REMPAN e-NEWSLETTER



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Editorial

The 13th WHO REMPAN Meeting in Nagasaki, 2011

Dear Colleagues, Dear Friends,

It is a great honour and pleasure for me to host the 13th WHO REMPAN Meeting on February 16-18, 2011 in Nagasaki.

When I have been working in Geneva, the joint seminar held for the first time on September 9, 2005 under the presence of the Late DG Dr. Jong-Wook Lee, WHO/HQ, provided a unique and historical opportunity to actively link the modern society's perception of radiation health effects with Nagasaki University's 21st Century COE (Centers of Excellence) Program through the discussion of the late effects of radiation on A-bomb Survivors' health in commemoration of the 60th anniversary of the Atomic Bombing of Hiroshima and Nagasaki

 $(\underline{http://www.jstage.jst.go.jp/browse/amn/50/Supplement2/_contents}).$

Now the novel **Global COE Program of Nagasaki University** exerts to contribute to the WHO Radiation Program on the basis of the Global Strategic Center for Radiation Health Risk Control (http://www-sdc.med.nagasaki-u.ac.jp/gcoe/index.html). One of the key points of WHO radiation program is the REMPAN activities. From Japan, we can constructively and dependably cooperate with the REMPAN members much more closely and tightly to improve radiation safety in and protection from radiological and nuclear emergencies in the world.

Japan has a unique know-how on radiation effects research and education/training module/system on radiation emergency medicine under the leadership of Radiation Effects Research Foundation and the National Institute of Radiological Sciences, respectively.

During the **REMPAN Meeting in Nagasaki** we all can widen our knowledge and understanding of the acute and chronic radiation syndrome and as well as to expert the ways to establishing a reliable nuclear and radiological safety.



Looking forward to seeing all of you in Nagasaki during the Lantern Festival in February, 2011!

Dr. Shunichi Yamashita Director, WHO Collaborating Center for Research on REMPAN in Nagasaki, Dean of Graduate School of Biomedical Sciences, Nagasaki University

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Lantern Festival in Nagasaki

Reports of Events

Sub-regional REMPAN meeting in Moscow

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

On October 22, 2010 a sub-regional meeting of WHO REMPAN CCs, LIs and experts of ex-Soviet Union countries was held in Moscow, Russia, at the Burnasyan Federal Medical Biophysical Center (FMBC) of the Federal Medical Biological Agency (FMBA) of Russia under the WHO REMPAN network umbrella. Experts from Russia, Ukraine, Belarus, Armenia and Estonia attended the meeting on radiation accident medical management. The meeting aimed at sharing the 25 year long medical experience with patients exposed in the Chernobyl and other radiation accidents.

It was concluded that such meetings are needed for exchanging experiences and developing cooperation within the WHO REMPAN network in the ex-Soviet Union territory in order to achieve common objectives - to strengthen radiation emergency preparedness and to conduct research of associated consequences. •



Participants (third *from left) – Prof.* A. Bushmanov Dr. Z. Carr. Dr. A. Guskova -Moscow, Russia, October 2010

Seminar "Advanced Medicine Technologies"

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

On September 07-10, 2010 the scientific and practical seminar "Advanced Medicine Technologies" was held at the Nikiforov Russian Center of Emergency and Radiation Medicine (NRCERM), EMERCOM in St. Petersburg, Russia. Leading specialists of the TSENTROSPAS Rescue Division, the Dzhanelidze Research Institute of Emergency Medicine in St. Petersburg and NRCERM, EMERCOM of Russia participated. Traditionally, the scientific forum was attended by a delegation from the Masherov State Medical University of Vitebsk, Belarus, headed by Prof. A. P. Solodkov.

The presentation by Prof. E. B. Carri, European Center for Disaster Medicine (CEMEC), Italy, "New Concepts and Perspectives of Field Hospitals" was in particular of great interest to the participants.

