

REMPAN

e-NEWSLETTER



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Editorial

Dear Colleague, dear Friends,

The holiday season is here. The time has come for laughter, fun, and spending time with family, friends and those most dear in our lives. It is also time to reflect upon 12 months of hard work behind and think about New Year's plans and resolutions...

The year 2012 for many of us was still very much affected by Fukushima, with more data becoming available for deeper reviews and analyses of lessons learnt. WHO focused its efforts on helping countries to be better prepared for unexpected. A key tool for supporting countries to build health sector capacities for response to radiation emergencies in a systematic, structured, and monitored manner are the [International Health Regulations \(IHR\)](#). Core capacities described in Annex 1 were to be met in June 2012 – within five years from the IHR (2005) entry into force. As of 3 December 2012, a total of 107 States Parties had obtained two-year extensions to this deadline. Among functional core capacities, the preparedness for radiation emergencies is one of the top priorities for most countries for the extension period of 2012-2014. Providing assistance to these countries through training, exercises and development of technical guidelines, we rely on the REMPAN network. One of recent activities was the regional workshop for South-East Asia held in New Delhi, India, on 05-08 November, 2012. The workshop included a table-top exercise based on a radiological event and raised awareness of National IHR Focal Points to the complicity and multi-sectoral nature of response management.

In 2012, WHO Radiation Program undertook the [preliminary dose assessment](#) that served as basis for the upcoming health risk assessment report and a new project was started to develop [WHO Guidelines for Public Health Response to Radiation Emergencies](#). REMPAN experts are contributing to these important undertakings.

New members joined the network: Swiss Office of Radiation Protection, Biomedical Advanced Research and Development Authority (USA), Institute of Radiation Emergency Medicine of Hirosaki University (Japan), Centre Nationale de l'Energie, Science, et Techniques Nucléaires (Morocco), and Health Affairs Directorate of the MoH (Sultanate of Oman). These connections bring along additional expertise, resources and new friendships. I strongly believe that personal friendships are the true basis of business relationships. One of the great pleasures we enjoy during the holiday season is the opportunity to reconnect with those whose friendship and goodwill we so highly value. In this spirit, it is my pleasure to say thank you and extend my sincere appreciation of your friendship and cooperation. ♦

May you and those close to you enjoy a joyous holiday season and a healthy and prosperous New Year!

Dr. Zhanat Carr
WHO-REMPAN Coordinator

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Scientific Events

Global Health Security Advisory Group meeting and workshop, Chiba, Japan

By Zhanat Carr, WHO, Geneva, Switzerland

The meeting of the Radio-Nuclear Threats Working Group (RNWG) of the [Global Health Security Advisory Group](#) (GHSAG RNWG) hosted by the [National Institute of Radiological Sciences \(NIRS\)](#) in Chiba, Japan, on October 01-02, 2012, was followed by a workshop on decontamination held jointly by the RNWG and a working group on chemical threats at the National Center of Disaster Medicine in Tachikawa, Japan.



Participants of the RNWG meeting – Chiba, Japan – October 2012

The members of the RNWG representing national health authorities of the G-7 countries came together to share information and experience, to coordinate activities pertaining to management of radiological and nuclear accidents and strengthening capacities in countries. The WG identified priority areas for 2013 as follows:

- Development of a pilot radiobioassay laboratory network in order to identify potential areas for further international collaboration to support radiobioassay surge capacity building
- Review of decontamination policies in countries and develop a joint report highlighting key findings and as well as areas for potential GHSAG collaboration towards harmonization of protocols
- Survey of country specific medical countermeasures policies, procedures, and practices, including for the use of potassium iodine (KI), in order to further harmonize policies, when applicable. ♦

Fukushima Ministerial Conference on Nuclear Safety in Koriyama City, Fukushima Prefecture, Japan

