



# Technological & Biological Hazard Preparedness



## WHAT ARE TECHNOLOGICAL & BIOLOGICAL HAZARDS?

Man-made hazards are defined as those “induced entirely or predominantly by human activities and choices”. Technological Hazards like industrial spills, transport accidents, factory explosions are a subset of man-made hazards. They can also be triggered by natural hazards (NATECH events).

Bio-hazards include bacteria, viruses, fungi and parasites or parts thereof. Exposure in sufficient quantities and over a given duration may result in illness or injury to human health, and this can happen through natural exposure or release (intentional or unintentional) of microorganism.

## WHAT IS OUR GOAL?

- Address **humanitarian consequences** of technological hazards
- Increase **knowledge** and enhance readiness and resilience
- Enhance humanitarian response following extreme events
- **Raise awareness** in communities
- Pursue greater international **cooperation for emergency planning, preparedness and response**
- **Advocate for humanitarian issues** in International radiation preparedness and response frameworks.

In the last 50 years...

**124**

Countries experienced industrial accidents.

**+ 8,400**

Technological hazards have happened due to industrial, transportation or diverse accidents.

**3.6 MILLION**

People have been affected by technological and biological hazards.

## HOW DO WE WORK?

Technological hazards have been addressed by the Red Cross Red Crescent Movement since 1986, through a **multi-hazard approach**. The IFRC has designed a global technological and biological hazard preparedness programme to guide National Societies on how to face these disasters.



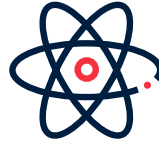
Chemical



Biological



Radiological



Nuclear



NaTech



Environmental

## PREPAREDNESS

The standard guidance and training for responding and reacting to hazardous material incidents builds on three basic concepts of time, distance and shielding.



Time

Spend the shortest amount of time as possible in contaminated areas.



Distance

The greater the distance from the source of harm and contamination, the less the degree of exposure and risk.



Shielding

Maintaining significant physical barriers between the hazardous materials provides main protection.



Find more information on specific preparedness messages on:

<https://media.ifrc.org/ifrc/techbiohazards/>

### 📄 Contact details:

Martin Krottmayer, Sr. Officer Tech hazards preparedness  
martin.krottmayer@ifrc.org

