



Workshop on European Population Doses from Medical Exposure

*24-26 April 2012
Athens, Greece*





hosted by the
Greek Atomic Energy Commission

funded by the
European Commission

Organized by DDM2 project consortium

General information

Workshop venue

Hellenic Research Foundation Amphitheatre

Address:

[48 Vassileos Constantinou Ave.](#)
[11635 Athens, Greece](#)

www.eie.gr

Registration

Participants' registration will be made at workshop venue. Registration includes:

- Workshop folder: programme, list of participants, pen, notepad
- Name badge
- Coffee breaks and light lunches

Fee required for the workshop dinner will be paid at registration desk only in cash the latest by Wednesday morning.

Posters

The poster area is located in the atrium, outside the workshop amphitheatre. The mounting of posters is scheduled for Tuesday, 24 April 2012, before the opening session.

Poster panels will be marked with the poster ID-numbers, as mentioned in the poster presentations list. Posters should be fixed to the poster panel using blue tack provided on site.

Authors are requested to remove their posters from the panels the last day of the workshop, after the closing session. The organizers have no responsibility to collect and return the posters.

Contact

Technical Secretariat
Greek Atomic Energy Commission
P.O. BOX 60092
15310 Agia Paraskevi
Athens, Greece
Tel.: +30 2106506714
Fax: +30 2106506748
Email: workshop@ddmed.eu

Working website

<http://ddmed.eu/workshop>

Scientific programme

Tuesday, 24 April

08:00 - 17:00 Registration / poster mounting

09:00 - 09:10 Opening by:
Christos Housiadas, GAEC Chairman
Ritva Bly, Project Leader

GENERAL INTRODUCTION TO POPULATION DOSE ESTIMATION

Chairpersons: Hilde Olerud, Abbas Aroua

09:10 - 09:30 Legal basis for population dose estimates and EC expectations from DDM2 [O.1]
Georgi Simeonov, European Commission

09:30 - 09:50 Introduction to population dose estimations in DDM2 [O.2]
Ritva Bly, Project leader

09:50 - 10:10 Data on medical exposures from a global point of view [O.3]
Ferid Shannoun, UNSCEAR

10:10 - 10:30 Coffee Break

METHODOLOGY FOR POPULATION DOSE ESTIMATES

Chairpersons: Hannu Järvinen, Paul Stoop

10:30 - 10:45 Categorization of X-ray examinations; TOP 20, 75 and 225 [O.4]
Hilde Olerud, NRPA

10:45 - 11:15 How to estimate typical effective doses for X-ray procedures? [O.5]
Paul Shrimpton, HPA

11:15 - 11:45 How to estimate typical effective doses for NM examinations (including PET-CT)? [O.6]
Bernard Aubert, IRSN

11:45 - 12:15 How to determine examination frequencies and population dose estimates for X-rays and NM? [O.7]
Jenia Vassileva, NCRRP

12:15 - 12:30 Break

STATUS OF EXAMINATION FREQUENCIES IN EUROPE

Chairpersons: Andreas Jahnen, Virginia Tsapaki

12:30 - 12:50 Summary of the general data based on European questionnaires [O.8]
Abbas Aroua, IRA

12:50 - 13:10 Summary of examination frequencies for X-ray procedures [O.9]
Elke Nekolla, BfS

13:10 - 13:30 Summary of examination frequencies for NM procedures [O.10]
Anders Frank, SSM

13:30 - 14:30 Lunch

STATUS OF POPULATION DOSES IN EUROPE

Chairpersons: Ritva Bly, Renato Padovani

14:30 - 14:50 Summary of the population dose for X-ray procedures [O.11]
Hannu Jarvinen, STUK

14:50 - 15:10 Summary of the population dose for NM procedures [O.12]
Paul Stoop, RIVM

15:10 - 15:30 Problems in population dose estimations, X-ray and NM procedures [O.13]
Jenia Vassileva, NCRRP

15:30 - 15:50 Discussion

15:50 - 16:10 Coffee Break

STATUS OF EUROPEAN POPULATION DOSE DATABASE AND GUIDANCE

Chairpersons: Stavroula Vogiatzi, Elke Nekolla

16:10 - 16:30 European database for population dose registration and follow-up [O.14]
Andreas Jahnen, CRP-Henri Tudor

16:30 - 16:50 Suggested need of improvements for the European Guidance (RP 154) [O.15]
Ritva Bly, STUK