Participants from right -Prof. A. Solodkov, Belarus, Dr. S. Alexanin, Russia, Dr. E. Bobrov, Belarus, Prof. E. B. Carri, *Italy – St. Petersburg*, Russia, September 201



Reports of Events

4th International Conference "Chronic Radiation Exposure: Small-Dose Effects"

By Alexander Akleyev, Urals Research Center for Radiation Medicine (URCRM), Chelyabinsk, Russia

On November 09-11, 2010 the 4th International Conference "Chronic Radiation Exposure: Small-Dose Effects" was held in Chelyabinsk, Russia. The conference organized by the Urals Research Center for Radiation Medicine (URCRM) was supported by the Federal Medical-Biological Agency (FMBA) of Russia, the European Commission, the International Committee on Radiological Protection, the UN Scientific Committee on the Effects of Atomic Radiation, the US Department of Energy and WHO.



Closing session – Prof. M. Kiselov (left), FMBA, Prof. A. Akleyev, URCRM -Chelyabinsk, Russia, November 2010

A total of 182 researchers from 10 countries (Russia, USA, Germany, Japan, France, Great Britain, Italy, Switzerland, Argentina Denmark) attended the conference.

Topics covered small-dose radiobiology, tissue reactions to irradiation, genetic radiation effects, late somatic radiation effects, retrospective dosimetry assessment of dose uncertainties, biological dosimetry and biomarkers, radiation effects on biota and ecosystems and for the first time, social-psychological aspects accidental radiation exposure. •

Exercises

Testing of emergency equipment in St. Petersburg

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

The exercise "Aeromobile medical technologies in transboundary emergencies" took place during an international seminar in St. Petersburg, Russia, on September 07-10, 2010 organized by the Ministry of Russian Federation for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters (EMERCOM).



Exercise – Helicopter medical module (HMM), St. Petersburg, Russia, September 2010

The aeromobile helicopter medical module (HMM) mounted on the helicopter MI-8 was tested in the exercise. Further, medical assistance for injured people on and off board the helicopter was demonstrated as well as medical equipment for emergency medical assistance and of the mobile medical module. •

Exercise – Off-board assistance, St. Petersburg, Russia, September 2010



Exercise by Antiterrorist Committee in Chelyabinsk region

By Alexander Akleyev, Urals Research Center for Radiation Medicine (URCRM), Chelyabinsk, Russia

On May 16, 2010 the Urals Research Center for Radiation Medicine (URCRM) medical-dosimetric team participated in a special-purpose



exercise, organized and conducted by the Antiterrorist Committee in Chelyabinsk Oblast. The aim of the exercise was to practice interaction between different organizations in rendering medical assistance to patients with acute radiation injuries under the conditions of an imminent terroristic threat.

Exercise – Chelyabinsk region, Russia, May 2010

Reports of Events

3rd International Seminar "Radiation Medicine in Research and Practice"

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

On December 02-03, 2010 the 3rd International Seminar "Radiation Medicine in Research and Practice" was held in Würzburg, Germany. As the previous two seminars the current seminar was iointly organised by the Burnasyan Federal Medical Biophysical Center (FMBC) of the Federal Medical-Biological Agency (FMBA) of Russia. Moscow, and the Clinic of Nuclear Medicine, University Hospital Würzburg. The seminar conducted in cooperation with WHO supported by the German Ministry of Environment, Nature Conservation and Reactor Safety.

Almost 100 participants from 16 countries (Australia, Austria. Belgium, Croatia, Finland, France, Germany, Hungary, Korea, Norway, Russia, Serbia, Spain, Switzerland, Ukraine, United Kingdom) attended this 2-day seminar. The program covered key issues of incorporation of radionuclides and addressed as a special topic Iodine Thyroid Blocking (ITB).



Closing session – Prof. A. Bushmanov (left), Burnasyan FMBC, Moscow, Russia, Prof. Chr. Reiners, Clinic of Nuclear Medicine – Würzburg, Germany, December 2010

Network News

Database in Obninsk to follow-up high risk groups after a large-scale radiation accident

By Natalya Seleva, Medical Radiological Research Centre (MMRC), Obninsk, Russia

Preparedness for radiation emergencies, response and long-term followup as well as radiation epidemiology research on populations accidentally exposed to ionizing radiation is one of REMPAN's objectives. Identifying those at potentially high risk for long term health effects (delayed stochastic effects) is very important and requires a clear methodology.

