ICRP Programme of Work: A Strategic View

IAEA Radiation Safety Standards Committee
Vienna, Austria
June 2018

Christopher Clement
ICRP Scientific Secretary
sci.sec@icrp.org
Maintain and continue to improve the system of radiological protection

Increase engagement with professionals, policy-makers, and the public

Promote awareness of radiological protection and broaden access to ICRP recommendations
Increase engagement with professionals, policy-makers, and the public

- Expand relations with organisations while improving effectiveness and efficiency of collaboration
- Engage more actively through ICRP symposia and other events
- Increase direct interactions with user groups
- Use social media to share the System of Radiological Protection and the activities of ICRP
Welcome to ICRPædia, the home for information on The System of Radiological Protection developed by The International Commission on Radiological Protection (ICRP). ICRPædia is the work of ICRP members.

The System of Radiological Protection is the basis of all standards, regulations, and practice of radiological protection world-wide, for the protection of patients, workers, the public, and the environment from Ionising Radiation.

The definitive reference for the recommendations and guidance of ICRP is the dedicated journal Annals of the ICRP.

ICRPædia is still in its infancy, and growing. Come back regularly to see what's new.

If you are looking for information on the International Commission on Radiological Protection (ICRP), go to www.icrp.org.

Hot Topics on ICRPædia

- Dive right in to an overview of The System of Radiological Protection
- Go to one of our ICRPædia Guides
- Try a search
- Check out one of the hot topics (below)
- Browse through the full list of pages
- Go to a random page

You can always come back to this page by clicking on the ICRPædia logo in the top-left corner of the page.
Promote awareness of RP and broaden access to ICRP recommendations

• Provide publications at low or no cost

• Improve user-friendliness of recommendations

• Promote education and training in RP

• Increase outreach worldwide, with special attention to:
  • The medical sector and health care professionals
  • Affected populations
  • Under-served regions of the world
Celebrate ICRP’s 90th year by making access to *Annals of the ICRP* free*

Supported by FANR, DOE, CNSC, IRPA, CRPA, SFRP, CEPN, etc. and many individual supporters

1/3 towards the goal to raise € 500,000 in 2018

* Raising € 500,000 will enable free access to all ICRP publications, except the most recent rolling two years, for everyone, everywhere, permanently

Contact: kelsey.cloutier@icrp.org or sci.sec@icrp.org
Maintain and continue to improve the system of radiological protection

- Review and assess science, values, and experience when producing recommendations
- Evaluate radiological protection needs related to emerging technologies that use ionising radiation
- Identify and encourage research needed to support RP
- Strengthen logistical and financial support for its expert groups examining emerging issues and developing recommendations and reference data
Programme of Work
System of Radiological Protection

Support the System
• e.g. by providing technical information needed for implementation such as dose coefficients

Elaborate the System
• e.g. for different exposure types and situations, new practices

Assess factors that may influence the System
• e.g. the latest science on radiation effects, ethical values

Review the System
Annals of the ICRP: Recently Published

P135 Diagnostic Reference Levels in Medical Imaging

P136 Dose Coefficients for Non-human Biota Environmentally Exposed to Radiation

P137 Occupational Intakes of Radionuclides: Part 3

P138 Ethical Foundations of the System of RP

P139 Occupational RP in Interventional Procedures
Annals of the ICRP: Consultation

Now in Consultation: The Use of Effective Dose as a Risk-related RP Quantity (comments due August 3, 2018)

Coming Soon

- Paediatric Reference Computational Phantoms
- Dose Rate Coefficients for External Exposures to Environmental Sources
- RP in Therapy with Radiopharmaceuticals
- Adult Mesh-type Reference Computational Phantoms
- Biota Radiation Weighting Factors for Reference Animals and Plants
23 Active Task Groups

- TG36 Radiopharmaceutical Doses
- TG64 Cancer Risk from Alpha Emitters
- TG76 NORM
- TG79 Use of Effective Dose
- TG89 Occupational RP in Brachytherapy
- TG90 Age-dependent Dose Conversion Coefficients for External Exposures to Environmental Sources
- TG91 Low-dose and Low-dose Rate Exposure
- TG93 Update of ICRP Publications 109 and 111
- TG95 Internal Dose Coefficients
- TG96 Computational Phantoms and Radiation Transport
- TG97 Surface and Near Surface Disposal
- TG98 Contaminated Sites

- TG 99 Reference Animals and Plants Monographs
- TG101 Radiopharmaceutical Therapy
- TG102 Detriment Calculation Methodology
- TG103 Mesh-type Computational Phantoms
- TG104 Integration of Protection of People and the Environment
- TG105 The Environment in the System of RP
- TG106 Mobile High Activity Sources
- TG107 The Patient in Veterinary Medicine
- TG108 Optimisation of Protection in Digital Radiography, Fluoroscopy, and CT
- TG109 Ethics in RP in Medicine
- TG110 Workers and the Public in Veterinary Practice
Dose Coefficients

