

# REMPAN

# e-NEWSLETTER



World Health Organization

Issue 9

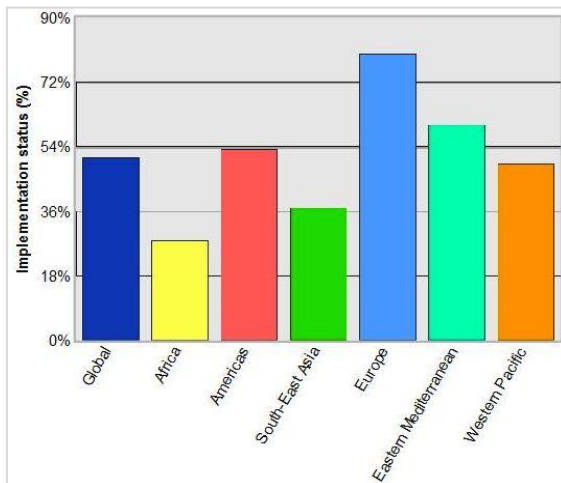
July, 2014

## Editorial

Dear Readers,

The Sixty-seventh session of the **World Health Assembly** (WHA) took place in Geneva during May 19–24, 2014. It was attended by 3,500 delegates from all WHO Member States and focused on a specific health agenda addressing a wide range of issues from climate change and antimicrobial resistance, to health of newborns and outbreaks of MERS, Ebola, and poliomyelitis. Watch the WHO Director General [Margaret Chan's opening speech](#) at the 67<sup>th</sup> WHA online.

WHO Secretariat has reported to WHA the status of the IHR (2005) implementation in the member states. The IHR monitoring data are now accessible through the [Global Health Observatory](#) database which is available online. The 2013 data are presented for 158 reporting countries and can be accessed and viewed by the six WHO regions and by the specific indicators. The graph below represents the percentage of countries who indicated their national capacities being prepared for emergencies related to radionuclear hazards.



*IHR radionuclear core capacity: Implementation status 2013, globally and by WHO region (%)*

Supporting member states implementation of IHR (2005), WHO relies on REMPAN – the global expert network on radiation emergency preparedness and response – and appreciates your continuing support and cooperation.

It is my pleasure to introduce the **9<sup>th</sup> issue of the REMPAN electronic newsletter** that outlines the network's activities and updates in the area pertaining to preparedness and response to radiation emergencies, research and development.

I would like to thank personally every contributor for taking time from your busy schedules to write and send us your news.

Dr Zhanat CARR  
WHO REMPAN Coordinator

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## News – From REMPAN Secretariat

By Zhanat Carr, WHO, Geneva, Switzerland

### ASPR HHS / WHO-SEARO Regional Coordination Meeting on All Hazards Public Health Preparedness and Response in Bangkok, Thailand, January 24-26, 2014

WHO provided input to the development of regional strategies for strengthening core capacities concerning radiation emergencies including a formal multi-sector consultation held by **WHO South-East Asian Regional Office** (SEARO) jointly with the Assistant Secretary for Preparedness and Response (ASPR), US Department of Health and Human Services (HHS), to strengthen all hazards emergency response, including chemical and radiological emergencies. ◆



### Working Meeting with R. Thinker, ARPANSA, at WHO HQ Geneva, Switzerland, June 2014

Dr Rick Thinker, Director of the Assessment and Advice Section Radiation Health Services at the WHO REMPAN Collaborating Center – Australian Radiation Protection and Nuclear Safety Agency (**ARPANSA**) has visited the WHO Radiation Program in Geneva, Switzerland in June 2014 to discuss the several areas of the collaboration between the two agencies. ◆



*M. Perez and E. van Deventer, WHO, R. Thinker, ARPANSA, Z. Carr, WHO (left to right) – Geneva, Switzerland – June 2014*

### Kick-Off-Meeting to revise WHO Iodine Thyroid Blocking Guideline in Würzburg, Germany, May 10, 2014

The Kick-off Meeting of the WHO Guidelines Development Group (GDG) for the revision of the WHO “Guidelines for Iodine Prophylaxis following Nuclear Accidents” 1999 was convened on May 10, 2014 in Würzburg, Germany.

The objectives of the earlier 2-year-project are to review the 1999 WHO “Guidelines for Iodine Prophylaxis following Nuclear Accidents”, the evidence base and the need for new recommendation, with the view of publishing a new technical tool under the provisional title “**Guidelines for Iodine Thyroid Blocking in a Nuclear or Radiological Emergency**” (KI-Thyroid Blocking: KITB), which are to assist Member States to develop national policies in line with international recommendations by WHO. ◆

## News – From REMPAN Secretariat

By Zhanat Carr, WHO, Geneva, Switzerland

### Bilateral meeting of RERF and WHO in Geneva, Switzerland, March 24, 2014

Drs Kazunori Kodama and Hiroaki Katayama from the **Radiation Effects Research Foundation** (RERF), Hiroshima, Japan, visited WHO HQ in Geneva, Switzerland on March 24, 2014. RERF is a one of the oldest Collaborating Centers of REMPAN with the focus on research in the field of radiation epidemiology and radiobiology. The purpose of the visit was to discuss the next 4-year period of collaboration between the two agencies and to deliver a scientific seminar “Long term epidemiological study on radiation health effects: from Hiroshima/Nagasaki to Fukushima”. The seminar has gathered a large number of WHO staff and was followed by a vigorous discussion. ◆



*H. Katayama, RERF, C. Dora, Coordinator IHE / PHE, K. Kodama, RERF (left to right) – Geneva, Switzerland – March 2014*

### IACRNE Meeting on ConvEx (3) 2013 Analysis – Vienna, Austria – February 10-12, 2014

WHO participated jointly with IAEA, WMO, FAO, ICAO, and other relevant international organizations and national authorities in the technical meeting to review and analyse the **lessons of the ConvEx-3 (2013)**.