By Zhanat Carr, WHO, Geneva, Switzerland

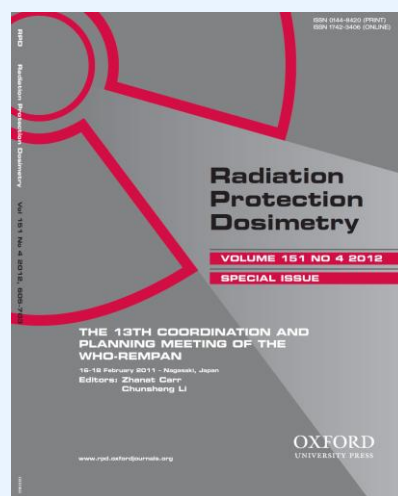
Maria Neira, Director, WHO Department of Public Health and Environment, attended the [Fukushima Ministerial Conference on Nuclear Safety](#) organized by the Government of Japan in co-sponsorship with the International Atomic Energy Agency (IAEA) on December 15–17, 2012, at Koriyama City, Fukushima Prefecture, Japan. The panelist presentation by M. Neira [“Public health response to the Fukushima Daiichi NNP and lessons learnt”](#) is downloadable. ♦

New Publications

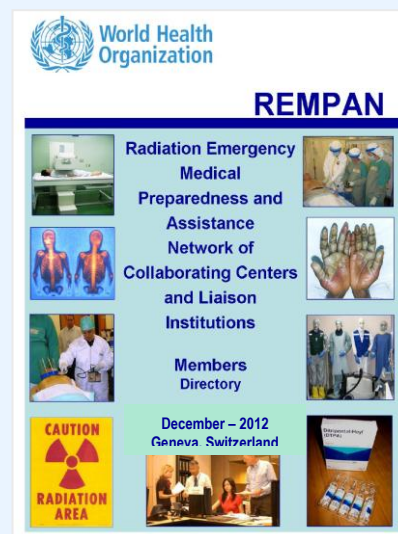
Proceedings of the 13th REMPAN Meeting published / REMPAN Directory 2012 up-dated

By Zhanat Carr, WHO, Geneva, Switzerland

The [Proceedings of the 13th Coordination and Planning Meeting of the WHO-REMPAN](#) held in Nagasaki, Japan, in 2011 have been published as a Special Issue of the [Radiation Protection Dosimetry Journal](#) in October 2012, 151 (4). ♦



The up-dated [REMPAN Directory 2012](#) is now downloadable from the WHO website. ♦



Scientific Events

4th International Symposium on Radiation Emergency Medicine, Hirosaki University, Japan

By Mitsuaki Yoshida, Institute of Radiation Emergency Medicine/ Hirosaki University (IREM/HU), Hirosaki, Japan

The 4th International Symposium on Radiation Emergency Medicine co-sponsored by the Graduate School of Health Science and the Institute of Radiation Emergency Medicine (IREM) was held in September 30, 2012, at Hirosaki University (HU), Japan. In 2009, the first International Symposium on Radiation Emergency Medicine was held at HU. The objective of the 4th International Symposium was to share information on the future development of human resources for radiation emergency medicine. Major topics included preparedness planning and establishment of an educational system to train and specialise nurses in radiation medicine.

The symposium consisted of four sessions and poster presentations. In the first session, five members of the Graduate School of Health Sciences at Hirosaki University introduced the education and research activities in the program of radiation emergency medicine.



In a special lecture, Dr. Zhanat Carr, WHO, presented the “WHO global framework for strengthening national capacity for preparedness and response to radiation emergencies”.

*Z. Carr –
4th International
Symposium –
Hirosaki, Japan, –
September 2012*

Further, Dr. Emiko Konishi, Kagoshima University, talked about “Radiological nursing of Japan: Values and responsibilities” and Christophe Dody, French Defense Radiation Protection Service (SPRA), introduced the topic of radiation protection and education for the management of irradiated patients by nurses or paramedics in France. Finally, Dr. Takako Tominaga and Dr. Yoshiko Nishizawa presented the activities in the National Institute of Radiological Sciences (NIRS) and in the Hirosaki University, respectively, from viewpoints of human resources development for radiation emergency medicine. ◆



Participants of the 4th International Symposium – Hirosaki, Japan – September 2012

New Publications

In July 2012, the **Institute de Radioprotection et de Sûreté Nucléaire (IRSN)** published two new information reports regarding the impact of the **radioactive contamination of the environment** following the Fukushima Dai-ichi accident.