The database of the National Radiation Epidemiological Registry (NRER), WHO Collaborating Centre for Research and Training on Radiation Epidemiology, Obninsk, Russia, provides such a tool. The database contains clinical and dosimetry information on 450.000 people over-exposed as a result of the Chernobyl accident. Statistical power of the collected data allows NRER researchers to assess radiation risks of cancer and non-cancer diseases among Chernobyl clean-up workers and residents of the most contaminated areas in Russia.



Dr. M. Maksioutov. Head Program Support Laboratory, IT Center, NRER, Obninsk, Russia

Main tasks of the Registry include collection, entry and administration of individual data provided by 20 regional centres of NRER and more than 4.000 medical centres in the region, dosimetric support of national and international epidemiological studies performed at the Medical Radiological Research Centre (MMRC) in Obninsk and risk assessment for cancer and non-cancer effects.

Main conclusions derived from the NRER research are included in the new UNSCEAR report on the Chernobyl accident. 25 year experience by NRER provides for reliable solutions developing protocols to identify high risk groups after radiation emergencies, which will facilitate appropriate follow-up of affected people and better allocation of public health resources avoiding unnecessary interventions.



T. Likharev (left), G. Ogorodnikova, engineers, information storage room, NRER, Obninsk, Russia

Network News

REMPAN Liaison Institution in

By Jana Djounova, Radiation Medicine and Emergency Department, NCRRP, Sofia, Bulgaria

As of the end of 2009 the National Centre of Radiobiology and Radiation Protection (NCRRP) in Sofia, Bulgaria, became a Liaison Institution of the WHO REMPAN network.

NCRRP is the specialized diagnostic and consultative unit of the Bulgarian Ministry of Health in the field of radiation medicine, occupational health monitoring of personnel working with ionizing radiation, medical emergency management of radiation accidents, evaluation of the victims' health and of long-term follow-up of injured people.

Activities performed in 2010 included the improvement of the national emergency plan for a nuclear emergency in the NPP "Kozlodui" and the participation in computer-assisted exercise "Phoenix 2010". The national exercise with a "dirty bomb" scenario aimed at actions of national institutions involved and consisted of the medical management of the victims.

Training

Virtual Community Reception Center (vCRC)

Following a mass casualty radiation emergency, public health professionals will play a crucial role assessing people for radiation exposure, screening people for radioactive contamination, and prioritizing people for further care. This process, called population monitoring, will be conducted in community reception centers (CRCs).

The Centers for Disease Control and Prevention (CDC) and Oak Ridge Institute for Science and Education (ORISE) present the web-based training tool **Virtual Community Reception Center (vCRC)** that provides an overview of the CRC process for planners, managers, and potential CRC staff.



Virtual Community Reception Center (vCRC)

vCRC is a self-paced program that uses a simulated 3-D environment, embedded video segments, an interactive process flow diagram, and customizable supporting resources to deliver a unique training experience for all users. vCRC has been approved for continuing education credit. For more information visit:

http://emergency.cdc.gov/radiation/crc/vcrc.asp •

New Publications

The **Medical Aspects of Radiation Incidents** by the REAC/TS Center in Oak Ridge, TN, USA, provides basic information needed for the medical management of radiation incident victims in an easy-to-understand manner and is now available at:

<u>http://orise.orau.gov/reacts/resources/radiation-accident-management.aspx</u> ◆



The first handbook on **Medical Actions in Radiological Emergencies** in Portuguese language has been produced by the



Eletronuclear Medical Assistance Foundation (FEAM) and its sponsor, Eletronuclear - Eletrobrás, operator of nuclear power plants in Brazil. The handbook prepared by Dr. N. Valverde, Dr. T. Leite and Dr. A. Maurmo will be published in January 2011 and will be distributed free of charge to FEAM staff and to other relevant organizations.

