RADIATION EMERGENCY MEDICAL PREPAREDNESS AND ASSISTANCE NETWORK

REMPAN e-NEWSLETTER

World Health Organization

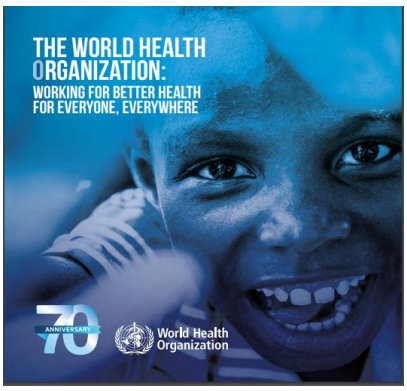
Issue 17 July, 2018

Editorial

Dear Reader,

It is a great privilege to address this distinguished audience of the global expert network as a representative of the World Health Organization (WHO) – one of the oldest international organizations and the few of those which address the very fundamental issues of our lives – protection of human health.

On 7 April, World Health Day, WHO marked its **70th anniversary**. Over the past seven decades, WHO has spearheaded efforts to rid the world of killer diseases like smallpox and to fight against deadly habits like tobacco use. This year's World Health Day was dedicated to one of WHO's founding principles: "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.". The WHO Director-General Dr Tedros said, "Good health is the most precious thing anyone can have. When people are healthy, they can learn, work, and support themselves and their families. When they are sick, nothing else matters. Families and communities fall behind. That's why WHO is so committed to ensuring good health for all."
With 194 Member States, across six regions, and working from more than 150 offices, WHO staff are working to achieve better health for everyone, everywhere – and to achieve the Sustainable Development Goal of ensuring "healthy lives and promote wellbeing for all at all ages". The tagline for this year's World Health Day is "**Universal Health Coverage**: everyone, everywhere".



The 71st World Health Assembly in May, 2018 has approved the 13th Global Programme of Work (GPW). The mission, as articulated in WHO's new GPW is to "Promote health, keep the world safe, serve the vulnerable". It is proposing ambitious new targets to be achieved by 2023: 1 billion more people benefitting from universal health coverage; 1 billion more people better protected from health emergencies; and 1 billion more people enjoying better health and wellbeing.
In striving to achieve these ambitious goals we will need your full cooperation and support. Can we count on you ?

With warmest regards,
Dr Zhanat Carr
WHO REMPAN Secretariat

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News – From REMPAN Secretariat

◆ March 2018: The launch of the global REMPAN Webinar series

The first REMPAN Webinar was organized successfully on 16 March and it was dedicated to the issue of **Public Health Impact of a Nuclear Detonation**. This 90 min open to public webinar included the following presentations:

- Radiation Health Effects Studies in A-bomb Survivors – Historic Perspective and Seven Decades of Follow-up – by K. Kodama (RERF, Japan)
- Public Health Resources to Meet Critical Components of Preparedness – by W. Whitcomb (CDC, USA)
- International Health Regulations and global health security – by R. Sreedharan (WHO Health Emergencies Programme)
- WHO REMPAN's role in supporting radiological and nuclear emergency preparedness – by Z. Carr (WHO REMPAN Secretariat).

The presentations were followed by Q&A session from some 80 participants who connected over the internet to the Webex session. The secretariat received positive feedback with regard to the format and content of the Webinar. It is hoped that the Webinars will be held twice a year and offer technical reviews and topical discussions on the issues of interest for the REMPAN community. The Webinar's video recording is available at: https://goo.gl/rkfhCc (please first click PLAY, then enlarge the small window at the upper right corner)◆

◆ The JEE Tool Update

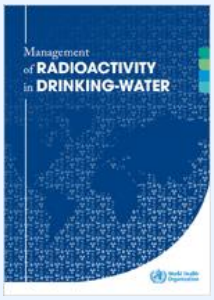
WHO provides Secretariat to the International Health Regulations (IHR) and continues supporting countries in strengthening core national capacities for public health emergencies of any nature through the IHR Monitoring and Evaluation Framework composed of four main pillars:

1. Annual monitoring (member states reporting to IHR Secretariat the results of their self-assessment on an annual basis), provides quantitative evaluation of the preparedness in countries and regions.