The exercise hosted by Morocco was based on a malevolent event scenario. Through the exercise WHO tested the IHR notification mechanism as well as WHO’s capability to respond to radiation emergency. REMPAN experts supported the exercise conduct. ◆

## News – From REMPAN Secretariat

By Zhanat Carr, WHO, Geneva, Switzerland

### Bilateral Meeting of IRSN and WHO in Geneva, Switzerland, April 30, 2014

The delegation from the WHO Collaborating Center and REMPAN member – **Institute de Radioprotection et Surété Nucléaire** (IRSN, Paris, France) visited WHO to discuss the directions of the collaboration for the next period of four years (2014-2018). The areas of collaboration include emergency preparedness and response, biodosimetry, radon, low-dose risk assessment, and risk-communication. ◆

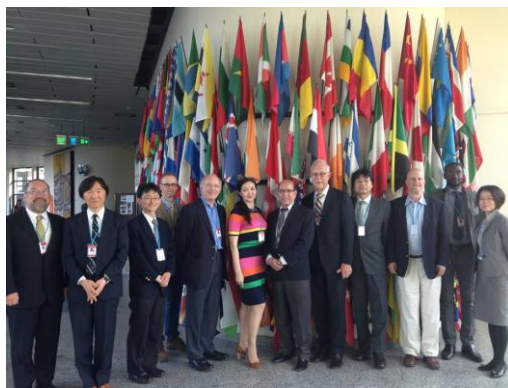


*Z. Carr, WHO,  
J.-R. Jourdain and  
J. Repussard, IRSN,  
M. Perez, WHO,  
R. Dallendre, IRSN,  
E. van Deventer, WHO  
(left to right) –  
Geneva, Switzerland –  
April 2014*

### Meeting of the Steering Group for Development of Training Package on EPR for Medical Physicists – Vienna, Austria – May 20-22, 2014

The IAEA Division for Nuclear Applications for Human Health (NAHO), jointly with the **International Organization of Medical Physicists** (IOMP) have launched a project on development of the training materials package for medical physicists (MPs). This group of specialists working in hospitals is often over-looked when human resources are being allocated in planning for radiation emergency response. MPs have the knowledge of radiation protection, radiation biology, dosimetry and exposure assessment and can become an instrumental part of emergency response with appropriate training and preparation. WHO was invited to join the Steering Group of this project that met in Vienna in May 2014. The project is supported by Japan. Target date for finalizing the training material is in 2015. ◆

*International  
Steering Group –  
Vienna, Austria –  
May 2014*



### ICPC Meeting for EPR-2015 Conference in Vienna, Austria, May 26, 2014

The **Incident and Emergency Center** (IEC) of the IAEA held the first meeting of the **International Conference Program Committee** (ICPC) for the International Conference on Global Emergency Preparedness and Response. The Conference is being planned for October 19-23, 2015 to be held in Vienna, Austria. The scope of the conference will cover all multi-sectoral aspects of preparedness, response, and lessons learnt from the radiological and nuclear emergencies, including medical and public health aspects. ◆

## News – From REMPAN Secretariat

By Zhanat Carr, WHO, Geneva, Switzerland

### National Competent Authorities for Emergency Conventions in Vienna, Austria, May 19-24, 2014

The **7<sup>th</sup> Competent Authorities Meeting** (CAM) was held at the IAEA in Vienna, Austria on May 19-23, 2014, chaired by Ms L. Hubbard, Chairperson of the IAEA's **Emergency Preparedness and Response Expert Group** (EPREG). A total of 121 participants from 68 States and 6 international organizations attended the meeting.

CAM reviewed relevant activities of the members since the 6<sup>th</sup> CAM related to recent developments in radiation protection, nuclear safety/security, and their integration in emergency response systems. The 46 national EPR reports were received and 19 were presented at CAM, together with six regional reports and WHO report focusing on lessons learnt from past emergencies. The representative of Japan presented the current situation at the Fukushima Daiichi NPP. CAM acknowledged the importance of collaboration on emergency preparedness and response among competent authorities.

CAM discussed the assessment and prognosis process in an emergency and emphasized the importance of continuing collaboration between the IAEA Secretariat and Member States to explore the challenges and limitations in such collaboration.

Finally, the IAEA's goals and challenges in the next two years regarding emergency preparedness and response were presented and discussed. The 8<sup>th</sup> CAM will be held on May 23 to 27, 2016. ◆

## News – From Network Members

### SFOPH designated as WHO REMPAN Collaborating Center, Berne, Switzerland

By Christophe Murith, Swiss Federal Office of Public Health (SFOPH), Berne, Switzerland

As of January 2014, the WHO designated the Radiological Protection Division of the [Swiss Federal Office of Public Health](#) (SFOPH) located in Berne, Switzerland, as Collaborating Center (CC) within the REMPAN network. Responsible and contact persons of the WHO REMPAN CC are Dr Christophe Murith and Dr Daniel Storch, respectively.



The **Radiological Protection Division** of SFOPH issues licences for the operation of equipment producing ionizing radiation, e.g. in medicine, industry, research and training. Further, it monitors the compliance of facilities and the safety of personnel working in this area. Nuclear installations themselves fall within the responsibility of the Federal Council and the Federal Office of Energy.

#### *Dr Chr. Murith*

In addition, the Radiological Protection Division is responsible for environmental radioactivity monitoring. It is notable that in regions of Switzerland most severely affected by the Chernobyl accident, fallout is still detectable in the soil, while in other regions radioactive deposition is continuously declining. A detailed report on measurements results and of radiation exposure to the public is published annually.



#### *Swiss Federal Office of Public Health (SFOPH) – Berne, Switzerland*

According to its mandate in the next 4 years, SFOPH has to fulfil the **following tasks** providing support and collaboration in:

- radiological emergencies response
- radon action plan by developing strategies for strengthening indoor air quality concerning radon
- non-ionising radiation
- radiation protection in the field of medical exposure to strengthen safety in radiology and radiotherapy ◆

## News – From Network Members

### New WHO REMPAN Liaison Institution in Valencia, Spain

By Alegría Montoro, La Fe University Hospital, Valencia, Spain

Recently the **Radiological Protection Service** (RPS) of La Fe University Hospital at Valencia, Spain, joined the WHO REMPAN network as **Liaison Institution** (LI).

Dr Juan Ignacio Villaescusa head of RPS is the focal point of the new REMPAN LI.



#### *Dr J. I. Villaescusa*

Established in 1988, RPS aims at building up an efficient ionizing radiation surveillance program for health workers. Assessing and evaluating adverse radiological effects from medical diagnostic or therapeutic exposure in patients and medical staff is another task. Monitoring systems are established to assess radiation risk of the general public from possible exposure by radioactive installations.

