Emergencies can be caused by natural disasters, technological accidents and conflicts, which can be further exacerbated by climate change and forced migration. Environmental risk factors, such as disrupted water and sanitation systems after an earthquake or floods, may cause cholera and other outbreaks. Health care facilities, health systems and communities may become dysfunctional in emergencies if they are not resilient to climate change. Environmental contamination from chemical spills or nuclear emergencies may take decades to subside. Preparedness and response to environmental health emergencies is therefore key.

Fire departments and emergency response teams conduct disaster preparedness drills.
Over 4800 technological disasters, such as industrial accidents, occurred between 2000 and 2017. 2.15 M people affected worldwide.

47 countries affected by cholera, usually transmitted through faecally contaminated water or food. About 2.9 M cases annually.

80 000 people relocated as a result of the accident at the Fukushima Daiichi Nuclear Power Station, which caused widespread radiological contamination.

A chemical or radionuclear event in one country can lead to health consequences in other countries.

Source: International Disaster Database
WHAT ARE KEY ACTIONS FOR IMPROVEMENT?

Key actions on environmental health in emergencies include the following:

1. **Policies and plans**
   Implement national policies and plans for prevention, preparedness, response and recovery in the event of emergencies, including technological disasters arising from natural hazard events.

2. **Intersectoral coordination**
   Strengthen intersectoral coordination and collaboration for emergencies.

3. **Capacities**
   Ensure institutional and human capacities and resources are in place for dealing with environmental health impacts in emergencies.

4. **Early warning systems**
   Put in place early warning systems.

5. **Safe WASH services**
   Invest in safe WASH services in cholera hot spot communities, including in health care facilities.

6. **Construction and maintenance**
   Ensure the construction and maintenance of earthquake-, flood- and cyclone-resistant infrastructure, such as buildings, industrial facilities, and water supply and sanitation systems.

7. **International Health Regulations**
   Implement the International Health Regulations on chemical, radiological and nuclear events.

8. **Occupational health and safety**
   Integrate occupational health and safety into national health security plans.

Checking radiation levels in a danger zone.
SECTORAL POLICIES INTERACTING WITH EMERGENCY PREPAREDNESS AND RESPONSE IN ENVIRONMENTAL HEALTH EMERGENCIES

Cooperation with the following sectors may be required to sustainably reduce risks to health:

- **Industry**
- **Energy**
- **Housing**
- **Land use planning**
- **Health**
- **Water and sanitation**
- **Labour**

Further information:
- [www.who.int/environmental_health_emergencies/en/](http://www.who.int/environmental_health_emergencies/en/)
- [www.who.int/health-topics/radiation](http://www.who.int/health-topics/radiation)


MAIN WHO ACTIONS

WHO actions on environmental health in emergencies include the following:

**Guidance and assistance**
Develop guidance and provide assistance for public health management of emergencies.

**Cholera**
Support the development of national cholera prevention and control plans and strengthen coordinated WASH and health actions through the Global Task Force on Cholera Control.

**Capacities**
Support countries in developing the necessary capacities for prevention, preparedness, response and recovery in the event of emergencies, including those required for implementation of the International Health Regulations.

**Knowledge**
Improve knowledge on the burden of disease from radiation and chemical emergencies.

**Occupational health and safety**
Support and build country capacity to protect occupational health and safety in public health emergencies.

**Health care facilities**

**Further information:**
- [www.who.int/environmental_health_emergencies/en/](http://www.who.int/environmental_health_emergencies/en/)
- [www.who.int/health-topics/radiation](http://www.who.int/health-topics/radiation)