2. After-action review (after actual emergencies, voluntary, provides qualitative evaluation). 3. Exercises (voluntary, evaluates functionality of the national arrangements for emergency response). 4. Joint External Evaluations (JEE). The second version of the JEE tool was published in 2018, along with the Guide for countries on JEE implementation that was published in 2017. Reports of the past JEEs are available at: www.who.int/ihr/procedures/mission-reports/en/

News – From REMPAN Secretariat

◆ **Management of Radioactivity in Drinking Water** – a new WHO publication providing guidance in the form of Q&As , addresses radiological aspects of drinking-water in non-emergency situations to support stakeholders in the interpretation and implementation of the WHO Guidelines on Drinking-water Quality in conjunction with the BSS. Additional guidance in the event of a nuclear or radiological emergency has been written with the aim of raising awareness on applicable international standards and criteria as well as facilitating the management of drinking-water supplies.



◆ On 18 June 2018, 18 years after the launch of ICD-10, WHO released a new version of **ICD-11** to allow Member States time to plan implementation. This is anticipating the presentation of ICD-11 to the World Health Assembly in 2019 for adoption by countries. Over a decade in the making, this version is a vast improvement on ICD-10. Three key features:

1) it reflects critical advances in science and medicine; 2) it is fully digital can be integrated with electronic health applications and information systems and is significantly easier to implement, which will lead to more detailed and more accurate informaiton to be capturesd, and make the tool much more accessible, particularly for low-resource settings. 3) ICD-11 has been produced through a transparent, collaborative manner, the scope of which is unprecedented in its history. An overriding motive in this revision was to make the ICD easier to use.

A number of radiation-induced helath conditions is also included in the Classification ◆

News – From REMPAN Secretariat

◆ April 2018: The launch of the WHO-NEA/OECD joint project on non-radiological health impact of nuclear emergencies – Paris, France

The Nuclear Energy Agency's (NEA/OECD) Committee on Radiation Protection and Public Health (CRPPH) has announced the start of a joint project to be implemented in partnership with WHO Radiaiton Programme. The project will focus on management of the psycho-social impact of nuclear emergencies and will explore the possibilities for developing some practical guidance on planning for mitigation of such consequences. The project will consist of three phases: 1) in 2018, the development of WHO policy framework document that will focus on adoptation of the generic WHO guidelines on managing mental health impact of emergencies to the scenario of a radiological or nuclear emergencies; 2) in 2019, the NEA will plan to develop some practical tools to support the emergency response planners and decisionmakers and use the WHO policy framework document as a reference; 3) in 2020, a joint NEA-WHO workshop will be planned to disseminate the information about the two products developed during the 1st and 2nd phases of the project and to collect the feedback of end-users. ◆

◆ April 2018: the JEE Mission to Singapore

Joint External Evaluation mission to Singapore was organized by the WHO Western Pacific Regional Office, to conduct the country's national preparedness for public health emergencies, according to the JEE tool which includes among 19 categories, radiological and nuclear emergencies. Dr Carr took part as an expert evaluator and a technical lead for the chemical and radiation emergency categories, and as a co-lead for the emergency communications category. Singapore has demonstrated a remarkable level of national preparedness for public health emergencies. During the visit to Singapore, Dr Carr established contact with Drs Marc Zheng Jie HO and Dr Weng Kee from the Ministry of Health, who will be REMPAN focal points in Singapore; and with Dr Suresh Pillai from the **National University of Singapore**
As a part of her visit to Singapore, Dr Carr had an opportunity to observe a full-scale exercise based on a radiological emergency scenario (RDD) held at the Ng Teng Fong General Hospital and was impressed by the facilities and the outstanding performance of the staff. Further cooperation with the Singapore under the framework of REMPAN is being discussed. ◆

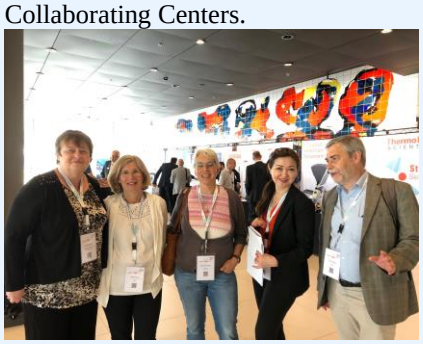
Photo: The experts of the WHO JEE mission to Singapore and senior public health officials of the MoH – April 2018.