Set up as an administrative and consultative body within the health service, RPS deals with potential radiological emergencies in the Community of Valencia. As there is one nuclear power station in region, capabilities and procedures are in place for any radiological incident.

In a radiological event, RPS can provide medical treatment of irradiated or contaminated people and has in place an experienced and qualified Biological Dosimetry Section.

**La Fe University Hospital** has designated reception areas for contaminated patients and laminar airflow units for ARS patients. Decontamination equipment and decorporation drugs are available. The hospital has 1000 patient rooms with three shielded rooms for I-131 therapy, one whole-body counter, three Gamma-cameras, one Pet-CT and three accelerators.

Staff of RPS attended the 14<sup>th</sup> Coordination and Planning Meeting of WHO REMPAN in Würzburg, Germany. ◆

## News – From Network Members

### 7<sup>th</sup> H. P. Jammiet Memorial Lecture by Albert Wiley

By István Turai, “Frédéric Joliot-Curie” National Research Institute for Radiobiology and Radiohygiene, Budapest, Hungary

The life achievement of Prof. **Albert Lee Wiley**, director of the Radiation Emergency Assistance Centre and Training Site (REAC/TS) and head of the WHO REMPAN Collaborating Center at Oak Ridge, USA, has been recognised by the **International Association of Radiopathology (IAR)** Assembly proposing Prof. A. Wiley to give the 7<sup>th</sup> H. P. Jammiet Memorial Lecture at the 14<sup>th</sup> WHO REMPAN Coordination and Planning Meeting in Würzburg on May 07-09, 2014.



*I. Turai (left), A. Wiley (right) – IAR 7<sup>th</sup> Jammiet Memorial Lecture – Würzburg, Germany – May 2014*

Albert Wiley received residency training in radiation therapy and nuclear medicine at the University of Wisconsin (UW) Medical Center, Madison, and the Stanford University Medical Center, Palo Alto, California. He was chairman of the Department of Radiation Oncology and Cancer Center and interim Director at the East Carolina University, Greenville, North Carolina. Currently, he is Professor Emeritus at the Department of Radiology and Human Oncology at the UW. He has over 180 journal, book and abstract publications in radiation oncology, nuclear medicine, radiobiology and radiation medicine.

He has served as consultant at the Chernobyl reactor site, the US Embassy in Venezuela following a local radiological accident, to the Nuclear Regulatory Commission (NRC) Advisory Committee on Reactor Safeguards and the Los Alamos National Laboratory, USA.

In recent years he has served as medical team leader on National Nuclear Security Administration (NNSA) sponsored training and exercises in Iraq, Korea, Kuwait, Morocco, South Africa, and also as a radiation medicine expert at nuclear emergency related meetings at the IAEA in Vienna, in Argentina, Israel, Japan, Mexico, Singapore and Ukraine.

In the **7<sup>th</sup> H. P. Jammiet Memorial Lecture** Albert Wiley presented a review titled "Use of the Clinical Decision Guidance (CDG) as a public health tool in the medical management of internal contamination in radiological mass casualty" on May 08, 2014 following presentation of his scientific and practical professional activities by Assoc. Prof. Dr István Turai, Scientific Secretary of IAR. ♦

## News – From Network Members

### New Director at the Bundeswehr Institute of Radiobiology, Munich, Germany

By Matthias Port, Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, Munich, Germany

**Colonel Dr. Matthias Port** has been appointed as new Director of the Bundeswehr Institute of Radiobiology affiliated to the University of Ulm, in Munich, Germany, a REMPAN Liaison Institution.

Colonel Dr. M. Port who specialized in internal medicine, haematology and oncology worked until recently as senior physician at the Hanover Medical School, Hanover, Germany. His research interests focus in the areas of radiobiology, tumor research and genomics.



*Colonel Dr. M. Port*

In April 2014, he took up his duties at the **Bundeswehr Institute of Radiobiology**, following the resignation of Colonel Prof. Viktor Meineke, who was director for the past ten years. Now, Colonel Prof. V. Meineke is appointed head of the department ABC Medical Defence at the German Armed Forces Medical Academy.

In May 2014, TÜV Süd Management Service GmbH recertified the quality management system of the Bundeswehr Institute of

Radiobiology according to the **DIN EN ISO 9001:2008**. Establishing this system ensures transparency, maintenance and further development of sustainable medical laboratory services. Future research is planned to expand of non-ionizing radiation as well as treatment of acute and chronic radiation symptoms. ♦



## News – From Network Members

### Hanns Langendorff Medal awarded to Prof. Patrick Gourmelon in Berlin, Germany

By Volker List, Karlsruhe Institute of Technology, Eggenstein-Leopoldshafen, Germany

For outstanding merits in radiobiology research and radiation protection **Patrick Gourmelon** was awarded the **Hanns Langendorff Medal** on June 13, 2014 during the 54<sup>th</sup> Annual Conference of the DGMS (German Society for Radiation Protection in Medicine) in Berlin by Prof. Dr. Dr. hc Chr. Streffer, advisory board member of the Hanns Langendorff Foundation and Dr. V. List, president of the DGMS.



*Chr. Streffer, P. Gourmelon, V. List (left to right) – 54<sup>th</sup> Annual DGMS Conference – Berlin, Germany – June 2014*

Patrick Gourmelon, born in Toulon, France in 1947, graduated as medical doctor and obtained his master in biochemistry and genetics and a degree in neurosciences in 1972. After his career in the French Army Medical Services he launched a radiobiology and radiopathology research program in the newly established IPSN, later **Institute for Radiological Protection and Nuclear Safety (IRSN)**. From 2002-2011, he was director of the Human Radioprotection Department heading an average of 130 young scientists. He published 168 scientific articles in internationally accredited journals.

His most important contributions were in radiopathology of the neurovascular radiation syndrome and the cellular pathology of the acute cutaneous radiation syndrome of acute radiation syndrome (ARS). He participated in the European **METREPOL** (Medical Treatment Protocols for Radiation Accident) Manual 2001, which established a new concept of multi-organ failure and clinical grading of ARS. He was also involved in the European Consensus Conference on European preparedness for haematological and other medical management of mass radiation accidents in 2006 and in the US-European harmonization of diagnostic and therapeutic approaches regarding radiation-induced health impairments in 2009.