The first document presents and comments the latest information gathered by IRSN on the impact of radioactive release from the damaged nuclear site of Fukushima Dai-ichi on the **marine environment**:

http://www.irsn.fr/EN/publications/hematic/fukushima/Documents/IRSN_Fukushima-Accident_Impact-on-marine-environment_13072012.pdf

In the second document, IRSN presents its analysis of data published in Japan on the contamination of the **terrestrial environment**, particularly of food produced in areas impacted by the accident:

http://www.irsn.fr/EN/newsroom/News/Pages/20120827_Fukushima-Accident_marine-environment-and-foodstuffs-contamination.aspx

Overall, the results of the first half of 2012 show a significant improvement of the situation for many categories of food (including vegetables, meat, livestock and milk), compared to spring 2011. However, significant concentrations of caesium-134 and caesium-137 continue to be measured regularly in certain types of products. ◆

Scientific Events

Symposium of Asia-Pacific Economic Cooperation (APEC), Moscow, Russia

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

The Symposium “**Best Medical Practices in Mitigation of Radiation Accidents and Catastrophes**” held September 13-14, 2012, in Moscow, Russia began to work in accordance with and approved by the Government of the Russian Federation interagency division of responsibilities between the Federal bodies of Executive power in the forum of the **Asia-Pacific Economic Cooperation (APEC)** and the plan of the working group on liquidation of consequences of radiation accidents and catastrophes.



Participants of the APEC Symposium – Moscow, Russia – September 2012

Among the participants of the Symposium were V. Uyba, Federal Medical and Biologic Agency (FMBA) of Russia, K. Kotenko, State Research Center Burnasyan Federal Medical Biophysical Center (FMBC) of the FMBA of Russia, S. Chen, APEC Secretariat, M.



Akashi, National Institute of Radiological Sciences (NIRS), Japan, as well as leading specialists in the field of radiation medicine, e.g. A. Wiley, USA, R. Schneider, Germany and L. Ying, China.

A. Guskova

The main topic of the meeting addressed the consequences of radiation accidents in Russia and APEC countries, as well as possibilities of mitigating and preventing radiation effects.

A. Bushmanov, A. Wiley, A. Barbanova (from left)



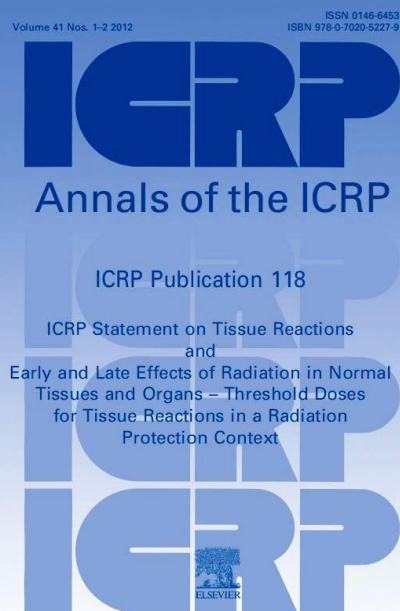
It is expected that the work of the international Symposium will significantly increase the degree of medical preparedness in the case of radiation incidents in the APEC regions and will contribute to the development of international cooperation in prevention and mitigation of consequences. ♦

New Publications

Russian translation of ICRP Publication 118

By Elena Kuznetstova, Urals Research Center for Radiation Medicine (URCRM) Chelyabinsk, Russia

Specialists of the Federal Government - funded Institution of Science **Urals Research Center for Radiation Medicine (URCRM)** in Chelyabinsk, Russia, translated the **ICRP** (International Commission on Radiological Protection) 2012 Publication 118. Ann. ICRP 41(1/2) into the Russian language. Thus, the report is now available not only in Russia, but also in the Ukraine, Byelorussia, Kazakhstan and other countries of the former Soviet Union.