News – From REMPAN Secretariat

◆ May 2018: The 3rd Asian REMPAN workshop was hosted by KIRAMS in Seoul, Republic of Korea on 15-16 May and organized jointly with REMPAN Secretariat. Read more about the event on p. 6

◆ May 2018: The 5th AOCRP Congress was officially co-sponsored by WHO and held in Melbourbe, Australia. WHO organized a special session owith the focus on EPR with participation of REMPSN experts from Japan, Australia and China. Further informaiton on p. 4 of this Newsletter

◆ June 2018: European IRPA-2018 Congress was held on 4-8 June in The Hague, The Netherlands. The congress was formally co-sponsored by WHO and included a WHO-co-shaored session on EPR (among others) involving participaiton of experts from a number of European REMPAN members and WHO Collaborating Centers.



Photo, L to R: N. Maznik (Ukraine), R. Schneider (Germany), M. Leenders /The Netherlands), Z. Carr (WHO), F. Fehringer (Germany) at the EURO-IRPA-2018

◆ June 2018: The 5th WHO BioDoseNet coordination meeting was held in Munich, Germany in conjunction with the International EPR-Biodose Conference in Munich, Germany on 11 June 2018. Read more about these events on pp.4-5.

◆ June 2018: the IAEA's 7th EPReSC meeting was held on 11-14 June in Vienna, Austria. WHO participated in this Committee as an Observer and reports on its activities to the EPReSC members to ensure coordination of the efforts to support preparedness in the countries.

Scientific Events

Joint International Symposium on EPRBioDose 2018, Munich, Germany

By Albrecht Wieser, HMGU, Ulrike Kulka, BfS, Matthias Port, BIR, Munich, Germany

The Joint International Symposium on EPR Dosimetry and Dating and the International Conference on Biological Dosimetry (EPRBioDose 2018) was hosted on June 11-15, 2018, at the Helmholtz Center Munich. For the first time this conference series was jointly organized by three institutions, the Institute of Radiation Protection of the **Helmholtz Center Munich** (HMGU), the **Federal Office for Radiation Protection** (BfS) and the **Bundeswehr Institute of Radiobiology** (BIR), all located in the outskirts of Munich, Germany.

Under the auspices of the International Association of Biological and EPR Radiation Dosimetry (**IABERD**) this conference series covered aspects of biomarkers, the application of biological and EPR dosimetry for medicine, radiological emergency and epidemiology, EPR dating and dosimetry as well as networking within these fields including quality assurance and management. The aim of IABERD is to sustain cooperation over time between scientists working in the fields of cytogenetic and molecular dosimetry as well as EPR dosimetry and dating by providing a platform to exchange and to foster science.

EPRBioDose 2018 - Munich, Germany – June 2018

During the EPRBioDose symposium 2018 more than 150 experts from 30 nations discussed new developments of retrospective dosimetry with all its aspects as well as recent applications of paleontological and geological dating. Improvements of well-developed measurement techniques like the dicentric assay were presented as well as new emerging techniques including molecular technologies for biodosimetry and the usage of tiny amounts of biological samples for EPR dosimetry. Especially high throughput approaches or automatization of labour-intensive laboratory methods up to fully automated image analysis point toward the future of diagnostics in the field of mass casualty scenarios. More research and involvement of even more research areas, including artificial intelligence, are necessary to overcome our present limitations in understanding the basic molecular principles of organisms after exposure to ionizing radiation.

Although, especially in the field of emergency preparedness and response, there is a great scientific competition between researchers employing very different technologies to meet the requirements, there is a common and very clear position of the EPR and biodosimetry scientific society: the common goal has to be the establishment and provision of a wide variety of methods and techniques, which is mandatory to meet the needs for diagnostic demands in the frame of the management of different radiological and nuclear scenarios. The next symposium will be held in late 2020 in Japan. ◆

