International Conference on Radiation Protection in Medicine

Organized by the
IAEA
International Atomic Energy Agency

Co-sponsored by the
World Health Organization

Hosted by the
Government of Germany

through the
Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

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Bonn Conference summary

- International Conference on Radiation Protection in Medicine – Setting the Scene for the Next Decade, 3-7 December 2012
- Attended by 536 participants and observers from 77 Member States and 16 organizations
- 88 presentations in the main programme
- EC and UNSCEAR breakout sessions
- 214 contributed papers, summarized by rapporteurs
- 68 posters
Bonn Conference summary

• Objectives:
  • To indicate gaps in current approaches to radiation protection in medicine;
  • To identify tools for improving radiation protection in medicine;
  • To review advances, challenges and opportunities in the field of radiation protection in medicine;
  • To assess the impact of the International Action Plan for the Radiation Protection of Patients, in order to prepare new international recommendations, taking into account newer developments
Bonn Conference summary

• Sessions on radiation protection in main modalities of use of ionizing radiation in medicine

  • **Topical Sessions:**
    • Justification
    • External beam radiotherapy
    • Diagnostic nuclear medicine and hybrid imaging
    • Therapeutic use of sealed and unsealed radioactive sources
    • Interventional procedures
    •Computed tomography
    • Film-based and digital radiography, diagnostic fluoroscopy and mammography
    • Procedures performed outside radiology departments

  • **Roundtable Sessions:**
    • Benefit/risk dialogue with patients and public
    • Manufacturers’ role in medical radiation protection
    • Meeting radiation protection needs in healthcare settings with limited infrastructure
    • Goals for medical radiation protection in 2020
Bonn Conference website

- Website with pdf’s of most of the invited presentations
- Also now including breakout sessions of EC and UNSCEAR

IAEA | Radiation Protection of Patients (RPOP)
Bonn Call-for-Action

Draft v 0.0 based on presentation given by Conference President at the conclusion of the Bonn Conference, together with input given by Session Rapporteurs (10 main actions, with sub-actions to each)

- To be circulated to original drafting group for amendments, before being circulated to other organizations for potential further amendments and agreement.
- Potentially to be issued as Joint Position Statement.
- Likely to be brought to the IAEA General Conference 2013.

Introduction

There is no doubt that the application of ionising radiation and radioactive substances in diagnostic and therapeutic procedures is beneficial for hundreds of millions of people each year.

On the other hand, the ability of ionising radiation to penetrate tissues and to kill and transform tissue cells can make it hazardous to health.

Employing radiation in medicine, therefore, has to carefully balance the benefits by enhancing human health and welfare, and the risk related to the overall radiation exposure of people in medical practices which should be kept as low as reasonably achievable.

There is a need for a holistic approach which includes partnership of national governments, civil society, international agencies, researchers, educators and professional associations dedicated to identifying, implementing and advocating solutions; and leadership, harmonization and co-ordination of activities and procedures at international level.

Objectives of the Bonn Call-for-Action:

- To attain the highest benefit with the least possible risk to all patients by appropriate use of ionizing radiation for diagnosis and treatment
Bonn Conference Proceedings

Proceedings from the International Conference > 900 pages

• It is being processed in-house and it will contain:
  • Bonn Call-for-Action
  • Opening addresses
  • Invited papers (2-4 pages each) > 45
  • Contributed papers (2-4 pages each) > 210

• It will not contain:
  • Discussions from sessions and roundtables
**Objetivos**
que se pretenden alcanzar con las Acciones

*Alcanzar el máximo beneficio con el menor riesgo posible a todos los pacientes mediante el uso apropiado de las radiaciones ionizantes para el diagnóstico y tratamiento.*

*Mejorar la protección radiológica de los pacientes y trabajadores de salud.*

*Integrar plenamente la protección radiológica en los sistemas de atención de salud.*

*Mejorar el diálogo sobre el concepto de riesgo - beneficio con los pacientes y el público.*

*Fortalecer la seguridad de las operaciones para reducir los errores humanos y técnicos.*

IAEA
**Principales Acciones que deberán ser tomadas**

- Intensificar la aplicación del principio de Justificación
- Mejorar la implementación del principio de Optimización
- Los fabricantes deberán contribuir al régimen general de seguridad.
- Insistir en la evaluación sobre el cumplimiento de las normas de seguridad.
- Generar y Promover una agenda estratégica de investigación
**Principales Acciones que deberán ser tomadas**

* Proporcionar información sobre exposiciones médicas en todo el mundo.

* Prevenir la ocurrencia de incidentes y accidentes por radiación.

* Fortalecer la cultura de la protección radiológica en los sistemas de salud.

* Fomentar el diálogo con los pacientes y el público sobre el concepto de riesgo-beneficio.

* Insistir / Apoyar la aplicación de los requisitos de seguridad.
Lo anterior proporciona el marco en base al cual se habrán de detallar subacciones (actualmente en draft).
International Conference on
RADIATION PROTECTION IN MEDICINE
Setting the Scene for the Next Decade
3-7 December 2012
Muchas Gracias!
Muito Obrigado!