Training

Training course and drill in China

By Ying Liu, Chinese Center for Medical Response to Radiation Emergency (CCMRRE), Beijing, China

On June 21-25, 2010 a training course on medical response to radiation emergency was held in Baotou, China, by the Ministry of Health and Chinese Center for Medical Response to Radiation Emergency (CCMRRE). More than 140 participants attended the training course which included as topics an introduction to radiation accidents, dose estimation, medical treatment, and countermeasures.

On September 28-29, 2010 the annual two-day drill for national medical response teams was held in Tianjin, China. The drill focused on exercising of monitoring and personal protective equipment, performance of decontamination and treatment of injured people.



Drill – Tianjin, China, September 2010

The training course and drill aimed to enhance the professional level of medical responders and the capability of national radiation emergency response.

Upcoming Training Courses

• 01-04 February, 01-04 March, 12-15 April, 2011, Oak Ridge, TN, **USA**

Radiation Emergency Medicine http://orise.orau.gov/reacts/capabilities/continuing-medicaleducation/radiation-emergency-medicine.aspx

• 06-19 February, 2011, Hammamet, Tunesia Analyse des systèmes de santé dans les pays en crise http://www.who.int/hac/techguidance/training/analysing health syste ms/fr/index.html

• 21-25 March, 2011, Sofia, Bulgaria National Training Course on Medical Preparedness and Response to a Radiation Emergency www.bnra.bg or www.nrpa.no

• 05-06 April, 2011, Oak Ridge, TN, USA Pre-Hospital Radiation Emergency Preparedness http://orise.orau.gov/reacts/capabilities/continuing-medicaleducation/pre-hospital-radiation-emergency-preparedness.aspx

• 16-20 May, 2011, Rockville, MD, USA Radiation Epidemiology and Dosimetry Course http://web.ncifcrf.gov/events/radiationepidemiology/default.asp

• 15-19 August, 2011, Oak Ridge, TN, USA Advanced Radiation Medicine http://orise.orau.gov/reacts/capabilities/continuing-medicaleducation/advanced-radiation-medicine.aspx

• 31 October - 13 November, 2011, Hammamet, Tunesia Public Health Pre-Deployment Course (PHPD) PHPD7 at the WHO Mediterranean Centre for Health Risk Reduction (WMC) http://www.who.int/hac/techguidance/training/predeployment/phpd/e n/index.html

Upcoming Events

• 16-18 February 2011, Nagasaki, Japan 13th WHO REMPAN Meeting By invitation

• 3-6 April 2011, Paris, France **EBMT 2011** www.congrex.ch/ebmt2011

• 20-22 April, 2011, Kiev, Ukraine International Conference "Twenty-five years of the Chernobyl catastrophe: Safety for the Future" http://www.icz.com.ua/

• 16-18 May, Munich, Germany 19th Nuclear Medical Defence Conference http://www.nmd-conference.org

• 26-30 June 2011, Palm Beach, Florida 56th Annual Meeting of the Health Physics Society http://www.hps.org/meetings/meeting28.html

• 28 August - 1 September, 2011, Warsaw, Poland 14th International Congress of Radiation Research http://www.icrr2011.org/

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.

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Contacts / Feedback

Dr Zhanat Carr **REMPAN Secretariat** Public Health and Environment Health Security and Environment World Health Organization Email: carrz@who.int

Website

http://www.who.int/ionizing_radiation/a_ e/rempan/en/index.html

Dr. Zhanat Carr, WHO Dr. Rita Schneider, REMPAN CC Würzburg

Design

Dr. Rita Schneider, REMPAN CC Würzburg

Contributors to this issue

Alexander Akleyev, Sergey Alexanin, Zhanat Carr, Jana Djounova, Alicja Jaworska, Teresa Leite, Ying Liu, Rita Schneider, Natalya Seleva, Steve Sugarman, Robert Whitcomb, Shunichi Yamashita