This “ICRP Statement on Tissue Reactions / Early and Late Effects of Radiation in Normal Tissues and Organs – Threshold Doses for Tissue Reactions in a Radiation Protection Context” provides a review of early and late effects of radiation in normal tissues and organs with respect to radiation protection. ♦

Scientific Events

Russian NRCERM scientists to attend the 7th Congress of Oncologists and Radiologist, Astana, Kazakhstan

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

Scientists from the Federal State Institute **Nikiforov Russian Center of Emergency and Radiation Medicine (NRCERM)** EMERCOM of Russia participated in the 7th Congress of Oncologists and Radiologists” of countries of the Commonwealth of Independent States (CIS) held from September 05-07, 2012 in Astana, Kazakhstan. The topic “Karyotypic characteristics of thyrocytes in papillary thyroid carcinoma patients irradiated as children or adolescents as a result of **Chernobyl Nuclear Power Plant Accident**” was presented by V. Kravtsov. ◆

7th Congress
of CIS –
Astana,
Kazakhstan
– September
2012



International Conference 55th Anniversary of the 1957 accident at the Mayak PA, Chelyabinsk, Russia

By Elena Kuznetstova, Urals Research Center for Radiation Medicine (URCRM), Chelyabinsk, Russia

The International conference “**Experience in minimizing consequences of the 1957 accident**” dedicated to the 55th anniversary of the 1957 accident at the Mayak PA took place on October 02, 2012 in Chelyabinsk, Russia. The Conference was convened by the Federal Government-funded Institution of Science **Urals Research Center for Radiation Medicine (URCRM)**, a WHO REMPAN Collaborating Center, the Federal Medical-Biological Agency (FMBA) of Russia and Ministry for Civil Defense Affairs, Emergencies and Elimination of Consequences of Natural Disasters (EMERCOM) of Russia.

In as many as 63 presentations latest data concerning the medical-biological consequences of the most important radiation accidents including the 1957 accident, information about the results of the implementation of the state policy in the sphere of overcoming consequences of radiation accidents on the territory of the Southern Urals were provided.



A. Akleyev –
Chelyabinsk, Russia –
October 2012

The consequences of radiation accidents and incidents on the territory of the former USSR and present-day Russia, international collaborative

experience in the sphere of scientific research and overcoming consequences of radiation accidents, improvement of the protective measures and the social-psychological adaptation of the population exposed to ionizing radiation were topics of the discussions. ◆

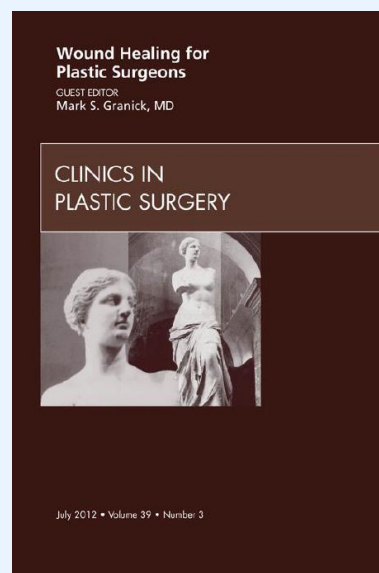
New Publications

Application of stem cells in wound healing

By Sadanori Akita, Department of Plastic and Reconstructive Surgery, Nagasaki, Japan