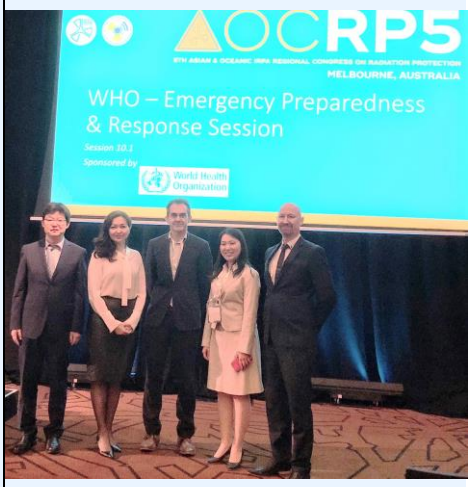
Scientific Events

WHO Co-Sponsored AOCRP-5 in Melbourne, Australia

By Zhanat CARR, WHO

The **5th Asia-Oceania Congress of Radiation Protection** (AOCRP-5) was held in Melbourne on May 20-23, 2018. The regional congress was co-sponsored by WHO and IAEA and involved participation of other key stakeholders in the field of radiation protection, such as UNSCEAR, ICRP, and of course IRPA among the main organizers of the event.

The congress was attended by more than 300 participants from Asia and Oceania countries. The scope of the congress included a broad range of the topics related to the various exposures to ionizing and non-ionizing radiation. WHO has organized three topical sessions, including a plenary inter-agency session with participation of IAEA, UNSCEAR, ICRP, IOMP, and of the international network of Patients for Patients Safety focusing on the progress made on the implementation of **Bonn Call for Action** and a topical session on Emergency Preparedness and Response, featuring presentations



from REMPAN members in Asia.

REMPAN members in Asia (left to right): Y. Long, China Center for Disease Control, Z. Carr, WHO, R. Tinker, ARPANSA, Australia, T. Tominaga, NIRS, Japan, M. Grzechnik, ARPANSA, Australia

All **conference materials** will soon be available online. ◆

Scientific Events

2nd International Symposium of the Network-type Joint Usage/Research Center for Radiation Disaster Medical Science, Nagasaki, Japan

By Noboro Takamura, Nagasaki University, Nagasaki, Japan

The Second International Symposium of the Network-type Joint Usage/Research Center for Radiation Disaster Medical Science: **For the Establishment of the Science of Resilience"** was held on February 03-04, 2018, at Nagasaki University, the WHO Collaboration Centre and a member of the Radiation Emergency Medical Preparedness and Assistance Network (REMPAN) in Japan.

This joint usage and research centre program was established by Hiroshima University, Nagasaki University, and Fukushima Medical University to establish a core for radiation disaster recovery and medical research, based on the accumulated scientific experiences from A-bomb survivors' studies and studies for the victims of accidents at the Chernobyl Nuclear Power Plant and Fukushima Daiichi Nuclear Power Station. This program, designated in 2016 by the Ministry of Education, Culture, Sports, Science, and Technology of Japan, provides research technology and the accumulated knowledge of our institutes to many researchers around the world, and it should promote interdisciplinary collaborations, the cultivation of young investigators, and an open exchange of research.

2nd International Symposium – Nagasaki, Japan – February 2018

Within this program's framework, an annual international symposium was organized since 2017, and for this second symposium hosted by Nagasaki University, three sessions that corresponded with the main missions of the program were held: "Social impact of a radiation disaster and radiological protection studies," "Radiation causality medicine," and "Low dose radiation effects and health risk studies." Jacques Lochard, Nagasaki University and ICRP, delivered the keynote address, and 12 speakers from France, the US, Korea, Taiwan, Germany, and Japan made their presentations. In the session on radiation causality medicine, Carol Iddins, REAC/TS, reviewed the medical management of radiological and nuclear casualties, especially cutaneous radiation injuries.

The third international symposium is going to be held in January 2019 at Fukushima Medical University and will focus on the issue of risk communication in an emergency. ◆

Scientific Events

5th Coordination Meeting of the WHO BioDoseNet in Oberschleissheim, Germany

By Ulrike Kulka, BfS, Oberschleissheim, Germany

The 5th Coordination Meeting of the **WHO BioDoseNet** members was hosted by the WHO Collaborating Centre - Federal Office for Radiation Protection (BfS) in Oberschleissheim, Germany on June 11, 2018, previous to the international EPRBioDose 2018 Conference.

The meeting was attended by 53 experts from 19 countries who shared recent activities and development in biological dosimetry and networking. In addition, future plans to enhance the capacity of the WHO network and options for joint activities and cooperation between the WHO BioDoseNet members were presented and discussed. During the break, the 10 years existence of the WHO BioDoseNet was celebrated.

