



# Factsheet for Decision Makers

## Radiation Protection of Workers

### ASSESSMENT OF WORKER EXPOSURE

#### Why is it important?

Radiation sources are widely used in medicine, industry, agriculture, and research. As a part of the system to ensure the adequate protection of workers, the BSS requires that doses received by workers are assessed and remain below the dose limits for occupational exposure. These doses need to be recorded and the records need to be retained for the time of the worker's employment and for not less than 30 years after the end of work.

#### What do I need to know?

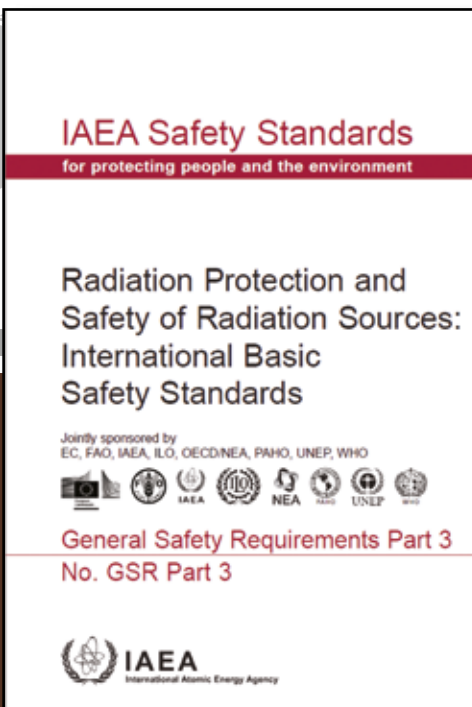
The **LICENSEE, EMPLOYER** and/or **FACILITY OPERATOR** should assess:

- Radiation levels in the work areas;
- Potential internal and external doses to the workers from carrying out their day to day duties;
- Potential doses resulting from accidents.

The **LICENSEE, EMPLOYER** and/or **FACILITY OPERATOR** should consider the options of assessing worker doses based on:

- Radiation levels in the workplace and the time spent working there. These can be external radiation levels, surface contamination levels and airborne activity levels;
- Measuring the worker external dose by individual monitoring, i.e., by issuing personal dosimeters to each worker;
- Assessing the worker internal dose by appropriate measurement techniques.

Individual monitoring should be used in all cases where workers may receive a significant radiation dose. Advice from radiation protection experts should be obtained on appropriate workplace monitoring arrangements and on selection of appropriate dosimeters to be used.



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.

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 is responsible for defining the legal and regulatory framework for radiation safety and for requiring that doses to the workers are assessed.

The regulatory body is responsible for ensuring that a system is in place for reporting worker doses, in particular doses that exceed dose constraints and/or dose limits.

The licensee, employer and/or facility operator are responsible for assessing and recording the doses received by their workers.

Workers are responsible for fulfilling their obligations and for carrying out their duties for protection and safety.



## 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](http://www-pub.iaea.org/MTCD/publications/PDF/Pub1578_web-57265295.pdf)

Occupational Radiation Protection Networks  
<http://www-ns.iaea.org/tech-areas/communication-networks/orpnet/>

Occupational Radiation Protection Safety Guide