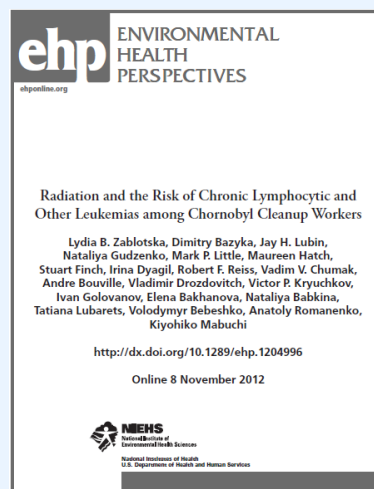
Experiences with Stem Cells in Treating Chronic Wounds”

by Sadanori Akita et al. was published in “Clinics in Plastic Surgery”, July 2012, 39 (3): 281–292. ◆



The publication “Radiation and the risk of Chronic Lymphatic and other Leukaemias among Chernobyl Cleanup Workers”

by L. B. Zablotska et al. was co-authored by Prof. Dimitry Bazyka, National Research Center for Radiation Medicine in Kiev, Ukraine. The article was published online in November 2012 in Environmental Health Perspectives. ◆



Exercise and Training

EBMT invited to observe mock terrorist radiation exercise, Hyderabad, India

By Ray Powles, Parkside Hospital, London, United Kingdom

The **Nuclear Accident Committee (NAC)** of the **European Blood and Marrow Transplant Centres (EBMT)** was invited to India to act as official observers for a two day mock terrorist radiation exercise organized by **AmeriCares India Foundation (AIF)**, August 31, 2012, at the premises of Basavatarakam Indo American Cancer Hospital and Research Institute in Hyderabad, India.



Radiation exercise – Hyderabad, India – August 2012

There were 500 individuals involved including medical, nursing personnel, and the emergency, security, radiation protection and fire services. The scenario involved two bomb blasts, the second bomb blast near the telecobalt therapy room. The exercise was deemed a success, and lessons learnt will be available in the form of a formal report. ♦

IACRNE Meeting in Morocco to Prepare ConvEx (3) 2013

By Zhanat Carr, WHO, Geneva, Switzerland

Members of the Inter-Agency Committee on Radiological and Nuclear Emergencies (**IACRNE**) met in Rabat, Morocco, on December 04-06, 2012, to discuss the preparation for the **ConvEx(3)2013 exercise**. The next exercise will be held at the end of 2013 in a Moroccan sea port and will be based on a malevolent radiological emergency scenario.

During the one year period preparation, national authorities will work jointly with international organizations, members of IACRNE and with the competent authorities of Spain, as a bordering country, to develop a scenario and all necessary supporting documents (i.e. the exercise scenario with its master events list, technical injects, guides for controllers, players, evaluators, etc.) and to make all necessary arrangements

for a smooth conduct of the exercise.

IACRNE Meeting – Rabat, Morocco – December 2012



It should be noted, that a malevolent radiological scenario will be used for the first time in the context of a ConvEx exercises and it expected to highlight the complex multi-sectoral nature of response management. WHO will plan to exercise the communications under IHR (2005), as well internal emergency SOPs, and communications with REMPAN members. ♦

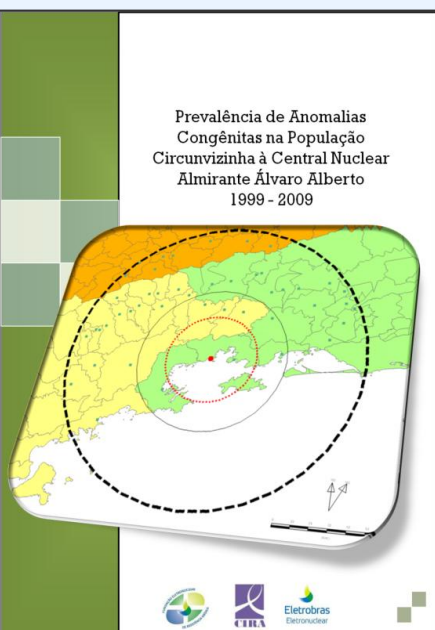
New Publications

Prevalence of congenital abnormalities, Angra dos Reis, Brazil

By Teresa Leite, Eletronuclear Medical Assistance Foundation (FEAM), Angra dos Reis, Brazil

A new publication prepared by Radioepidemiological Information Center, coordinated by Eletronuclear Medical Assistance Foundation (FEAM) was published in November 2012.

