

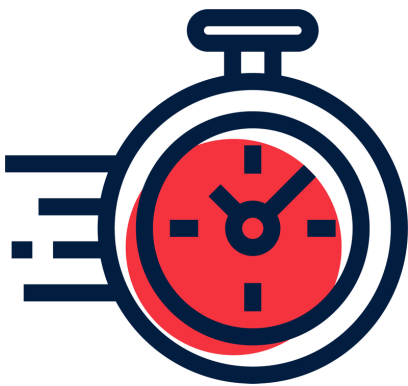
Technological hazards

Self-protection



When a technological or biological hazard happens, take the following actions:

TIME



Spend the shortest amount of time in contaminated areas

DISTANCE



Take greater distance from the source of harm and contamination

SHIELDING



Maintain significant physical barriers and shielding

Be prepared!

[ifrc.org](https://www.ifrc.org)

Technological hazards

Personal Protective Equipment (PPE)



OBJECTIVE

To prevent exposure to hazardous material.

TYPES

Face shields, gloves, goggles, glasses, gowns, head covers, masks, respirators, shoe covers.



Be prepared!

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How to be prepared for a **nuclear, chemical or radiological** event?



FORECAST (v.1)

IDENTIFY



Know the chemical,
biological,
radiological and
nuclear hazard risks
in your area.

PLAN



Make your
household
evacuation
plans and identify
safe havens



Keep a First Aid
kit and an
emergency kit
at home.

Be prepared!

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How to be prepared for a **nuclear, chemical or radiological** event?



FORECAST (v.2)

IDENTIFY



Know the chemical, biological, radiological and nuclear hazard risks in your area.

PLAN



Make your household evacuation plans and identify safe havens



Keep a First Aid kit and an emergency kit at home.

Be prepared!

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What to do in case of a **nuclear, chemical or radiological event?**



IMMEDIATE RESPONSE

GET INSIDE



Go to the
basement or the
middle of a
building.

STAY INSIDE



Plan on 12 - 14
hours unless
provided updated
guidance.

STAY TUNED



AM/FM radio is
best, cellular
and Internet if
available.

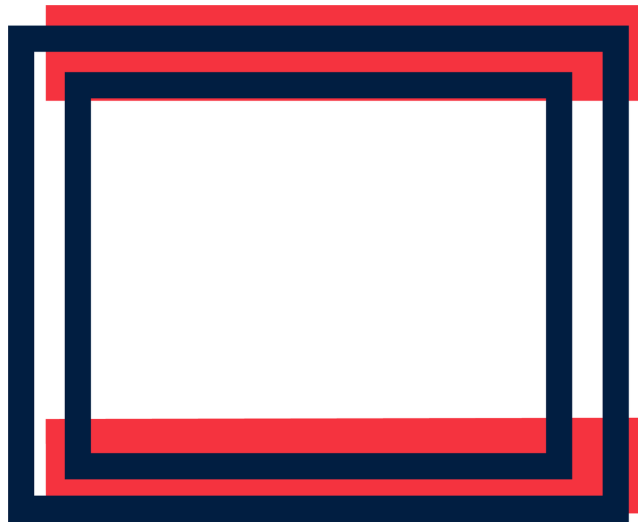
Be prepared!

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What to do in case of a nuclear, chemical or radiological event?



IMMEDIATE RESPONSE



- Block the air inlets with wet clothes or seal with adhesive tape.
- Stop any ventilation or air conditioning to prevent toxic vapors from getting inside.
- Do not smoke
- Avoid anything or sparks to reduce the risk of explosion.

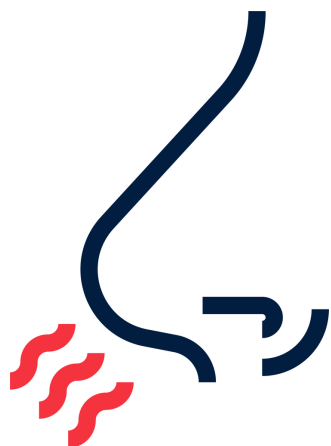
What to do in case of a **nuclear, chemical or radiological** event?