- TG36 Radiopharmaceutical Doses
- TG64 Cancer Risk from Alpha Emitters
- TG76 NORM
- TG79 Use of Effective Dose
- TG89 Occupational RP in Brachytherapy
- TG90 Age-dependent Dose Conversion Coefficients for External Exposures to Environmental Sources
- TG91 Low-dose and Low-dose Rate Exposure
- TG93 Update of ICRP Publications 109 and 111
- TG95 Internal Dose Coefficients
- TG96 Computational Phantoms and Radiation Transport
  - TG97 Surface and Near Surface Disposal
  - TG98 Contaminated Sites
- TG 99 Reference Animals and Plants Monographs
- TG101 Radiopharmaceutical Therapy
- TG102 Detriment Calculation Methodology
- TG103 Mesh-type Computational Phantoms
- TG104 Integration of Protection of People and the Environment
- TG105 The Environment in the System of RP
- TG106 Mobile High Activity Sources
- TG107 The Patient in Veterinary Medicine
- TG108 Optimisation of Protection in Digital Radiography, Fluoroscopy, and CT
- TG109 Ethics in RP in Medicine
- TG110 Workers and the Public in Veterinary Practice
Medical & Other Applications

- TG36 Radiopharmaceutical Doses
- TG64 Cancer Risk from Alpha Emitters
- TG76 NORM
- TG79 Use of Effective Dose
- TG89 Occupational RP in Brachytherapy
- TG90 Age-dependent Dose Conversion Coefficients for External Exposures to Environmental Sources
- TG91 Low-dose and Low-dose Rate Exposure
- TG93 Update of ICRP Publications 109 and 111
- TG95 Internal Dose Coefficients
- TG96 Computational Phantoms and Radiation Transport
- TG97 Surface and Near Surface Disposal
- TG98 Contaminated Sites
- TG 99 Reference Animals and Plants Monographs
- TG101 Radiopharmaceutical Therapy
- TG102 Detriment Calculation Methodology
- TG103 Mesh-type Computational Phantoms
- TG104 Integration of Protection of People and the Environment
- TG105 The Environment in the System of RP
- TG106 Mobile High Activity Sources
- TG107 The Patient in Veterinary Medicine
- TG108 Optimisation of Protection in Digital Radiography, Fluoroscopy, and CT
- TG109 Ethics in RP in Medicine
- TG110 Workers and the Public in Veterinary Practice
Environment

- TG36 Radiopharmaceutical Doses
- TG64 Cancer Risk from Alpha Emitters
- TG76 NORM
- TG79 Use of Effective Dose
- TG89 Occupational RP in Brachytherapy
- TG90 Age-dependent Dose Conversion Coefficients for External Exposures to Environmental Sources
- TG91 Low-dose and Low-dose Rate Exposure
- TG93 Update of ICRP Publications 109 and 111
- TG95 Internal Dose Coefficients
- TG96 Computational Phantoms and Radiation Transport
- TG97 Surface and Near Surface Disposal
- TG98 Contaminated Sites

- TG 99 Reference Animals and Plants Monographs
- TG101 Radiopharmaceutical Therapy
- TG102 Detriment Calculation Methodology
- TG103 Mesh-type Computational Phantoms
- TG104 Integration of Protection of People and the Environment
- TG105 The Environment in the System of RP
- TG106 Mobile High Activity Sources
- TG107 The Patient in Veterinary Medicine
- TG108 Optimisation of Protection in Digital Radiography, Fluoroscopy, and CT
- TG109 Ethics in RP in Medicine
- TG110 Workers and the Public in Veterinary Practice
Scientific & Ethical Basis / Fundamentals

- TG36 Radiopharmaceutical Doses
- TG64 Cancer Risk from Alpha Emitters
- TG76 NORM
- TG79 Use of Effective Dose
- TG89 Occupational RP in Brachytherapy
- TG90 Age-dependent Dose Conversion Coefficients for External Exposures to Environmental Sources
- TG91 Low-dose and Low-dose Rate Exposure
- TG93 Update of ICRP *Publications 109 and 111*
- TG95 Internal Dose Coefficients
- TG96 Computational Phantoms and Radiation Transport
- TG97 Surface and Near Surface Disposal
- TG98 Contaminated Sites
- TG 99 Reference Animals and Plants Monographs
- TG101 Radiopharmaceutical Therapy
- TG102 Detriment Calculation Methodology
- TG103 Mesh-type Computational Phantoms
- TG104 Integration of Protection of People and the Environment
- TG105 The Environment in the System of RP
- TG106 Mobile High Activity Sources
- TG107 The Patient in Veterinary Medicine
- TG108 Optimisation of Protection in Digital Radiography, Fluoroscopy, and CT
- TG109 Ethics in RP in Medicine
- TG110 Workers and the Public in Veterinary Practice
Potential Near-Future Efforts

- More ‘end user’ publications
- Continuing to respond to the evolving use of radiation in medicine
- Veterinary patients
- Further work on ethics in RP
- Space
- Individual radiosensitivity
Areas that May Require Further Attention

**Effects**
- Definition of health
- Classification of effects
- Low-dose and low-dose rate risk
- Individual radiosensitivity
- Detriment beyond cancer and hereditary

**Concepts**
- Individual dose limitation
- Social and economic factors in optimisation
- What is protected in protection of the environment
- Tolerability and reasonableness

**Organising Radiological Protection**
- Categories of exposure esp. environment
- Relationships between exposure situations
- Exposure situations and protection tools

**Other**
- Science, ethics and judgement
- Protection of children
- Protection quantities

PRELIMINARY
ICRP - ICRU 90th Anniversary Colloquium

Celebrating 90 Years of Expertise – Radiation Protection during Our Next Decade

Stockholm
October 17-18, 2018

Hosted by
Strålsäkerhetsmyndigheten (SSM)
https://www.stralsakerhetsmyndigheten.se/en/icrpicru90