The publication presents the **prevalence of congenital abnormalities** in the population near the power plant in Angra dos Reis, Brazil. The publication compares official information collected from the national registry of newborns which provides information about congenital abnormalities at the time of birth.



Data of the city Angra dos Reis were compared with more than 40 cities grouped according to the distance from the nuclear power plant in Angra dos Reis.

The study shows no risk excess concerning the prevalence of congenital abnormalities for the population living near the site. ♦

Exercise and Training

Exercises on emergency medical assistance to combined injury patients, St. Petersburg, Russia

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

During the IV International Congress “Safety on the Roads for Safety of Life” held September 27–28, 2012 in St. Petersburg, Russia, a **demonstration exercise** of emergency medical assistance was conducted by the **Nikiforov Russian Center of Emergency and Radiation Medicine** (NRCERM) EMERCOM of Russia. In the accident scenario with two vehicles and a fuel tanker five people were injured. A field exercise included transportation of a combined injury patient to the emergency facility of the NRCERM by air medical services (helicopter MI-8). During the transportation the physicians provided life-saving and emergency clinical management to the patient. The patient monitoring data was transmitted to the hospital via a telemedicine system. Lessons learnt from the exercise are applicable for and add to the experience with the management of radiation emergencies. ◆



Medical assistance to combined injury patient – St. Petersburg, Russia – September 2012

FEAM Training Course, Angra dos Reis, Brazil

By Teresa Leite, Eletronuclear Medical Assistance Foundation (FEAM), Angra dos Reis, Brazil

The **Eletronuclear Medical Assistance Foundation (FEAM)** participated in a training course of Air Force health professionals. In this training course relevant topics in medical response to radiological accidents were discussed including patient transportation by aircrafts. The instructors’ team consisted of seven specialists from FEAM; other instructors came from the Army Technological Center and the Institute of Aerospace Medicine from the Brazilian Air Force. ◆



The FEAM team (in civilian clothes) and course participants

News – From the Network Centres

Fukushima Medical University (FMU) to become a REMPAN Liaison Institution

By Shunichi Yamashita, Fukushima Medical University (FMU), Fukushima, Japan

On October 04, 2012, Dr. Zhanat Carr, WHO, visited **Fukushima Medical University (FMU)** for a second time after the Fukushima nuclear power plant accident and met with FMU President Dr. Shinichi Kikuchi and Vice President Dr. Shunichi Yamashita. They discussed and agreed upon future collaboration as FMU is joining the REMPAN network as a **Liaison Institution**.



Fukushima Medical University – Fukushima, Japan – October 2012

Further, Dr. Carr participated in a meeting of the Department of Radiation Health Management and visited the Radiation Emergency Medicine class for FMU students held at the Education Center for Disaster Medicine. She also visited the FMU Radiation Medical Science Center, exchanged views with faculty members, and discussed the progress of the **Fukushima Health Management Survey** led by FMU. ◆

News – Upcoming Training Courses

Workshop and training course to be held during 39th Annual Meeting of the EBMT in 2013, London, UK

By Ray Powles, Parkside Hospital, London, United Kingdom

On 09 April, 2013, a **workshop on the long-term non-cancer effects of total body irradiation** will be held during the 39th Annual Meeting of the European Group of the Blood and Marrow Transplantation (EBMT) in London. Speaker will be Prof. Ray Powles, chairman EBMT - Nuclear Accident Committee (NAC), Dr. Zhanat Carr, WHO, and Dr Masazumi Akahoshi, Radiation Effects Research Foundation (RERF), Hiroshima, Japan, who will talk on “Long-term atomic bomb survivors: The increased long term non-cancer risks following Hiroshima”.

On the April 10, 2013, also as part of the 39th Annual Meeting of the EBMT there will be a 4 hours formal **training programme** of lectures, which will be available on the **EBMT** website.