The presentations showed, that the WHO successfully continued to strengthen the national awareness for radiation emergency preparedness and response (EPR). It is expected that the work of the WHO BioDoseNet is able to further significantly increase the capacity and capability of retrospective dose reconstruction in the case of radiation emergencies worldwide. Besides the benefit to foster and enhance existing collaboration between laboratories involved in radiation emergency preparedness, it will also contribute to the enhancement of scientific exchange and development worldwide. ◆

WHO BioDoseNet – 10 years Anniversary – Oberschleissheim, Germany – June 2018

Scientific Events

3rd Asian WHO-REMPAN Workshop Hosted by KIRAMS, Seoul, Republic of Korea

By Youngwoo Jin, KIRAMS, Seoul, Republic of Korea

On May 16-18, 2018, the 3rd Asian WHO-REMPAN Workshop on Monitoring, Assessment and Management of Internal Contamination with Radionuclides hosted by the National Radiation Emergency Medical Center (NREMC) of the Korea Institute of Radiological and Medical Sciences (KIRAMS) in collaboration with the (WHO was held Seoul, Republic of Korea.

3rd Asian WHO-REMPAN Workshop – Seoul, Republic of Korea – May, 2018

The objective of the workshop was to inform participants of recent technological issues and help them better understand the existing international arrangements in the field of internal contamination, thus enhancing preparedness and response to radiation emergencies in Asian region. The topics addressed during the workshop ranged from the basics of internal contamination, thyroid measurement inter-comparison exercise, to recent advances of computational human phantom, etc. It also included actual case reports of internal contamination accident including a recent Korean case.

46 participants from 12 countries attended the workshop, most of whom came from Asian countries such as Indonesia, Japan, Lao PDR, Maldives, Singapore, Thailand, and Vietnam. They also had an opportunity to take a look at the NREMC's facility on the last day of the workshop.

NREMC was established under KIRAMS in 2002 to operate a national radiation emergency medical network and provide education/training for relevant personnel. It has held two workshops with WHO since 2015 to assist strengthening Asian countries' national capacities for response to radiation emergencies. It is now designated as a WHO Collaborating Centre in Radiation Emergency Preparedness and Response.

The workshop was livestreamed and its **video recording** is available online. ◆

Scientific Events

XVIII A. Saenko International Radiobiology School for Young Researchers

By Natalya Seleva, MRRC, Obninsk, Russia

In the 21st week of 2018, the XVIII A. Saenko International Radiobiology School for Young Researchers was organized by the **A. Tsyb Medical Radiological Research Center (MRRC)** in cooperation with the Russian Academy of Sciences (RAS) Scientific Council on Radiobiology and WHO Collaborating Centre in Obninsk, Russia.

Lecturer B. Zhivotovsky, Department of Fundamental Medicine, M. V. Lomonosov Moscow State University, Moscow, Russia and Karolinska Institute, Stockholm, Sweden

An international team of lecturers presented modern trends in Radiobiology, Genetics, Informatics, etc., among them "Open-ended questions in Radiobiology", Radiation Hazards in the Present-Day World.

The attendants came from research centres of Russia, Kazakhstan, Belarus, Bulgaria, Japan, Sweden, Sweden, and Czech Republic. ◆

Education, Training, Exercise

NIRS-KIRAMS Training Course on Radiation Emergency Medicine for Korean Medical Professionals 2018

By Masashi Sagara, Hiroko Ino and Hideo Tatsuzaki, QST-NIRS, Japan

The WHO Collaborating Center - **National Institute of Radiological Sciences (NIRS)** organized the "NIRS-KIRAMS Training Course on Radiation Emergency Medicine for Korean Medical Professionals 2018" from April 24-26, 2018 at NIRS, Chiba, Japan. 26 young Korean medical professionals and administrative staffs working for 10 core hospitals from all over the country participated in the course, in which basic lectures of radiation emergency medicine were implemented.