Experimental research results and cooperation with the French Army Hospital of Percy resulted in highly sophisticated treatment of the ARS including mesenchymal stem cell transplantation. Assisted by the networks of IAEA and WHO, this treatment was applied successfully in several radiation accident patients in Georgia, Peru, Belgium, Ecuador, Gabon and Tunisia.



*Hanns Langendorff Medal*

For his merits in both scientific fields – radiobiology and radiation protection – Patrick Gourmelon is an outstanding laureate of the Hanns Langendorff Medal. ◆

## News – From Network Members

### Diploma of Merit and European Gold Medal awarded to Sergey Aleksanin, St. Petersburg, Russia

By Sergey Aleksanin, Nikiforov Russian Center of Emergency and Radiation Medicine (NRCERM), St. Petersburg, Russia

On June 04, 2014 Sergey Aleksanin, director of the Nikiforov Russian Center of Emergency and Radiation Medicine (NRCERM) EMERCOM of Russia, was awarded the **Diploma of Merit** and the **European Gold Medal** of the European Scientific-Industrial Chamber for his exceptional professional achievements and essential contribution to the fields of pathology and radiation medicine. ◆



*European Gold Medal*



*Diploma of Merit*

## Scientific Events

### 14<sup>th</sup> Coordination and Planning Meeting of WHO REMPAN, Würzburg, Germany

By Rita Schneider, Department of Nuclear Medicine, Würzburg, Germany

The 14<sup>th</sup> Coordination and Planning Meeting of the WHO REMPAN Collaborating Centers and Liaison Institutions held from May 07-09, 2014 in Würzburg, Germany, was hosted by the WHO REMPAN Collaborating Center at the **Department of Nuclear Medicine**, University Hospital Würzburg.

Almost **100 participants from 26 countries** – Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, China, France, Germany, Hungary, Indonesia, Japan, Morocco, the Netherlands, Norway, Romania, Russia, Spain, South Korea, Sudan, Sweden, Switzerland, the UK, Ukraine, and USA as well as representatives from WHO, Switzerland and other international organizations (IAEA, NEA, IFRC), non-governmental organizations (NGOs) (IRPA, IOMP) and professional associations (ICRP, EBMT, IAR, RITN, NERIS, RENEB) attended the meeting.



14<sup>th</sup> WHO REMPAN Meeting – Würzburg, Germany – May 2014

The scope of the three-day meeting covered various aspects of the response to radiation emergencies and the management of their health consequences in ten sessions. The first day was almost entirely devoted to issues related to the **Fukushima accident** including first response, dose and risk assessment and the mid and long-term response.

Other topics of the ambitious and wide program included reports by WHO, IAEA, IRPA and the introduction of new REMPAN members, risk communication, the strengthening preparedness in countries and regions through cooperation, technical support, and partnerships, thyroid and radiation, radiobiology and biodosimetry research and development, REMPAN activities for strengthening preparedness in countries via training, exercise, development of technical tools, and information sharing, and management of acute radiation overexposure.

The proceedings of this 14<sup>th</sup> meeting were agreed to be published as soon as possible. The 15<sup>th</sup> Coordination and Planning Meeting of the WHO REMPAN hosted by the **Swiss Federal Office of Public Health (FOPH)** will be held in Geneva, Switzerland, in 2017. ♦

## Scientific Events

### 9<sup>th</sup> International Workshop on Ionizing Radiation Monitoring in Oarai, Japan

By Constantin Milu, Romanian Society on Radiological Protection, Bucharest, Romania

From November 29 to December 4, 2013, the **9<sup>th</sup> International Workshop on Ionizing Radiation Monitoring** took place in Oarai / Ibaraki, Japan.

All 36 foreign participants of the Workshop from 21 countries visited the affected four Units of the Fukushima Daiichi NPP with detailed view of Reactor 4, regarding the extraordinary efforts for removal of fuel from the spent-fuel pool. For this purpose, a special structure of external walls and ceiling panels was installed, with the aim of supporting the fuel taking facility, so that the work can be carried out without applying the weight of the facility onto the reactor building

The basic principle for mid-and-long-term initiatives is placing as top priority on the safety of local citizens and workers. The distribution of D-Shuttle dosimeters for monitoring of the general public in the affected area is part of these aims.



Removal of Fuel from the Spent-Fuel Pool of Reactor 4 – Fukushima Daiichi NPP, Japan – December 2013

The above report by Constantin Milu, President of the Romanian Society for Radiological Protection and Observer of the WHO REMPAN is adapted from **The ANS Globe**, No. 21, June 2014, the Bulletin of the American Nuclear Society's International Committee. ♦

## Scientific Events

### International Conference held in Gomel, Belarus

By Alexander Rozhko, Research Center for Radiation Medicine and Human Ecology (RRCRM&HE), Gomel, Belarus

On April 11, 2014 an International Conference **Modern Issues of Radiation Medicine: from Science to Practice** was held in Gomel, Belarus. It was attended by more than 200 radiation medicine experts from Belarus, Japan, Russia and Kazakhstan. The conference scope included radiation medicine, radiobiology and radioecology, dosimetry, and radiation safety.



*International Scientific and Practical Conference – Gomel, Belarus – April 2014*

Dr Alexander Rozhko, director of the State Institution **Research Center for Radiation Medicine and Human Ecology** (RRCRM&HE) presented the results of medical surveillance of Chernobyl population in the region. Prof. Kenji Kamiya, (Hiroshima, Japan), presented the report on health risk management study on population affected by the nuclear accident in Fukushima and Prof. Tochiya Inaba (Hiroshima, Japan) focused on issues of radiation-induced carcinogenesis, as the key research area on low-doses of radiation exposure. ◆

### 2<sup>nd</sup> International Conference on Humanitarian Impact of Nuclear Weapons – Nayarit Mexico – February 13-14, 2014

By Zhanat Carr, WHO, Geneva, Switzerland

The 2<sup>nd</sup> International Conference on Humanitarian Impact of Nuclear Weapons was hosted by the Government of Mexico in Nayarit. Dr Z. Carr presented the WHO's mandate and the program on preparedness and response to radiation emergencies, reviewed the past engagement of WHO in the nuclear weapons issue, and participated in the important dialogue on potential consequences of a nuclear war on public health. Among other contributing agencies were UNDP, UN, UNIDR, IOM, IFRC, and relevant NGOs supporting the movement towards prohibition of nuclear weapons, such as iCan movement. The [Conference summary](#) is available online. ◆



*Dr José A. M. Kuribreña, Minister of Foreign Affairs of Mexico, opening the 2<sup>nd</sup> International Conference – Nayarit, Mexico – February 13-14, 2014*

## Scientific Events

### 4<sup>th</sup> European IRPA Congress in Geneva, Switzerland

By Zhanat Carr, WHO, Geneva, Switzerland

As one of 16 official supporting organizations, WHO took part in the 4<sup>th</sup> European Congress of the **International Radiation Protection Association** (IRPA) which was held in Geneva, Switzerland on June 23-27, 2014. Under the theme "Radiation Protection Culture – A Global Challenge", the Congress gathered over 700 participants.