AFTER



Wash if your
skin gets
irritated



In case of respiratory
difficulties cover
your mouth and
nose with a wet cloth



Avoid areas
exposed to
chemical,
biological,
radiological and
nuclear hazards

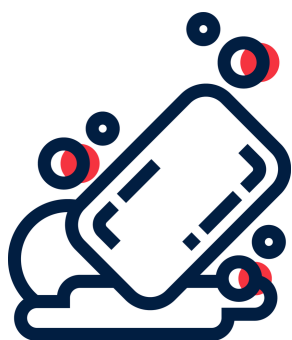
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What to do in case of a **nuclear, chemical or radiological** event?



AFTER



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Avoid areas exposed to chemical, biological, radiological and nuclear hazards

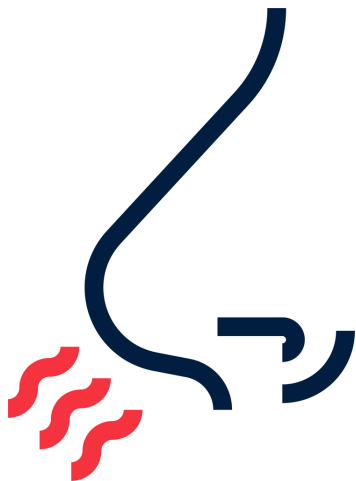
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Routes of exposure to **nuclear, chemical or radiological** agents

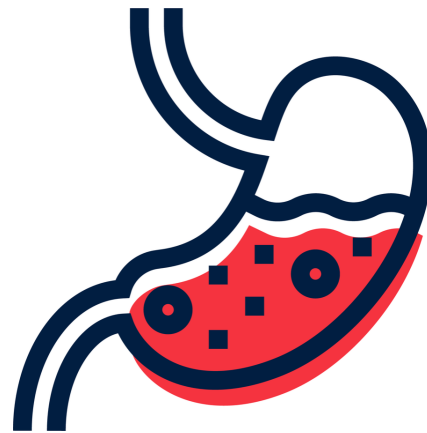


INHALATION



Breathed into
the respiratory
tract.

INGESTION



Taken into the body
contaminated
drinks or food.

DERMAL



Absorbed
through the skin,
sometimes even
through layers of
clothing.

Be prepared!

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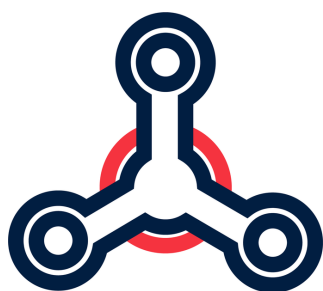
Source: U.S. National
Library of Medicine

What are **Technological & Biological** hazards?



Man-made

Industrial pollution, toxic wastes, dam failures, transport accidents, factory explosions, fires, and chemical spills.