The lectures will address basic radiation physics, scenarios, and triage. To attend this training programme, specifically aimed at emergency specialists and haematology clinicians and nurses contacted the secretary of the NAC Dr. Bhawna Sirohi (myeloma@clara.co.uk) ♦

4th International Training Course on the Medical Management of Radio-Nuclear Events in May 2013, Stockholm, Sweden

By Leif Stenke, Karolinska Institutet and University Hospital, Stockholm, Sweden

The **4th International Training Course on the Medical Management of Radio-Nuclear Events** will be held on May 15-17, 2013, aiming at an advanced medical course on the management of radio-nuclear victims, and will focus also on lessons learnt from the Japanese disaster in March 2011. The course will be arranged by the **Swedish National Board of Health and Welfare** and **Karolinska Institutet** formally in collaboration with WHO REMPAN and the Nuclear Accident Committee (NAC) of the European Group of the Blood and Marrow Transplantation (EBMT).



Island of Skeppsholmen

The venue of the training course will be at Skeppsholmen, a small island right in the middle of down-town Stockholm, Sweden. For additional information and registration contact:

ola.nerf@sodersjukhuset.se ♦

News – Upcoming Training Courses

- 05-08 February, 2013, Oak Ridge, USA
- 12-15 March, 2013, Oak Ridge, USA
- 09-12 April, 2013, Oak Ridge, USA
- 04-07 June, 2013, Oak Ridge, USA

Radiation Emergency Medicine (REM)

<http://orise.orau.gov/reacts/capabilities/continuing-medical-education/radiation-emergency-medicine.aspx>

- 15-19 April, 2013, Oak Ridge, USA

Advanced Radiation Medicine

<http://orise.orau.gov/reacts/capabilities/continuing-medical-education/advanced-radiation-medicine.aspx>

News – Upcoming Scientific Events

- **14-15 January, 2013, Zurich, Switzerland**
ICMPRR 2013 – International Conference on Medical Physics, Radiation Protection and Radiobiology
<https://www.waset.org/conferences/2013/zurich/icmprpr/>
- **05-06 March, 2013, Dubai, UAE**
ICRM 2013 – International Conference on Radiation Medicine
<https://www.waset.org/conferences/2013/uae/icrm/>
- **11-13 March, 2013, Tomsk, Russia**
6th International Scientific Conference “Medical and Ecological Effects of Ionizing Radiation”
www.sbrc.ru or conf@sbrc.ru
- **12-15 March, 2013, Vienna, Austria**
ETRAP 2013 – 5th International Conference on Education and Training in Radiological Protection
<http://www.euronuclear.org/events/etrap/etrap2013/index.htm>
- **24-28 March, 2013, Leiden, The Netherlands**
EPRBioDose 2013
<http://www.medgencentre.nl/Biodose/Default.htm>
- **28-29 March, 2013, Madrid, Spain**
ICRRP 2013: International Conference on Radioactivity and Radiation Protection
<https://www.waset.org/conferences/2013/madrid/icrrp/>
- **07-10 April, 2013, London, UK**
39th Annual Meeting of the European Group of the Blood and Marrow Transplantation (EBMT)
<http://www.congex.ch/ebmt2013.html>
- **13-16 May, 2013, Munich, Germany**
“ConRad” – Global Conference on Radiation Topics - Preparedness, Response, Protection and Research
<http://events.bsbb.de/event/conrad/Home.html>
- **21-23 May, 2013, Harrogate, UK**
50th Annual Conference – Radiation Protection - ectres from the past, visions for the future
<http://www.srp-uk.org/events/srp-events>
- **04-06 June, 2013, Poznan, Poland**
European ACCIRAD Workshop (risk analysis of accidental and unintended exposures in radiotherapy)
<http://accirad-workshop.eu/page/25/>
- **07-11 July, 2013, Madison, USA**
58th Annual Meeting of the Health Physics Society
<http://www.hps1.org/chapters/ncc/2013AM/>

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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