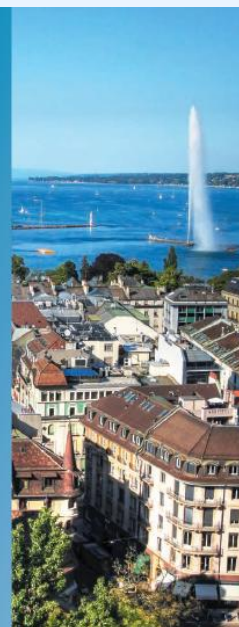
Some parts of the program were organized by the WHO, in cooperation with other partners, including a Workshop on Data Collection on Medical Exposures, a Seminar on Radiation Protection in Pediatric Imaging, and a Workshop on Radiation Protection Principles: Similarities and Differences in Ionizing and Non-ionizing Radiation.



FOURTH EUROPEAN  
IRPA CONGRESS

Radiation Protection  
Culture -  
A global challenge

JUNE 23-27, 2014  
CICG / Centre  
International  
de Conférences  
Geneva, Switzerland



In the area of emergency preparedness and response, WHO staff has chaired the sessions on: Lessons Learned from the Past Emergencies; Emergencies, safety and Security (1 and 2). This activity represents one of a series of collaborative activities between WHO and IRPA in support of the implementation of the new Radiation Basic Safety Standards (BSS) as well as contributed to the strengthening regional capacity for response to radiation emergencies. ◆



## Scientific Events

### 3<sup>rd</sup> Annual RENE B Meeting in Valencia, Spain

By Ulrike Kulka, Federal Office for Radiation Protection (BfS), Oberschleissheim, Germany

The **RENEB (Realizing the European Network of Biodosimetry)** project started in January 2012 aiming to realize a European network of biological and retrospective dosimetry in cooperation with 23 organizations from 16 European countries. Funded by the European Commission (GA 295513) for 4 years, RENE B will continue implementing the emergency biodosimetry preparedness system thereafter. The purpose of RENE B is to increase biodosimetry capacities in case of large-scale radiological emergency scenarios.

In this context, the network also contributes to emergency preparedness by strengthening an operational basis for biodosimetry support of response to large scale radiological incidents. The network will support both, a verification of the dose in triaged victims and singling out the individuals with radiation sensitivity; as well as contribute to the long-term follow up studies of exposed persons.



RENE B meets annually and its Advisory Board includes Z. Carr and E. Buglova as representatives of WHO and IAEA, respectively. On February 24-26, 2014, the **3<sup>rd</sup> Annual Meeting** of the RENE B consortium was hosted by the Spanish partner Fundacion para la Investigacion del Hospital Universitario la Fe de la Comunidad Valenciana (LAFE). Network activities and progress of the implementation process were reported and further project development was discussed.



*F. Gering, N. Fabregat, A. Montoro, U. Kulka, A. Wojci, Z. Carr, O. Belyakov (left to right) – Seminar “Are we prepared for a large scale radiological accident in Europe”, Hospital Universitario y Politécnico La Fe – 3<sup>rd</sup> Annual RENE B Meeting – Valencia, Spain – February 2014*

Main focus of the discussion was the organization of **2<sup>nd</sup> RENE B intercomparison** in October 2014 and the decision to open it for non RENE B labs worldwide. In this context it is of particular high value, that the WHO BioDoseNet will be a partner in the exercise.

In addition, a seminar open to the public “Are we prepared for a large scale radiological accident in Europe?” was held in the framework of the RENE B meeting at Valencia. ♦

## Scientific Events

### Task Force Meeting within PREPARE Project in Athens, Greece

By Christophe Murith, Swiss Federal Office of Public Health (SFOPH), Bern, Switzerland

Following the first evaluation of the Fukushima disaster, the **PREPARE** project aims to close identified gaps in nuclear and radiological preparedness. Among others, the project will address the review of existing operational procedures for long lasting releases, cross border problems in monitoring and food safety and further develop missing functionalities in decision support systems, e.g. improved source term estimation and dispersion modeling, and hydrological pathways for European water bodies.

In addition, as the management of the Fukushima event in Europe was far from optimal, a so called **Analytical Platform** will be developed exploring the scientific and operational means to improve information collection, information exchange and the evaluation of such types of disasters. The reflection of the French-Swiss panels focused mainly on the contaminated foodstuff management in a post-accidental situation. The main objectives are to raise issues on the possible strategies, guidance and tools that would help to manage contaminated food taking into account all stakeholders (consumers, producers, retailers) viewpoints.



*Participants of Task Force Meeting – Athens, Greece – May 2014*

The **Task Force Meeting** in Athens, Greece on May 26-28, 2014 aimed to present the different panels in order to finalize the Report describing the stakeholder panel first results that is expected from the different involved countries in July by the European Commission. ♦

## Scientific Events

### 2<sup>nd</sup> International Regional Seminar held on IAEA General Safety Requirements, Moscow, Russia

By Andrey Bushmanov, Burnazyan Federal Medical Biophysical Center (FMBC), Moscow, Russia

From May 19-23, 2014 the State Research Center **Burnazyan Federal Medical Biophysical Center** (FMBC) of the Federal Medical and Biologic Agency (FMBA) of Russia hosted the Second International Regional Seminar on the implementation of the IAEA General Safety Requirements: **Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards**. The seminar was attended by over 40 representatives of Russian organizations, including the FMBA of Russia, the State Corporation "Rosatom", the Russian Academy of Sciences and other agencies. In addition, representatives of 14 countries (Albania, Armenia, Belarus, Bulgaria, Kazakhstan, Lithuania, Macedonia, Moldova, Montenegro, Romania, Serbia, Tajikistan, Turkey, and Ukraine) attended this five-day interactive seminar, which presented and discussed 8 relevant topics within 10 sessions.



