



**IAEA**

International Atomic Energy Agency

# **Train the Trainers Workshop on Medical Physics Support for Nuclear or Radiological Emergencies**

**Atlanta, Georgia, United States of America**

**23–27 May 2016**

**Ref. No: E2-TR-52512**

## **Prospectus**

**Title:** Train the Trainers Workshop on Medical Physics Support for Nuclear or Radiological Emergencies

**Venue:** Centers for Disease Control and Prevention, Atlanta, Georgia, United States of America

**Dates:** 23–27 May 2016

**Deadline for  
Nominations:** **29 February 2016**

**Organizers:** The International Atomic Energy Agency (IAEA) and the Argonne National Laboratory (ANL), USA, with the support of the Centers for Disease Control and Prevention (CDC), USA.

**Host Country  
Organizers:** **Ms Sunaree Hamilton**  
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**Language of Instruction:**

English

**Purpose:**

The purpose of the workshop is to provide the participants with a good understanding of their potential complementary roles in nuclear or radiological emergency (NRE) situations, and to prepare them to contribute effectively to the response to an NRE situation as identified in emergency preparedness plans. The participants are also expected to contribute to the training of other health care professionals in their respective countries in preparedness for and response to NRE situations.

Furthermore, the workshop will introduce the participants to a multidisciplinary team approach in dealing with NRE situations.

**Expected Outputs:**

Participants will gain the skills and knowledge necessary to contribute effectively to the response to an NRE situation as identified in emergency preparedness plans. They will have a better understanding of their potential roles in NRE situations and be in a position to contribute to the training of health care professionals in preparedness for and response to NRE situations.

**Scope and Nature:**

This five-day workshop will consist of lectures, demonstrations, simulation, role play, and practical sessions followed by discussions with the workshop participants.

The topics to be covered include the following:

- Dose Assessment and Reconstruction
- Response to Nuclear and Radiological Emergencies Based on the IAEA Safety Standards
- Radiation Measurements and Instrumentation
- Monitoring and Decontamination of People
- Local Area Monitoring, Decontamination and Radioactive Waste Management
- Biological Effects — Cell and Tissue Effects, Stochastic Effects
- Protection Strategies for the Public
- Protection Strategies for Workers
- General Principles of Medical Management

- Psycho-Social Effects and Impacts on Mental Health
- Effective Communication
- Education and Training on NRE Situations (Theory and Practice, Training of Others)

**Background Information:**

In the wake of the Fukushima Daiichi nuclear accident there has been a revival of widespread public concern about the threat of radiation to human health. Amongst the health professionals, clinical radiation medical physicists have an important supporting role to play in NRE situations. There are about 18 000 medical physicists working in regional medical and academic centres globally. Although they have a solid knowledge in radiation dosimetry, and a fairly good understanding of radiation biology, only a few of them will have actually been involved in the response to an NRE situation. By virtue of their professional radiological practice in a clinical environment, they are familiar with many of the concerns and practical issues for people exposed to radiation, and so they have the potential to contribute significantly to the response to an NRE situation.

This workshop has been designed to provide specific comprehensive training on NRE preparedness and response for clinical radiation medical physicists. It also aims to:

- Encourage/facilitate the embedding of medical physicists in NRE preparedness teams, in cooperation with other professions and organizations, at strategic and operational levels, both within hospitals and in the wider emergency planning structure;
- Recognize the essential contributions of medical physics staff (technicians, dosimetrists, etc.) in NRE preparedness programmes and to ensure appropriate training;
- Promote the interaction of medical physicists with other professional groups involved in NRE preparedness, including through participation in regular training and exercises; and
- Encourage consideration of the potential of appropriately trained medical physicists to contribute to multidisciplinary NRE training of other professional groups, both within and outside health care settings.

**Participation:**

The workshop is open to up to 20 participants from Member States of the IAEA.

The participants will be requested to submit a short summary of their experience with NRE situations.

**Participants’  
Qualifications:**

Medical radiation physicists:

- Postgraduate degree or equivalent,
- Completed a specialized clinical training programme, in radiotherapy physics, nuclear medicine physics, diagnostic radiology physics or radiation protection,
- Minimum of three years’ experience as a clinical medical radiation physicist or radiation safety specialist in a hospital,
- Involvement in radiation protection education and training,
- Preference will be given to candidates currently working in hospitals and who are involved in local, regional or national emergency response activities.

**Nomination  
Procedure:**

The workshop is intended for medical physicists working in hospitals, who may be requested by their institution or national authorities to join or support nuclear or radiological preparedness efforts. Exceptionally, applications from medical physicists working in a non-clinical environment will also be considered. Member States are invited to nominate one or more participants for this workshop. Member States are strongly encouraged to identify suitable women participants.

Nominations should be submitted, using the attached Nomination Form, through the established official channels not later than **29 February 2016** for the attention of the responsible officer for the workshop, Mr Ahmed Meghzifene, Division of Human Health, Department of Nuclear Sciences and Applications, IAEA, Vienna International Centre, PO Box 100, 1400 Vienna, Austria (Tel.: +43 1 2600 21653; Fax: +43 1 26007; Email: [A.Meghzifene@iaea.org](mailto:A.Meghzifene@iaea.org)). Nominations should also be copied to the Administrative Secretary for the workshop, Ms Rosalie Salem (Email: [MedPhyWS@iaea.org](mailto:MedPhyWS@iaea.org)). The full names and complete contact details (including postal address, telephone/fax numbers, and email address) of nominated participants should be provided.

**Security  
Training:**

It is recommended that all nominations be accompanied by separate certificates attesting to the candidate’s satisfactory completion of the United Nations (UN) ‘Basic Security in the Field’ (BSITF II) and ‘Advanced Security in the Field’ (ASITF) courses. The courses are available at: <https://training.dss.un.org>.

Once the candidate has completed the courses and passed the accompanying exams, certificates will be generated automatically and should be printed for submission to the IAEA. A copy of the certificates should be kept by the candidate for his/her records, as they are valid for any UN-related travel for three years.

**Administrative  
and Financial  
Arrangements:**

Nominating Governments will be informed in due course of the names of the candidates who have been selected and will, at that time, be given full details of the procedures to be followed with regard to administrative and financial matters.

Selected participants from countries eligible to receive technical assistance will be provided with a round trip economy class air ticket from their home countries to Atlanta (where the Centers for Disease Control and Prevention is located), in Georgia, USA, and a stipend sufficient to cover the cost of their accommodation, food, and minor incidentals. Shipment of accumulated workshop materials to the participants' home countries is not the responsibility of the IAEA.

The organizers of the workshop do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the workshop, and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks. A copy of the insurance policy will be requested for the issuance of visa.

The IAEA is generally not in a position to bear the travel and other costs of participants in the workshop. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Such assistance may be offered upon specific request to normally one participant per country provided that, in the IAEA's view, the participant on whose behalf assistance is requested will make an important contribution to his or her State's emergency preparedness and response arrangements for NRE situations. The application for financial support should be made at the time of nominating the participant.

It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in meetings, workshops or training courses or for consultants. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.