



60 Years

Atoms for Peace and Development

Factsheet for Decision Makers

Emergency Preparedness and Response

EMERGENCY PREPAREDNESS AND RESPONSE

Why is it important?

A nuclear or radiological emergency requires prompt action. Emergency situations may arise as a result of unintended or unanticipated events, operational and equipment failures as well as malevolent acts.

While rare, a nuclear or radiological emergency arises unexpectedly, can happen anywhere and can have geographically far-reaching consequences. A detailed emergency response is event specific. Adequate emergency preparedness is nevertheless essential to avoid or to reduce adverse consequences on human life, health, property and the environment.

Inadequate preparedness may delay the recovery efforts and cause significant societal harm.

What do I need to know?

A nuclear or radiological emergency may result in exposures that cause acute health effects (e.g. acute radiation syndrome) and an increased risk of late radiation induced health effects (e.g. cancer); also they may have adverse psychological impacts as well as social and economic consequences.

Protective and other response actions need to be taken to avert or reduce health effects and to provide for the timely resumption of normal social and economic activity; these actions may include sheltering, evacuation, iodine thyroid blocking, food restrictions and relocation.

Emergency arrangements must be pre-planned for timely implementation of protective and other response actions, including criteria to decide if and when the actions are justified.



The International Basic Safety Standards (BSS) are the international benchmark for radiation safety. The BSS are used in many countries as the basis for national legislation to protect workers, patients, the public and the environment from the risks of ionizing radiation.

IAEA Safety Standards for protecting people and the environment

Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards

Jointly sponsored by
EC, FAO, IAEA, ILO, OECD/NEA, PAHO, UNEP, WHO

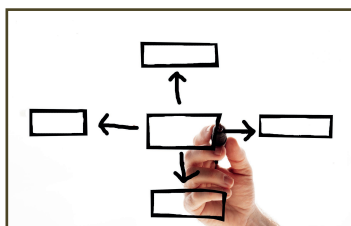


General Safety Requirements Part 3
No. GSR Part 3



The BSS are based on the most recent scientific evidence on the effects of ionizing radiation and take into account practices and experiences from around the world in the use of ionizing radiation and nuclear techniques. Eight international organizations sponsor the BSS.

What actions are required?



The government needs to make preparations to integrate nuclear or radiological emergency planning into the national system for managing all types of hazard.

The government needs to ensure that an integrated and coordinated emergency management system is established and maintained. Co-ordination with the relevant international emergency arrangements also needs to be ensured.

The government needs to ensure that appropriate protection strategies (comprising of various response actions) are developed, justified and optimized for timely implementation in consultation with all relevant stakeholders.

The government needs to develop a programme to manage, control and record the doses received by emergency workers, including those working for response organizations. Advance planning is needed to facilitate smooth transitioning to the long-term recovery.



The IAEA has detailed requirements for nuclear or radiological emergency preparedness and response in IAEA Safety Standards Series No. GSR Part 7.

Resources

Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards, No. GSR Part 3
http://www-pub.iaea.org/MTCD/publications/PDF/Pub1578_web-57265295.pdf

Preparedness and Response for a Nuclear or Radiological Emergency, IAEA Safety Standards Series No. GSR Part 7
http://www-pub.iaea.org/MTCD/Publications/PDF/P_1708_web.pdf