#### 2<sup>nd</sup> International Regional Seminar – Moscow, Russia – May 2014

The international representatives shared their experience in the application of IAEA radiation safety standards and their adaptation to the regulation of exposure levels in persons working with ionizing radiation sources. ◆

### Conference on the 55<sup>th</sup> Anniversary of the Scientific Centre of Radiation Medicine and Burns, Yerevan, Armenia

By Nikolay Hovhannisyán, Scientific Centre of Radiation Medicine and Burns, Yerevan, Armenia

Founded in 1958 as Department of Radiology, Academy of Sciences of the Republic of Armenia and reorganized in 1985 as Research Institute of Medical Radiology, Armenian Ministry of Health, the **Scientific Centre of Radiation Medicine and Burns**, Armenian Ministry of Health was finally renamed in 1995 and became a Collaborating Centre of WHO REMPAN in 1997

*Conference “Actual Problems of Radiation Safety” – Yerevan, Armenia – May 2014*



On May 23, 2014 the Scientific Centre of Radiation Medicine and Burns in Yerevan celebrated its **55<sup>th</sup> anniversary** holding the conference „Actual problems of radiation safety“, which was attended by 90 professionals. ◆

## Exercise and Training

### Past and Upcoming Training Courses by NIRS, Chiba, Japan

By Hideo Tatsuzaki, Takako Tominaga, Misao Hachiya, Makoto Akashi, NIRS, Chiba, Japan

The **National Institute of Radiological Sciences** (NIRS) in Chiba, Japan, a WHO REMPAN Collaborating Center, continues its activities to strengthen radiation emergency medicine not only in Japan but also internationally.

In 2013, NIRS conducted three international training courses: the NIRS-KIRAMS (Korea Institute of Radiological Medical Sciences) Joint Seminar on Radiation Emergency Medicine, the Asian Nuclear Security Network Sub-regional Workshop, and the IAEA Training Course for Medical Response to Radiation Emergencies with participants from Africa, Asia, Europe, and Latin America. Thus, NIRS shared experiences of the Fukushima accident with medical professionals in the world.

In the first half of 2014, NIRS conducted six domestic training courses.



*M. Akashi, NIRS (left), T. Okubo, RERF (right) – 14<sup>th</sup> WHO REMPAN Meeting – Würzburg, Germany – May 2014*

To the 14<sup>th</sup> Coordination and Planning Meeting of the WHO REMPAN Collaborating Centers and Liaison Institutions” held in Würzburg, Germany in May 2014, NIRS contributed with six presentations on the Fukushima Daiichi NPP accident.

On August 25-27, 2014, the **NIRS-KIRAMS Joint Seminar** will be held at NIRS. Korean medical professionals, doctors, nurses, and emergency medical technician (EMT), are expected to attend. ◆

## Exercise and Training

### RITN Hospitals conduct Annual Tabletop Exercises, Minneapolis, USA

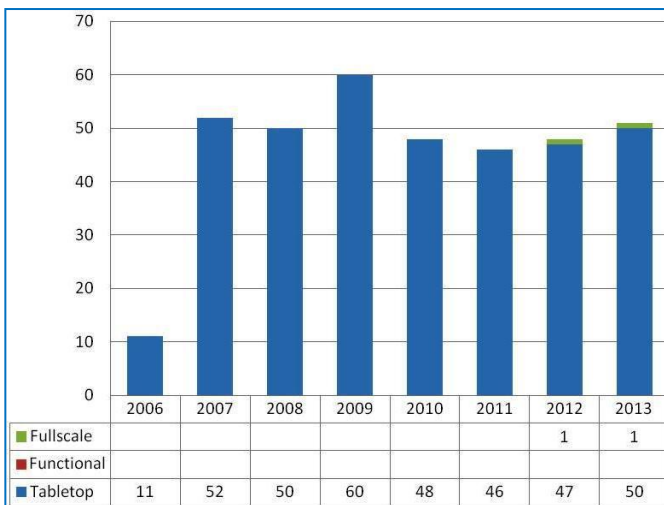
By Cullen Case, National Marrow Donor Program – RITN, Minneapolis, USA

Over the past 18 months the [Radiation Injury Treatment Network \(RITN\)](#) grew from 65 to **70 collaborating hospitals**, blood donor centers and cord blood banks preparing for a mass casualty incident with marrow toxic injuries. The US National Marrow Donor Program (NMDP), US Navy and American Society for Blood and Marrow Transplantation (ASBMT) collaboratively developed RITN, which comprises of medical centers with expertise in the management of bone marrow failure, stem cell donor centers and umbilical cord blood banks across the US.



RITN – Participating Centers Map, March 2014

Each year RITN requires hospitals in its network to conduct a tabletop exercise. In 2012 RITN began funding Fullscale exercises as well and in 2015 we expect to fund some Functional exercises. Between 2006 and the end of 2013, **366 RITN exercises** have been conducted related to radiological mass casualty incidents. Training has been a centerpiece of RITN; from 2006 to 2013 10,293 medical professionals and related response personnel were trained through RITN coordinated/sponsored training course. ◆



RITN – 366 Exercises, 2006-2013

## New Publications

### New Radiation Injury Referral Guideline, RITN, Minneapolis, USA

By Cullen Case, National Marrow Donor Program – RITN, Minneapolis, USA

In June 2014, the Radiation Injury Treatment Network (RITN) published **Guidelines for Identifying Radiation Injury and Considering Transfer to a Specialized Facility**. The purpose of these referral guidelines is to provide hospitals with a concise guide for identifying casualties in the aftermath of a radiation incident who may have received a clinically significant dose of radiation.



These **guidelines** will greatly expand the capability to absorb casualties by allowing less specialized medical staff to treat casualties with clear guidance on when to elevate their care or seek input from a specialized care facility like RITN. ◆

## Exercise and Training

### **Fukushima Medical University Education Program on Radiation Emergency Medicine**

By Tomoko Inamasu, Fukushima Medical University (FMU), Fukushima, Japan

As a sign of hope in Fukushima's disaster recovery, **Fukushima Medical University** (FMU) identified its role as a model case in radiation emergency medical education. With their own experience of the disaster, FMU faculty members and students have strong motivation to learn this area of medicine and a great sense of mission toward the post-disaster medical needs in Fukushima.

