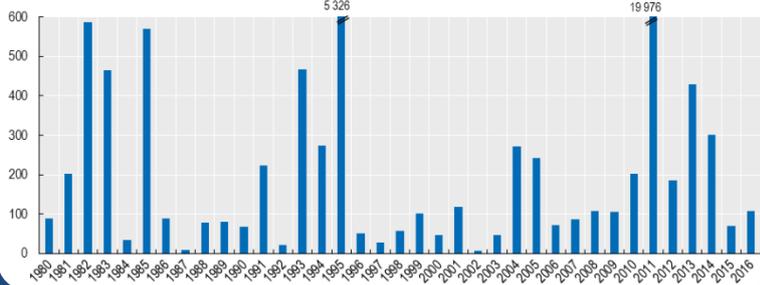
Sources: OECD Survey on the Governance of Critical Risks, 2016; OECD 2006, Cabinet Office, 2016

Disaster-related socio-economic losses

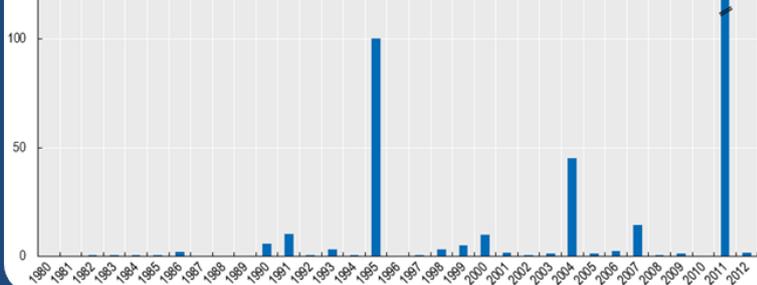
Deaths are mostly caused by geophysical hazards, such as earthquakes and tsunamis. Large-scale earthquakes, such as the 2011 Great East Japan Earthquake, have caused significant spikes in the overall deaths recorded, driving the country average of deaths per million inhabitants for the period 1995-2015 above the OECD average.

Damage is to a large extent caused by geophysical hazards, followed by storms and floods. Overall, damage caused by disasters as a % of GDP between 1995 and 2015 was significantly above the OECD average.

Total number of annual deaths, 1980-2016

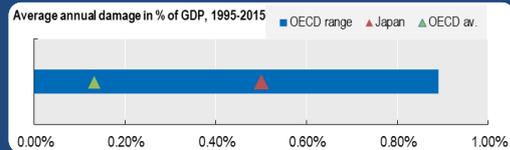
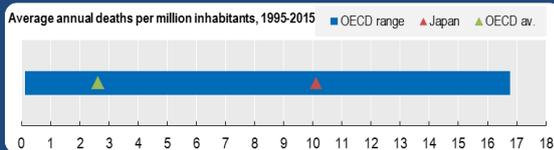


Total annual damage in USD billion, 1980-2016



Major disasters

- Kumamoto Earthquakes**
 - April 2016
 - 50 deaths
 - 20 billion US\$ damages (est.)
- Great East Japan Earthquake**
 - March 2011
 - 19,846 deaths
 - 210 billion US\$ damages (est.)
 - JPY 16.9 trillion
- Kobe Earthquake**
 - January 1995
 - 5297
 - 100 billion US\$ damages (est.)
- Cyclone Mireille (n°19)**
 - September 1991 in Hiroshima and Kyushu
 - 66 deaths
 - 10 billion US\$ damages (est.)



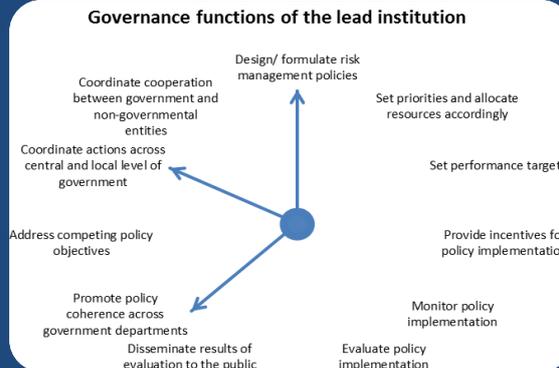
Notes: For 64% of disaster events registered for Japan in EM-DAT between 1995 and 2015, damage data are not recorded. Owing to differences in the measurement of damage, estimations for individual events may differ across sources. Due to methodological differences in the attribution of deaths to heatwaves, the figure comparing average deaths per million inhabitants against the OECD average excludes these deaths.

Sources: OECD questionnaire on the Governance of Critical Risks; EM-DAT: The International Disaster Database, 2017; GTD: The Global Terrorism Database, 2016; OECD Statistics; White Paper on Disaster Management in Japan 2016

Institutional lead for risk management



The **Central Disaster Management Council** in the Cabinet Office is one of the **lead institutions** responsible for the governance of critical risks. Situated within the Director General for Disaster Management Bureau of the Cabinet Office Japan, it is chaired by the Prime Minister and comprises the cabinet, directors of major Japanese institutions. It designs risk management policies, such as the Basic Disaster Management Plan and Earthquake Plans, and promotes their coordinated implementation by the central and local levels of government. Through measures such as Disaster Management Drills and subsidies for disaster relief, it enables effective disaster response and recovery. While the Ministry of Land, Infrastructure and Transport (MLIT) is in the lead for structural risk reduction, the Cabinet Office fosters prevention for natural hazards through non-structural measures.



Sources: OECD Survey on the Governance of Critical Risks, 2016; OECD 2006, Cabinet Office, 2016

Risk anticipation

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

Risk communication

	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
Japan	Yes	No	Yes	Yes	Yes	Yes
Responding Countries	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed

Critical infrastructure protection

	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
Japan	Yes	Yes	No	No	Yes	No	Yes	No	No
Responding Countries	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed	Mixed

Source: OECD Questionnaire 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.