16:50 - 17:00 Discussion

17:40 - 19:30 **Social programme: Guided tour in the New Acropolis Museum**

Wednesday, 25 April

08:30 - 17:00 Registration at National Hellenic Research Foundation

NATIONAL EXPERIENCES ON POPULATION DOSE ESTIMATION

Session 1 – X-ray and NM examinations

Chairpersons: Ritva Bly, Anders Frank

09:00 - 09:15 Radiation dose of the Bulgarian population from X-ray and Nuclear Medicine examinations [O.16]
Simona Avramova-Cholakova, Bulgaria

09:15 - 09:30 Frequency and collective dose for the Nuclear Medicine and the TOP 20 X-ray examinations in Portugal, 2011 [O.17]
Pedro Teles, Portugal

09:30 - 09:45 Population dose assessment from x-ray and nuclear medicine examinations in Serbia [O.18]
Danijela Arandjic, Serbia

09:45 - 10:00 Radiation exposure of the Italian population from diagnostic radiology and nuclear medicine examinations [O.19]
Gaetano Compagnone, Italy

10:00 - 10:15 Break

NATIONAL EXPERIENCES ON POPULATION DOSE ESTIMATION

Session 2 – X-ray examinations

Chairpersons: Hannu Järvinen, Bernard Aubert

10:15 - 10:30 Trends in examination frequency and population doses in Norway, 2002 - 2008 [O.20]
Hilde Olerud, Norway

10:30 - 10:45 Patient Dose Evaluation and Experiences in Collection of Frequencies for X-ray Procedures [O.21]
Jonas Marcinkevicius, Lithuania

10:45 - 11:00 Survey of population doses from selected X-ray examinations in Slovakia [O.22]
Dusan Salat, Slovakia

11:00 - 11:15 Automation of the collection of the frequency of X-ray examinations: a pilot study [O.29]
Regis Le Coultre, Switzerland (presented by Eleni Theano Samara, Switzerland)

11:15 - 11:40 Discussion

11:40 - 12:00 Coffee break

NATIONAL EXPERIENCES ON POPULATION DOSE ESTIMATION

Session 3 –NM examinations

Chairpersons: Hilde Olerud, Paul Stoop

12:00 - 12:15 Contribution of nuclear medicine to the exposure of the French population in 2007 [O.23]
Cecile Etard, France (presented by Bernard Aubert, France)

12:15 - 12:30 The estimation of collective dose from medical exposures from diagnostic nuclear medicine examinations in Croatia [O.24]
Dario Faj, Croatia

12:30 - 12:45	Dosages and use of different nuclides in diagnostic nuclear medicine imaging [O.25] <i>Ischa DeWaard, The Netherlands</i>
12:45 - 13:00	Population Collective Effective Dose from Nuclear Medicine Procedures in Greece [O.26] <i>Stavroula Vogiatzi, Greece</i>
13:00 - 14:00	Lunch break

GLOBAL EXPERIENCES ON POPULATION DOSE ESTIMATION

Chairpersons: Paul Shrimpton, Abbas Aroua

14:00 - 14:30	Ionizing Radiation Exposure of the Population of the United States [<i>Invited presentation</i> , O.30] <i>David A. Schauer, NCRP</i>
14:30 - 14:45	Australian per Caput Dose from Diagnostic Imaging and Nuclear Medicine [O.31] <i>Anthony Wallace, Australia</i>
14:45 - 15:00	A Comparison of classification methodologies of Health Care Levels used by UNSCEAR and WHO [O.32] <i>Ferid Shannoun, UNSCEAR</i>
15:00 - 15:20	Coffee break

SPECIAL TOPICS

Chairpersons: Andreas Jahnen, Virginia Tsapaki

15:20 - 15:35	Impact of different interpretations within TOP 20 approach for population dose estimation [O.33] <i>Hannu Järvinen, Finland</i>
15:35 - 15:50	Initial survey results on the accuracy of dose data in the DICOM objects [O.34] <i>Renato Padovani, Italy</i>
15:50 - 16:05	Computed Tomography Doses in Nuclear Medicine [O.35] <i>Katja Merimaa, Finland</i>
16:05 - 16:20	Age and sex distribution of CT examinations in Poland [O.36] <i>Dariusz Kluszczynski, Poland</i>

