24th EURADOS Webinar

Patient shielding, updating the practice









European Radiation Dosimetry Group (EURADOS)

- EURADOS (established in 1982) is a non-profit association for promoting research and development and European cooperation in the field of the dosimetry of ionising radiation.
- The scope of EURADOS: radiation protection, retrospective dosimetry, individual and evironmental radiation monitoring, radiobiology, and diagnostic and therapeutic applications of radiation in medicine
- More than 80 members (institutions), 700 scientists; 8 working groups contributing to the overall EURADOS mission
- https://eurados.sckcen.be/





Members of EURADOS



8 EURADOS Working Groups

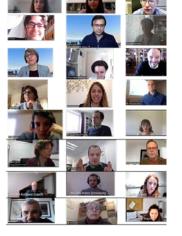
- WG 2 Harmonization of Individual Monitoring (M.-A. Chevallier, France)
- WG 3 Environmental Dosimetry (A. Vargas, Spain)
- WG 6 Computational Dosimetry (H. Rabus, Germany)
- WG 7 Internal Dosimetry (David Broggio, France)
- WG 9 Dosimetry in Radiotherapy (L. Stolarczyk, Denmark)
- WG 10 Retrospective Dosimetry (L. Ainsbury, UK)
- WG 11 High-Energy Radiation Fields (M. Caresana, Italy)
- WG 12 Dosimetry in Medical Imaging (Ž. Knežević, Croatia (2013-2023) P. Ferrari, Italy (from 2023)
- Pilot Group Dosimetry in nuclear medicine (Weibo Li, Germany)

https://eurados.sckcen.be/working-groups











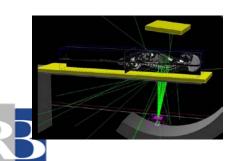


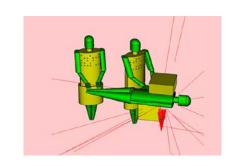
Aim of the Working Group:

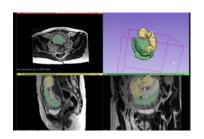
Assessment and improvement of patient and staff dosimetry in the medical field, excluding radiotherapy.

Main objectives

- WG12 is focused on patient and staff dosimetry in the medical field; diagnostic and interventional radiology, and nuclear medicine, excluding RT
- ➤ The overall aim of the WG12 is focused on dosimetry harmonization, evaluation and development of dosimetry methods, preparation of recommendations, intercomparisons, literature reviews and measurement campaigns to assess occupational and patient exposure.
- ➤ WG 12 is actively collaborating with **EFOMP** and **EANM** on several tasks.
- Members of WG 12 include experts from the medical physicist's community, reference and research laboratories, dosimetry services and regulators.









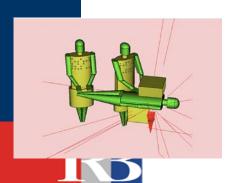


SG1 Staff dosimetry (Isabelle Clairand, IRSN)

- Task 1.2 Dose Constraints (J. Domienik)
- Task 1.3 EURADOS synthetic worksheet, (I. Clairand)
- Task 1.4 A.I. in medical application (J. Dabin)
- Task 1.7 Occupational exposure during the management, preparation and administration of "new" radiopharmaceuticals (*P. Ferrari*)
- Task 1. 8 Extremity doses in nuclear medicine focused on the new radionuclide, (R. Kollaard)

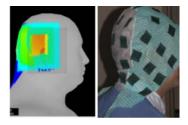
SG 2 Patient dosimetry (*Jeremie Dabin, SCK*)

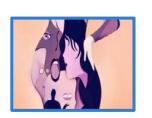
- Task 2.1 Dual Energy CT dosimetry (A. Gallagher)
- Task 2.2 Personalized dose in radiotherapy jointly with WG9, (T. Siiskonen)
- Task 2.3 Review of guidelines/recommendations on use of out-of-field shielding in X-ray imaging (M. Sans Merce)
- Task 2. 4 Dosimetry in pregnancy, (D. Faj)
- Task 2.5 Organ doses in interventional radiology (N. Arbor)













List of publications WG 12 availiable on Eurados web page

https://eurados.sckcen.be/documents-publications/publications



Original paper

Management of pregnant or potentially pregnant patients undergoing diagnostic and interventional radiology procedures: Investigation of clinical routine practice

Dario Faj ^{a,b}, Céline Bassinet ^c, Hrvoje Brkić ^{a,b,*}, Francesca De Monte ^d, Serge Dreuil ^c, Laura Dupont ^e, Paolo Ferrari ^f, Aoife Gallagher ^g, Lara Gallo ^d, Christelle Huet ^c, Željka Knežević ^h, Ivana Kralik ^l, Dragana Krstić ^f, Carlo Maccia ^h, Marija Majer ^h, Francoise Malchair ^l, Una O'Connor ^m, Piotr Pankowski ⁿ, Marta Sans Merce ^e, Julie Sage ^c, George Simantirakis ^o

> J Radiol Prot. 2021 Jan 18. doi: 10.1088/1361-6498/abdd05. Online ahead of print.

A European perspective on Dental Cone Beam Computed Tomography (CBCT) systems with a focus on optimisation utilising DRLs (Diagnostic Reference Levels)

Teemu Siiskonen ¹, Aoife Gallagher ², Olivera Ciraj Bjelac ³, Leos Novak ⁴, Marta Sans Merce ⁵, Jad Farah ⁶, Jérémie Dabin ⁷, Francoise Malchair ⁸, Zeljka Knežević ⁹, Mika Kortesniemi ¹⁰

Affiliations + expand

PMID: 33461178 DOI: 10.1088/1361-6498/abdd05







Review paper

Recommendations for the use of active personal dosemeters (APDs) in interventional workplaces in hospitals

U. O'Connor^{a,*}, E. Carinou^b, I. Clairand^c, O. Ciraj Bjelac^d, F. De Monte^c,
J. Domienik-Andrzejewska^f, P. Ferrari^g, M. Ginjaume^h, H. Hršakⁱ, O. Hupe^j, Ž. Knežević^k,
M. Sans Merce^{l, m}, S. Sarmentoⁿ, T. Siiskonen^c, F. Vanhavere^p

EURADOS newsletter Linkedin.com/in/eurados, (PhD, posdoc, job position announcements)

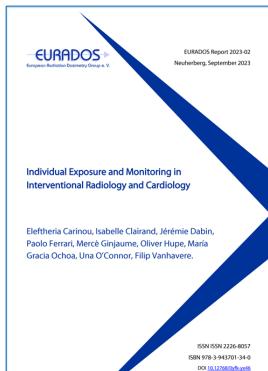
https://www.facebook.com/EURADOS https://www.youtube.com/EURADOS

Report 2023-02 was published in November 2023.

Can be downloaded at:

https://eurados.sckcen.be/documents-publications/reports-

documents



Agenda



• Regulations and current practice

Marta Sans Merce, (University Hospital Geneva, EURADOS)



• The European consensus

Paddy Gilligan, (University College Dublin, EFOMP)



No-shielding policy: how to inform patients and caregivers

Shane Foley, (University College Dublin, EFRS)

EBAMP accredits the "24th EURADOS Webinar on patient shielding" to be held on 29th January 2024 online as a CPD event for Medical Physicists at EQF Level 6.

The event has been judged to have **1** hour of educational experience, which, according to the EBAMP protocol is equivalent to **9 CPD points**.

The Accreditation Code for the event is: APP00262

Please remember that the following text:





If you need Certificate please contact:

office@eurados.org