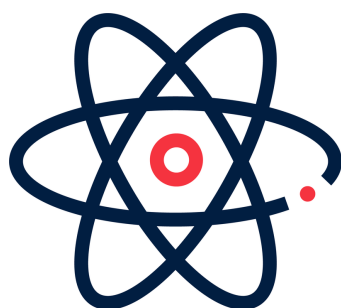
Chemical



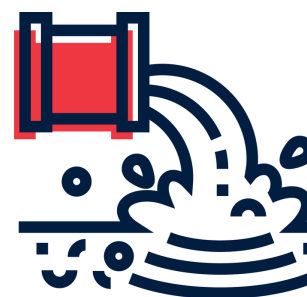
Biological



Radiological



Nuclear



Environmental

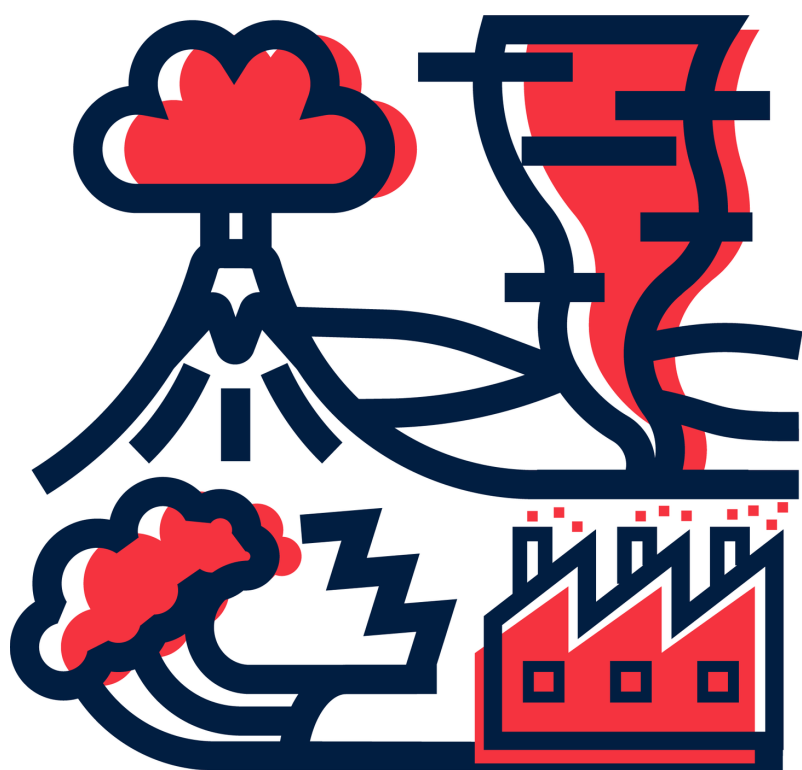
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What are **Technological & Biological** hazards?



NATECH hazards



Industrial facilities and critical infrastructure are vulnerable to the impact of natural climate-related hazards which can trigger so-called Natech (Natural Hazard Triggering Technological Disasters) accidents and the release of toxic substances, fires and explosions, potentially resulting in health effects, environmental pollution and economic losses.

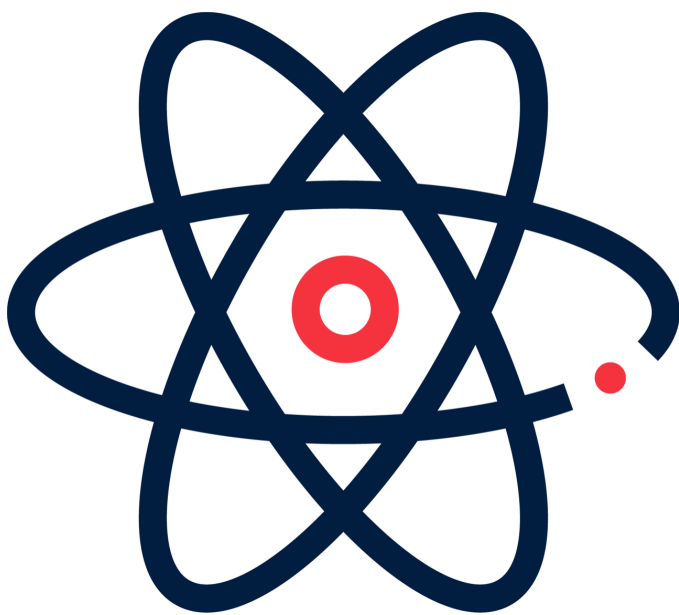
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Technological & Biological **hazards**



Nuclear hazards



Nuclear emergencies involve or emerge from nuclear chain reactions from nuclear power plants, research reactors, or nuclear weapons, creating enormous effects.

Be prepared!

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Technological & Biological **hazards**



Radiological hazards



Any situation which gives rise to an abnormal or unexpected radiation hazard. An emergency can arise because of:

1. A loss of shielding, resulting in high radiation levels;
2. A loss of containment, resulting in a release of activity; or
3. An uncontrolled criticality.

