

ICRP Committee 2 on line meeting on May 14th

C2 Task Groups:

- TG 36 “Radiation doses to patients in diagnosis nuclear medicine”. The objective is the update of ICRP Publication 128 developing absorbed organ dose coefficients (mGy/MBq) and Effective dose coefficients (mSv/MBq) for radiopharmaceuticals. The submission of the TG 36 report to MC will be later than expected, to improve the document. The group will deal with patient doses during pregnancy and dose to the foetus.
- TG 95 “Internal Dose Coefficients”. OIR report series 2015-2022 (occupational intakes) and Data Viewer have been published. EIR Reports are in progress dealing with exposure of members of the public. EIR Part 1 was approved for publication (1 year delay). EIR Part 2 is in public consultation.
- TG 103 “Mesh-Type Reference Computational Phantoms”. MRCPs for adults are available in Publication 145. ICRP Publication 156 about Pediatric Mesh Reference Computational Phantoms is in press. MRCP pregnant females are completed (Hanyang Univ.) for all fetal ages. It was decided to change the position of the foetus at week 30 considering head-down position at that stage. Public consultation is expected by November 2024.
- TG 112 “Emergency Dosimetry”. The goal is the development of data sets for dosimetric estimations of internal and external exposures. The scenarios include high doses (stochastic effects and tissue reactions). Code McSEE is under development for MC simulations to assess external doses; final version will be available by the end of 2024. The Geometry panel and the Phantom panel were improved. Regarding Source Panel, environmental sources have been added. The Output panel was updated: (1) doses are updated and displayed during calculations and (2) enamel dose (for EPR dosimetry) can be calculated, with detailed teeth mesh models.
- TG 113 “Dose coefficients for diagnostic x-ray imaging” in Radiography, Computed Tomography (CT) scan and Fluoroscopy. MC simulations are carried out using voxel reference phantoms for well defined imaging protocols. The Radiography Report is online for public consultation. Regarding CT, calculations were finished and the draft report is in progress. The dosimetry of the pregnant patient and foetus was initiated for patients undergoing radiography and CT examinations (mesh-type pregnant phantoms will be used). MC calculations of Paediatric Fluoroscopy are ongoing; spot checks are necessary to confirm the validity of the results.

Other Task Groups with C2 members:

- TG 122 “Radiation Detriment Calculation Methodology” (C1).
- TG 115 “Doses and risks for RP of astronauts” (C1).
- TG 118 “RBE, Q, wR” (C1).
- TG 119 “Cardiovascular diseases” (C1).
- TG 120 “RP for Radiation Emergencies and Malicious Events” (C4).
- TG 121 “Effects of Ionising Radiation Exposure in Offspring and Next Generations” (C1)
- TG 125 “Dosimetry for non-human biota”.
- TG 128 “Individualisation and Stratification in Radiological Protection: Implications and Areas of Application”

Other topics:

- EURADOS-ICRP Training Course on the Theory and Practical Application of Codes for the Determination of Dose After Internal Contamination will be organized in Fontenay-aux-Roses (France) on 14-18 October 2024.
- ICRP C2 Publications in press:
 - o ICRP Publication 155 – TG96
 - o ICRP Publication 156 – TG103
 - o ICRP Publication 159 – EIR Part 1, TG95
- ICRP reports accepted for Public Consultation:
 - o TG 95 – EIR Part 2
 - o TG113 – Dose Coefficients in Radiography
- Next C2 onsite meeting will be held in Munich on 4-6 November, 2024