Recently introduced **Radiation Emergency Medicine curriculum** at the FMU is a part of the general program, and includes one-semester lecture series for the third year students, and one practical module for the fifth year. Taking advantage of availability of experts from other parts of Japan currently concentrated in Fukushima, the FMU program offers a unique opportunity for medical education.

Just as FMU required international knowledge and expertise of radiation protection, FMU's unique education and training program including special modules on radiation emergency medicine now attracts foreign students.

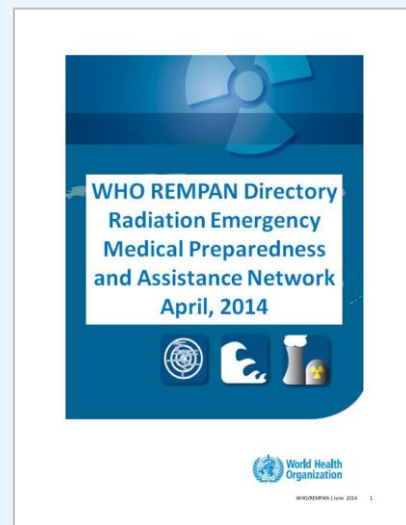


*FMU Radiation Emergency Medicine Education Program – Fukushima, Japan – January 2014*

A **Japanese-Belarusian exchange program** is established. Led by Prof Tetsuhito Fukushima, FMU Vice President, the first bilateral lecture session in January 2014 highlighted FMU's international academic commitments. Invited lecturers were Prof Vasili Roudenok, Vice-President of Belarusian State Medical University and Prof Alexander Kozlovsky, Vice-President of Gomel State Medical University, Belarus. In addition, a student exchange provides an opportunity for FMU medical students to visit Belarus and think about the needs of Fukushima's future medical care. ◆

## New Publications

The up-dated **REMPAN Directory 2014** is now downloadable from the WHO website.

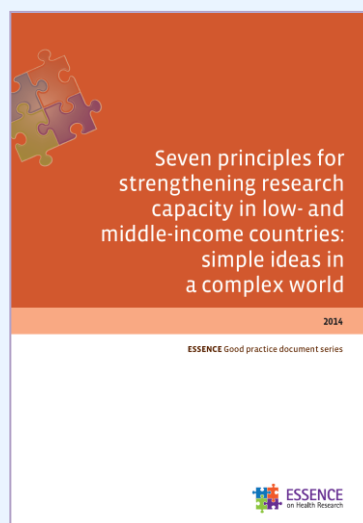


### **ESSENCE on Health Research**

(Enhancing Support for Strengthening the Effectiveness of National Capacity Efforts), a collaborative framework between funding agencies to scale up research capacity published a new good practice document in 2014.



The **good practice document** is designed to provide broad guidance on how best to strengthen research capacity with the maximum possible benefit. ◆

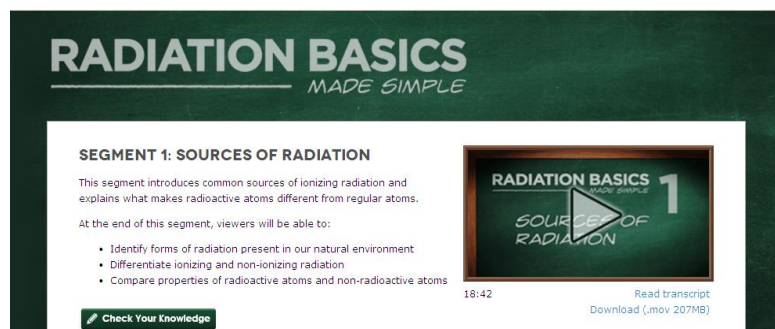


## Exercise and Training

### New Resources for Radiation Emergencies at CDC, Atlanta, USA

By Robert Whitcomb, Centers of Disease Control and Prevention (CDC), Atlanta, USA

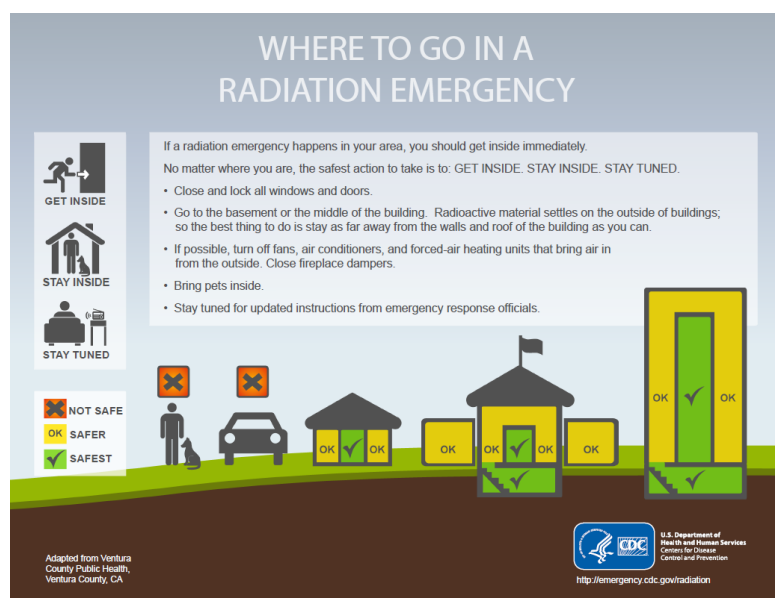
The **Centers for Disease Control and Prevention** (CDC), Radiation Studies Branch launched **Radiation Basics Made Simple**, the first in a series of radiation preparedness training modules. This new module introduces participants to the fundamentals of radiation and radioactivity eight segments featuring an enhanced lecture-style video and interactive knowledge checks to deliver and reinforce key concepts. The online training is free of charge; and is available from the CDC website.



[View of the Training Module](#)

CDC has also developed a series of **thirteen info graphics** to help explain various radiation emergency concepts. The info graphics focus on three major content areas “Protective Actions“, “Radiation Emergencies and Your Health“ and “Types of Radiation Emergencies“. The info graphics were recently tested through an online nationwide survey for comprehension, believability, and visual appeal. The public response to the info graphics was extremely positive. The goals of these info graphics are to improve understanding of radiation concepts, create visual cues, and to reinforce a key message of **“Get Inside, Stay Inside, and Stay Tuned”**.