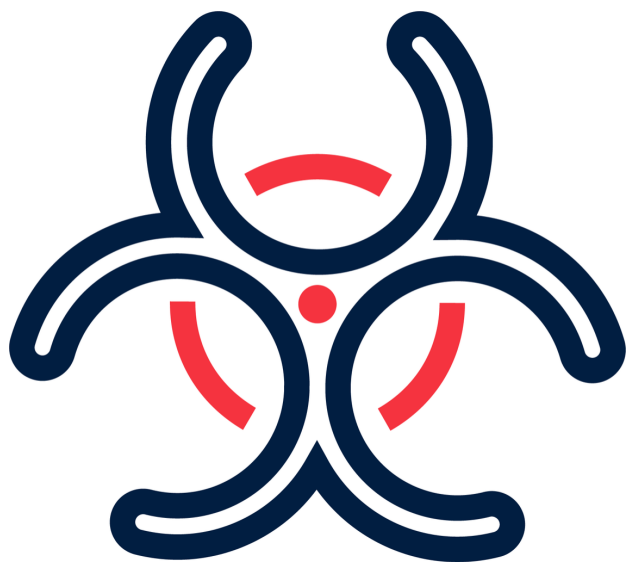
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Technological & Biological **hazards**



Biological hazards



Public health emergencies, such as epidemics and contaminated drinking water and food. Contamination can occur through natural exposure to the agent, accidental release of microorganisms.

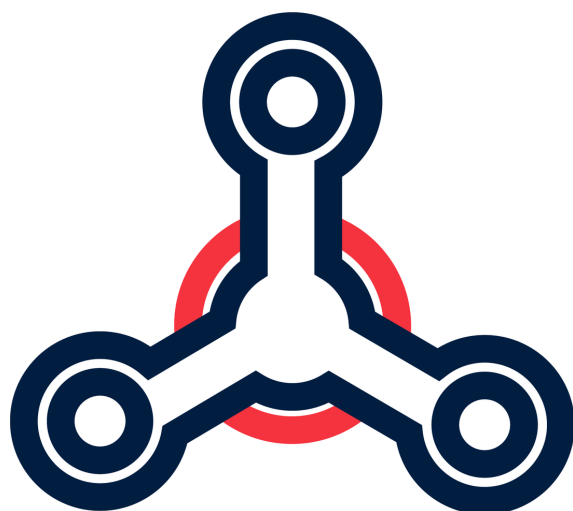
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Technological & Biological **hazards**



Chemical hazards



Chemical poisoning that may include thermal, asphyxiate, and physical injury risks, due to transportation or misused hazardous materials.

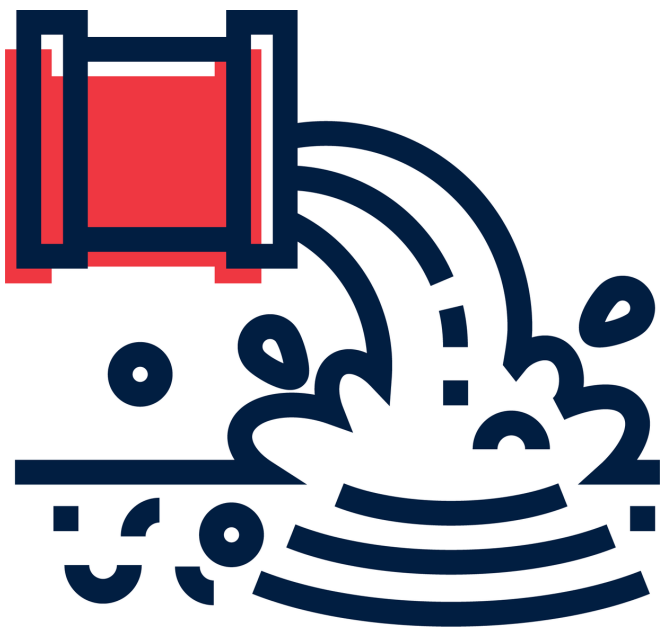
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Technological & Biological **hazards**



Environmental hazards



Sudden commercial or industrial failures causing accidents of varying scope, such as spills or multiple fires affecting the environment and livelihoods.

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