



# World Health Organization



**Radiation Protection Culture in Medicine**

*Regional Workshop  
11 April 2015  
Buenos Aires, Argentina*



## What the new BSS say about RS culture

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*Workshop on RP Culture in Medicine, Buenos Aires, 11 April 2015*

# The System of Radiological Protection



- Three **principles**
  - Justification
  - Optimization
  - Limitation
- Three **categories of exposure**
  - Public
  - Occupational
  - Medical
- Three **exposure situations**
  - Planned
  - Existing
  - Emergency

# System of Radiological Protection in Medicine



- **Exposure situation**

- Planned

- **Principles**

- Justification
- Optimization

- **Categories of exposure**

- Medical
- Occupational
- Public

# Categories of exposure in medicine

- Medical exposures →
  - *Patients;*
  - *Comforters and carers;*
  - *Medical research volunteers*
- Occupational exposures
  - *Health care providers*
- Public exposures
  - *Visitors, general public*



# To support the implementation of the radiation basic safety standards (BSS)

- New **international BSS** cosponsored by 8 international organizations, including WHO, has expanded the requirements for medical exposures.
- **WHO is working to support the BSS implementation in the health sector** and this is a **priority** task today.





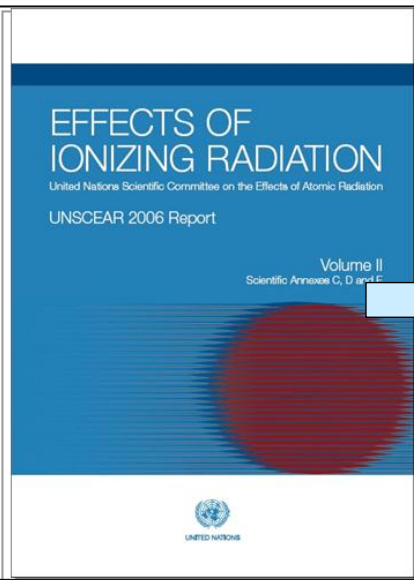
# International and Euratom BSS

- Euratom BSS: legally binding, HERCA is working to support the transposition in EU Member States
  - Safety requirements in the international BSS and EU BSS are consistent

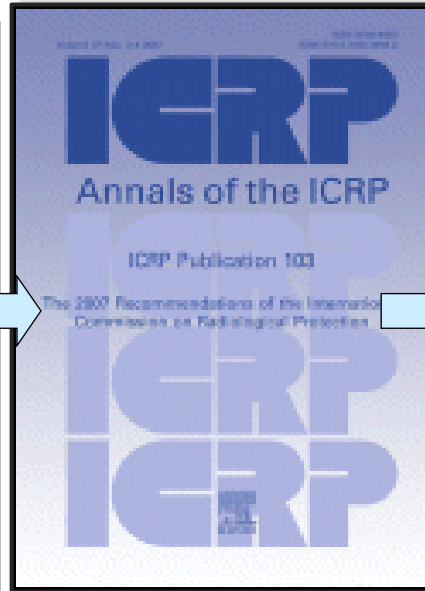


Buenos Aires, 11<sup>th</sup> April 2015

# RP system- the paradigm: science, recommendations, standards



**Scientific basis**  
Effects, risks,  
sources, levels,  
trends, ...



**Recommendations**  
System of RP  
(philosophy,  
principles, dose  
criteria, ...)



**Standards**  
(safety requirements,  
regulatory  
language,...)

**Need to bridge this gap**



**Medical  
settings**

*"What should I do  
to improve  
radiation safety in  
healthcare ????"*

**But... how?**

# What the new BSS say about RS culture





# Safety culture in the new BSS



**Req. 2.51** - to promote and maintain safety culture by:

- (a) Promoting individual and collective commitment to protection and safety at all levels of the organization;*
- (b) Ensuring a common understanding of the key aspects of safety culture within the organization;*
- (c) Providing the means by which the organization supports individuals and teams in carrying out their tasks safely and successfully, with account taken of the interactions between individuals, technology and the organization;*
- (d) Encouraging the participation of workers and their representatives and other relevant persons in the development and implementation of policies, rules and procedures dealing with protection and safety;*



# BSS Req 2.51 (cont'd)

*(e) Ensuring accountability of the organization and of individuals at all levels for protection and safety;*

*(f) Encouraging open communication with regard to protection and safety within the organization and with relevant parties, as appropriate;*

*(g) Encouraging a questioning and learning attitude and discouraging complacency with regard to protection and safety;*

*(h) Providing means by which the organization continually seeks to develop and strengthen its safety culture.*

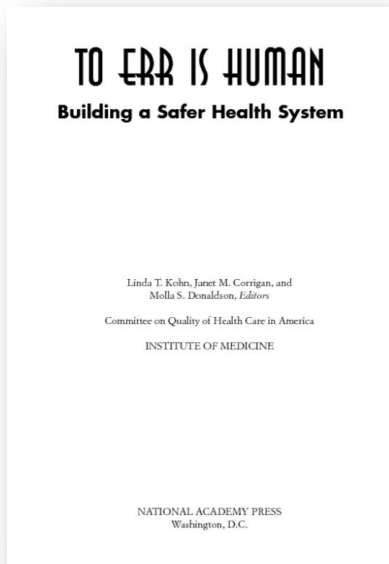
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# Safety culture in healthcare



- **Patient safety** is a global public health issue.
- **Burden of unsafe care**: in developed countries as many as 1/10 patients is harmed while receiving hospital care (10%).
- "Healthcare organizations must develop a **culture of safety** such that the organization care process and the workforce are focused on **improving the reliability of patient care**"
- "The biggest challenge to moving toward a safer health system is **changing the culture** from one of blaming individuals for errors to one in which errors are seen as opportunities for learning, improving the system and preventing harm"



# Patient Safety

- **Patient safety:** reduction of risk of unnecessary harm associated with healthcare to an acceptable minimum.
- As a **discipline**, it refers to the **coordinated efforts to prevent harm** caused by the process of health care itself, from occurring to patients.
- WHO Patient Safety Programme (**PSP**) vision is: "***Every patient receives safe health care, every time, everywhere***".
- **Patient safety** encompasses **radiation safety in health care**