The info graphics are located on the newly redesigned [radiation emergencies homepage](#). ♦



*Info graphic: “Get Inside, Stay Inside, and Stay Tuned”*

## New Publications

The **World Cancer Report 2014** published by the **International Agency for Research on Cancer** (IARC), the specialized cancer agency of the WHO, provides a professional, multidisciplinary assessment of all aspects of the geographical distribution, biology, etiology, prevention, and control of cancer, predicated on research. ♦



In May 2014, the **International Agency for Research on Cancer** (IARC), the World Health Organization (WHO), and the **International Association of Cancer Registries** (IACR) launched **new guidelines for establishing cancer registries**. The publication „Planning and developing population-based cancer registration in low- and middle-income settings“ provides essential guidance on the key steps in planning a registry, including accessing sources of information, monitoring the quality of the data, and reporting results. ♦



## Exercise and Training

### Full Scale Nuclear Response Exercise in Canada

By Brian Ahier and Chunsheng Li, Radiation Protection Bureau, Health Canada, Ottawa, Canada

The Fukushima Nuclear Power Plant accident in 2011 resulted in a reassessment of nuclear emergency preparedness and response in Canada. As part of this reassessment, an action plan to improve severe accident preparedness was issued by the Canadian Nuclear Safety Commission (CNSC). This action plan led to an initiative by **Ontario Power Generation (OPG)** to conduct a full scale nuclear emergency response exercise. In parallel, updates were made to emergency response plans in various jurisdictions, also with the intent to test these in a national exercise. As a result, **“Exercise Unified Response”** was designed to include regional, provincial, and federal bodies, as well as the utility itself.

The objective of “Exercise Unified Response” was to assess the preparedness of OPG, government and non-government agencies, and local communities in response to a nuclear accident. More specifically, the objectives were to validate the recently revised Federal Nuclear Emergency Plan (FNEP), to demonstrate that the emergency response of the participating organizations can ensure the safety of the public and the environment, and to test the interoperability and coordination of the participating organizations, as well as the integration of the overall emergency response. In addition, each participating organization identified its own set of objectives that would be evaluated internally. The scenario events that unfolded during the exercise were selected to verify the common objectives and to allow each organization to test their own objectives.



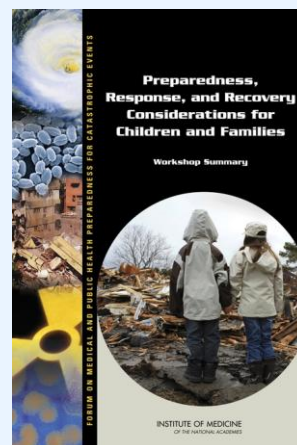
*Darlington Nuclear Generating Station, Ontario Power Generation (OPG) – Ontario, Canada – May 2014 (Photo Courtesy of OPG)*

“Exercise Unified Response” was hosted by OPG’s **Darlington Nuclear Generating Station** during May 26-28, 2014, based on a loss of coolant scenario coupled to a loss of power supply. Over 1000 players from more than 50 organizations participated, with the involvement of media and the public.

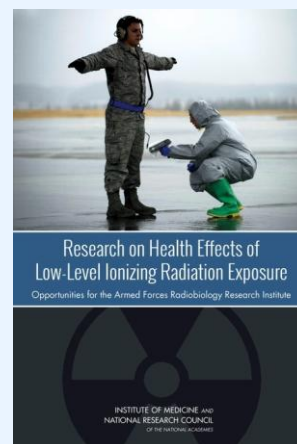
The exercise was an important opportunity for all players and participants to practice their arrangements for responding to a severe accident scenario. Detailed evaluations are underway and will be shared later. ◆

## New Publications

The summary of a workshop **“Preparedness, Response and Recovery Considerations for Children and Families”** convened in June, 2013 by the Institute of Medicine Forum on Medical and Public Health Preparedness for Catastrophic Events was published in 2014. The report discusses **disaster preparedness, response, and resilience strategies** relative to the needs of children and families, including children with special health care needs. ◆



The 2014 publication **“Research on Health Effects of Low-Level Ionizing Radiation Exposure”** by the Institute of Medicine and National Research Council examines recent scientific knowledge about the human effects of exposure to low-dose radiation from medical, occupational, and environmental ionizing-radiation sources. The report identifies current research directions in radiobiological science and assesses how Armed Forces Radiobiology Research Institute (AFRRI) programs are advancing research along these directions. ◆



## Upcoming Events

- **13-17 July 2014, Baltimore, USA**  
[59th Annual Meeting of the Health Physics Society](#)
- **07-12 September 2014, Barcelona, Spain**  
[3rd International Conference on Radioecology & Environmental Radioactivity - ICRER 2014](#)
- **13-17 September 2014, Rabat, Morocco**  
[4th African Regional IRPA congress \(AFRIRPA04\)](#)
- **21-24 September 2014, Las Vegas, USA**  
[60th Annual Meeting of the Radiation Research Society](#)
- **26-30 October 2014, Hobart, Tasmania**  
[39th Annual Conference of the Australasian Radiation Protection Society](#)
- **17-20 November 2014, Mol, Belgium**  
[Radiation protection](#)
- **01-05 December 2014, Vienna, Austria**  
[International conference on occupational radiation protection: Enhancing the protection of workers – Gaps, challenges and developments](#)

## Upcoming Training Courses

- **12-15 August 2014, Oak Ridge, USA**  
[Radiation Emergency Medicine \(REM\)](#)
- **18-22 August 2014, Oak Ridge, USA**  
[Advanced Radiation Medicine](#)
- **15-19 September 2014, Gomel, Belarus**  
[Late Phase Nuclear Accident Preparedness and Management](#)

## Disclosure

The REMPAN e-NEWSLETTER is produced 2 times a year and circulated by WHO Secretariat to the network members to provide information about latest news on the network's activities, developments in radiation emergency preparedness and management.

The REMPAN e-NEWSLETTER was prepared by the WHO Collaborating Centre for Radiation Emergency Medical Preparedness and Assistance, Würzburg, Germany and the REMPAN Secretariat, WHO, Geneva, Switzerland.

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