POSTER SESSION

Chairpersons: Hilde Olerud, Jenia Vassileva

16:20 - 16:40	Summary of posters
16:40 - 18:00	Time for poster watching
20:30	Social programme: Workshop Dinner

Thursday, 26 April

8:30-12:00 Registration at National Hellenic Research Foundation

NATIONAL DIAGNOSTIC REFERENCE LEVELS AND DOSE SURVEYS

Chairpersons: Andreas Jahnen, Renato Padovani

09:00 - 09:20	Summary of national DRLs for x-ray procedures in Europe [O.37] <i>Hannu Järvinen, STUK</i>
09:20 - 09:40	Summary of national DRLs for NM procedures in Europe [O.38] <i>Stavroula Vogiatzi, GAEC</i>
09:40 - 09:55	National diagnostic reference levels for fluoroscopy-guided procedures in Gastroenterology, Urology and Pediatric Cardiology [O.39] <i>Eleni Theano Samara, Switzerland</i>
09:55 - 10:10	The study of patient doses in diagnostic radiology for establishment of national diagnostic reference levels [O.40] <i>Larysa Stadnyk, Ukraine</i>
10:10 - 10:25	Entrance surface dose for selected radiological procedures in Poland [O.41] <i>Piotr Pankowski, Poland</i>
10:25 - 10:40	Diagnostic reference levels in x-ray and nuclear medicine procedures in France: evolution of collected data and collection tools [O.42] <i>Patrice Roch, France</i>
10:40 - 10:55	Assessment of radiation dose to pediatric patients in computed tomography [O.43] <i>Abdelmoneim Sulieman, Sudan</i>
10:55 - 11:15	Coffee break

CONCLUSIONS

Chairpersons: Hilde Olerud, Stavroula Vogiatzi

11:15 - 11:45	European population dose and database [O.44] <i>Ritva Bly, STUK</i>
11:45 - 12:15	Major recommendations for improving for the EU guidelines (RP 154) [O.45] <i>Hannu Järvinen, STUK</i> <i>General Discussion: Project staff at panel</i>
12:15 - 12:45	CLOSING REMARKS <i>Georgi Simeonov, EC</i>
12:45 - 13:00	<i>Stavroula Vogiatzi, GAEC, Local Organizing Committee</i> <i>Ritva Bly, STUK, Project leader</i>

Poster presentations

Experience in collecting and analyzes of the frequency of X-ray diagnostic investigations in Ukraine [P.1]
Stadnyk Larysa, Ukraine

System of collection of medical exposure data in the Russian Federation [P.2]
Zvonova Irina, Russian Federation

Trends in the choice of Xray, CT and MR over 20 years in Norwegian radiology for examinations of head and spine [P.3]
Olerud Hilde Merete, Norway

Patients radiation doses from x-ray examinations in Sudan [P.4]
Sulieman Abdelmoneim, Sudan

Population exposure from Radiological medical examinations in Chania General Hospital [P.5]
Seferlis Stavros, Greece

Dose estimation received by adults undergoing radiological examinations in St. Paul's District General Hospital branch - Panagia of Thessaloniki [P.6]
Vernadakis - Michailakis Pavlos, Greece

Dosimetric comparison of mammography systems with different target/filter combinations [P.7]
Salvara Katerina, Greece

Preliminar radioprotection analysis on IGRT and kV imaging in RT treatments. Dosimetry, radioprotection and image quality impact [P.8]
Mari Alberto, Italy

Patient doses during four common cardiac electrophysiology procedures [P.9]
Papageorgiou Evangelia, Greece

Evaluation of radiation exposure of patients undergoing percutaneous transhepatic biliary drainage with stent to the duodenum using two Monte Carlo methods [P.10]
Karavasilis Efstratios, Greece

Adult radiation doses from multi-detector CT exams: preliminary results from the first Italian SIRM survey [P.11]
Palorini Federica, Italy

Pilot Results of the National Survey on Radiation Dose in CT in The Netherlands [P.12]
Stoop Paul, Netherlands

Assessment of the exposure of the Swiss population to computed tomography in 2008 [P.14]
Aroua Abbas, Switzerland

Establishment of Diagnostic Reference Levels for dental intraoral radiography in Greece [P.15]
Manousaridis Georgios, Greece

Preliminary Australian Diagnostic Reference Levels for Multi-Detector CT [P.16]
Wallace Anthony, Australia