Participants of NIRS-KIRAMS Training Course – Chiba, Japan – April 2018

This was the 12th training course in the series since 2005 for establishing a concept of Radiation Emergency Medicine in Asian countries that NIRS has conducted based on requests by the Korean Institute of Radiological & Medical Sciences (KIRAMS) specifically. Both NIRS and KIRAMS are WHO Collaborating Centres (CCs), and this training course was one of continuous efforts on the cooperative activity between WHO-CCs. ◆

OpenWHO: open to all anytime, from anywhere.

By Zhanat CARR

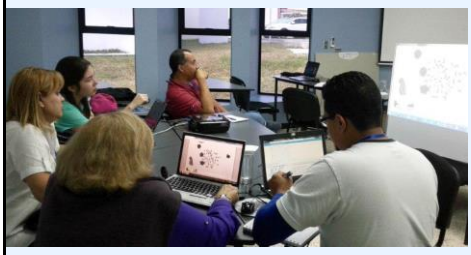
OpenWHO is WHO's new interactive, web-based, knowledge-transfer platform offering online courses to improve the response to health emergencies. OpenWHO enables the Organization and its key partners to transfer life-saving knowledge to large numbers of frontline responders. It is the first WHO platform to host unlimited users during health emergencies. It provides you with a fast and free way to obtain the latest scientific and operation know-how. With a dynamic interface, accessible through your computer and mobile device, OpenWHO offers off-line downloads, peer discussion boards and live briefings from ongoing health emergencies. ◆

Education, Training, Exercise

2nd Biodosimetry Workshop in Latin America" in San Jose, Costa Rica

By Omar Garcia, CPHR, Habana, Cuba

Representatives from Bolivia, Paraguay, Ecuador and Venezuela took part in the 2nd regional workshop "New calibration curves for biodosimetry in Latin America" in San Jose, Costa Rica on November 15-25, 2017. These countries identified experienced clinical cytogenetic laboratories who currently lack calibration curves due to limitations for blood irradiation to join the Latin American Biological Dosimetry Network **(LBDNet)**. Thus a proposal was launched to use several sets of images already available at the BioDoseNet image repository to generate dose response curve. The database contains about 25.000 electronical images of metaphases from dicentric assays, which have been previously analysed by international experts.



2nd Biodosimetry Workshop – San Jose, Costa Rica – November 2017

The workshop was to revise of the results obtained by the four participants' laboratories previously sent to the Cuban biodosimetry laboratory for revision, summary and statistical evaluation. A joint analysis of conflicting images by the difference in dicentric scoring was organized during the meeting.

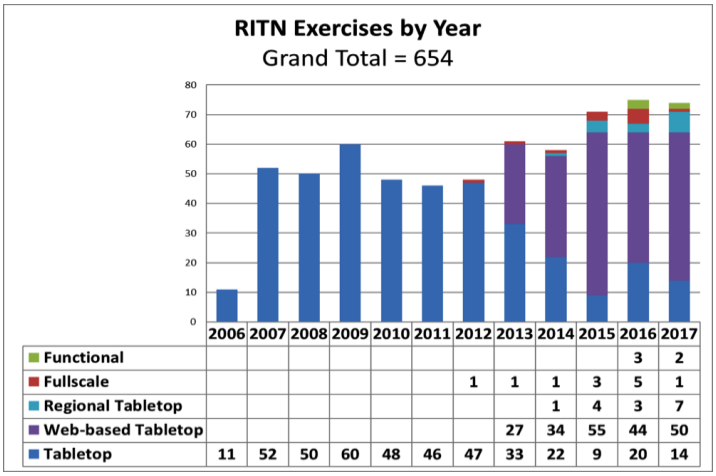
To continue the scoring process the schedule of activities up to 2019 was discussed and approved during the meeting. This workshop was implemented through the framework of the IAEA technical cooperation project RLA/9/076 and was coordinated by the Cuban Center of Radiation Protection and Hygiene (CPHR) with the support the Federal Office for Radiation Protection (BfS) in Germany. ◆

Education, Training, Exercise

Exercises Supported and Exercise Videos Created by RITN

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

Over the past year the **Radiation Injury Treatment Network**® (RITN) has supported many exercises and training opportunities; including one full scale exercise, two functional exercises and seven regional table-top exercises. Through training, educational sessions and awareness overview presentations RITN reached out to approximately 3.500 people in the communities its' hospitals serve; increasing their awareness of the role they may play in a radiological disaster in a distant city.



