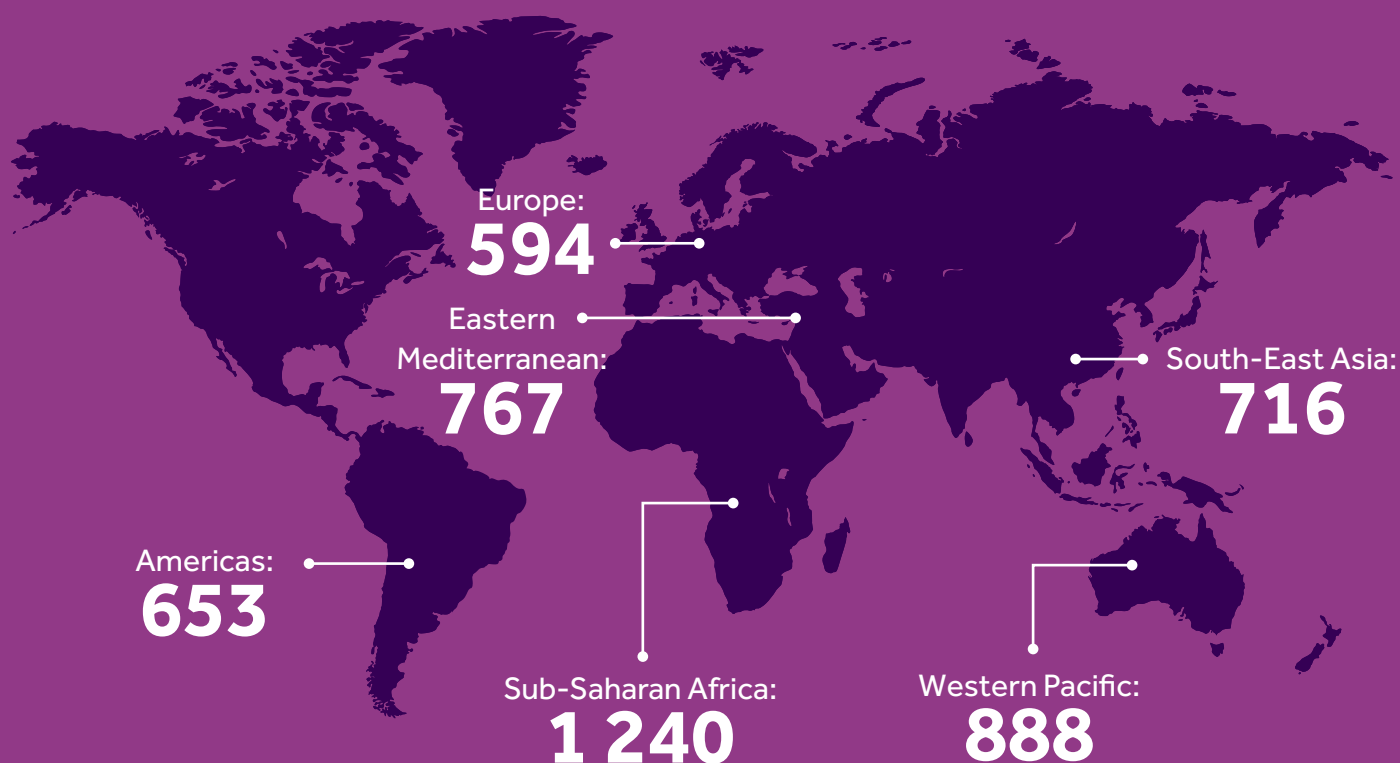# ENVIRONMENTAL HEALTH IN EMERGENCIES

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.

PRIORITY SETTINGS FOR ACTION

NUMBER OF TECHNOLOGICAL DISASTERS BY WHO REGION, 2000–2017

Europe:
594

Eastern Mediterranean:
767

South-East Asia:
716

Americas:
653

Sub-Saharan Africa:
1 240

Western Pacific:
888

Source: International Disaster Database

Over **4800** technological disasters, such as industrial accidents, occurred between 2000 and 2017.

47 countries affected by cholera, usually transmitted through faecally contaminated water or food.

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

2.15 M people affected worldwide.

about **2.9 M** cases annually.

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

Checking radiation levels in a danger zone.

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.

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.

Health care facilities
Support Global Health Cluster partners in monitoring and improving WASH in health care facilities in emergencies.

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.

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/;
www.who.int/health-topics/radiation.

World Health Organization