Establishment of the Local Dose Reference Levels for Direct Digital Radiology protocols at the Nicosia General Hospital [P.17]
Christofides Stelios, Cyprus

Establishment of Local Dose Reference Levels for four CT protocols and size specific dose estimations at the Nicosia General Hospital [P.18]
Christofides Stelios, Cyprus

Pediatric Chest X-Ray Protocol optimization and establishment of Local Dose Reference Levels of different age groups at Arch. Makarios III pediatric hospital [P.19]
Christofides Stelios, Cyprus

Dosimetric considerations for combined chest-abdomen neonates' radiographs [P.20]
Hatziioannou Konstantinos, Greece

Verification of radiation doses calculations during paediatric barium meal and cystourethrography examinations using PCXMC 2.0 and MCNP5 Monte Carlo codes [P.21]
Dimitriadis Anastasios, Greece

Pediatric nuclear medicine in the Netherlands - Dosages and state of affairs in 2010 [P.22]
De Waard Ischa, Netherlands

Examination frequency and population dose from nuclear medicine (NM) examinations in Norway in 2008 [P.23]
Unhjem Jan Frede, Norway

Evaluation of patient doses related to the nuclear medicine investigations in the period 2005-2009, in Hungary [P.24]
Pellet Sandor, Hungary

Statistical review of administered dose to PET/CT patients at “Evangelismos” General Hospital and evaluation of the concordance with the EANM guidelines [P.25]

Samartzis Alexandros, Greece

“Radiophilia”: A Tragic Phenomenon in Diagnostic radiology [P.26]

Abdollahi Hamid, Iran

Recent technical advances and future perspectives concerning protection of Population and Biomedical Equipment against E/M Radiation Medical Exposure as described in relevant Industrial Property Documents [P.27]

Spyropoulos Basile, Greece

Variation of gene expression level arising from occupational exposures of medical radiation workers [P.28]

Bahreyni Toossi, Mohammad Taghi, Iran

Social programme

Tuesday, 24 April 2012, 17.40 – 19.30

New Acropolis Museum visit

The New Acropolis Museum visit and guided tour will be organized on Tuesday 24 April 2012. The tour is kindly offered by GAEC.

The Museum is next to the “Acropolis” metro station.

Wednesday, 25 April 2012, 20.30 – 23.30

Dinner at the restaurant of the Royal Olympic Athens Hotel

The workshop dinner will take place on Wednesday, 25 April 2012 at the roof-garden restaurant of the Royal Olympic Athens Hotel, located in the city centre. The location offers a remarkable view of the Acropolis and the Lycabettus hill, laying just in front of the famous Temple of Zeus and the National Gardens.

If you are using metro line 3, get off at “Syntagma” Station. At “Syntagma” Station you switch lines in the direction of Ag. Dimitrios and get off at the first Station, the “Acropolis” Station. From the “Acropolis” Station the Hotel is 200m away, walking along Ath. Diakou Street.

Contact details:

Royal Olympic Athens Hotel
28-34 Athanasiou Diakou Str.
Tel.: +30 210 9288400

Click on the following URL to see the map for the Acropolis area, where both social events will take place:

<http://maps.google.com/maps/ms?msid=217545943193970880031.0004bdef10518a9e30a44&msa=0&ll=37.973855,23.739266&spn=0.012754,0.027874>

Committees

Scientific Committee

Ritva Bly (STUK, Finland), chair
Abbas Aroua (IRA, Switzerland)
Bernard Aubert (IRSN, France)
Anders Frank (SSM, Sweden)
Andreas Jahnen (CRP-Henri Tudor, Luxembourg)
Hannu Jarvinen (STUK, Finland)
Elke Nekolla (BfS, Germany)
Hilde Olerud (NRPA, Norway)
Renato Padovani (EFOMP, Italy)
Ferid Shannoun (UNSCEAR)
Paul Shrimpton (HPA, UK)
Georgi Simeonov (EC)
Paul Stoop (RIVM, the Netherlands)
Virginia Tsapaki (EFOMP, Greece)
Jenia Vassileva (NCRRP, Bulgaria)
Stavroula Vogiatzi (GAEC, Greece)

Local Organizing Committee (GAEC)

Stavroula Vogiatzi
Kyriaki Irodiadou
Ioannis Kaissas
Vasiliki Tafili

Dose Datamed 2 Partners





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