

## AbstractID: 9043 Title: The Role of Medical Physicists in the Revised International Radiation Safety Standards

**Purpose:** The 1996 version of the *International Basic Safety Standards for the Protection against Ionizing Radiation and for the Safety of Radiation Sources* (BSS) [IAEA Safety series 115], used world-wide as the basis for radiation protection legislation/regulations, is being revised by several cosponsoring international organizations to be consistent with the new ICRP Recommendations. This paper will focus on major changes regarding medical exposures and the role of medical physicists.

**Method and Materials:** The current BSS draft is including, for the first time, the term “medical physicist”, replacing the expressions in the previous version: “expert” in “radiotherapy physics”, “radiodiagnostic physics” and/or “nuclear medicine physics”. This step is crucial towards the recognition by the International Labor Organization of medical physicists as health professionals, a pre-requisite in many countries for hiring medical physicists in hospitals. The draft is also expanding the medical physicist’s role in medical exposures, now a “principal party” together with the “radiological medical practitioner” and the “employer, owner and/or administrator”.

**Results:** Medical physicists are responsible for imaging, calibration, dosimetry and quality assurance requirements. “For therapeutic uses of radiation”, these activities shall “be conducted by or under the supervision of a medical physicist with competence in the relevant field (radiation oncology or nuclear medicine)”. “For diagnostic and image-guided interventional uses of radiation”, they shall be “fulfilled by, or under the oversight of or with the advice of, a medical physicist with competence in the relevant field”; the degree of involvement “determined by the complexity of the particular use of radiation and the ensuing radiation risks”.

**Conclusion:** The AAPM should play a prominent role in the BSS revision process through two mechanisms: the IOMP, the international organization representing medical physics globally, and the official delegation of the US, which, as any member state of the cosponsoring organizations, has to approve the standards.