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Functional											3	2
Fullscale							1	1	1	3	5	1
Regional Tabletop									1	4	3	7
Web-based Tabletop								27	34	55	44	50
Tabletop	11	52	50	60	48	46	47	33	22	9	20	14

RITN Exercises, 2006-2017

As part of the exercise conducted by Rush University Medical Center RITN funded the creation of a short **video of the exercise**. This resulted in the need for a reliable place to share RITN videos, so we created a YouTube page to house this video, a few other RITN centre exercise videos that the hospitals created as well as a new short overview video of RITN titled "RITN: What You Need to Know".
RITN YouTube channel:
www.youtube.com/channel/UCkd45X1DlPqeRr-u5lph6Og ◆

◆ WHO Online Course on Risk Communication

Risk communication, a core public health intervention in any disease outbreak and health emergency, refers to the real-time exchange of information, advice and opinions between experts, officials and people who face a threat to their wellbeing, to enable informed decision-making and to adopt protective behaviours. This course contains 5 modules:

- what is risk communication, why it is important
- key elements of risk communication
- risk communication capacities, such as policy, strategies and evaluation
- Single Overarching Communication Outcome (SOCO), spokesperson tips and message development
- exercises and ways they can be used to test preparedness in communicating risks. ◆

Education, Training, Exercise

◆ WHO Internship Programme

By Zhanat Carr, WHO

WHO as the leader in global public health issues is committed to building a diverse pool of future leaders in public health. WHO's Internship Programme offers a wide range of opportunities for graduate and postgraduate students (age 20+) to gain insight in the technical and administrative programmes of WHO while enriching their knowledge and experience in the health field, thereby contributing to the advancement public health.
The objectives of the internship programme are to:

- Provide a framework for assigning postgraduate students from diverse academic backgrounds to WHO programmes that can enhance their educational experience through practical assignments.
- Expose students to the work of WHO.
- Provide WHO programmes with input from students specializing in various fields. Most students are placed in health-related programmes, although other disciplines can be considered as appropriate such as communication, external relations or human resources.

The internship duration is between minimum 6 weeks and maximum of 24 weeks. Two six-month periods open annually for applications: Jan to Jun and Jul to Dec. The information on full requirements and application process is available at: http://www.who.int/careers/internships/en/ and
FAQs:
http://www.who.int/careers/internships/internFAQ

News – From Network Members

REMPAN CC in Moscow Supports FIFA World Cup 2018 in Russia

By Andrey Bushmanov, SRC – Burnazyan FMBC of FMBA

The WHO REMPAN Collaborating Center (CC) in Moscow at the State Research Center (SRC) – Burnazyan Federal Medical Biophysical Center (FMBC) of Federal Medical Biological Agency (FMBA) participated in the provision of safety measures of the FIFA World Cup 2018 being held in the Russian Federation.

The REMPAN CC in Moscow established a specialized radiological team for rapid medical response to radiation threats and incidents during the preparation and conduction of FIFA World Cup's events. The specialists for dosimetry, radiologists and technical personnel were in constant stand-by to provide assistance in case of a radiological incident. Training was conducted to provide medical and dosimetry assistance in a mobile radiation monitoring laboratory.

A team of specialists from the REMPAN CC was on duty at the official FIFA venues in Moscow until the end of the World Cup. ◆

Response Team from SRC – Burnazyan FMBC of FMBA

"Mobile Dosimetry Lab" Introduced by KHNP-RHI

By Hajung Gong, KHNP-RHI, Seoul, Republic of Korea

Reflecting lessons from Fukushima accident, the Korea Hydro & Nuclear Power-Radiation Health Institute (KHNP-RHI) has introduced a **"Mobile Dosimetry Lab"** for the rapid and accurate radiation dose evaluation in nuclear emergencies. 'Mobile Dosimetry Lab' is equipped with a portal monitor for screening individuals for contamination, a whole body counter system for internal contamination evaluation and in-vivo ESR for external dose evaluation etc. Especially, in-vivo ESR will be used for triage in the early stage of a large scaled accident by using human teeth.

"Mobile Dosimetry Lab" – KHNP-RHI, Seoul, Republic of Korea

It is expected that with the 'Mobile Dosimetry Lab' radiation dose evaluation can be performed effectively even in situation where facility equipment at an accident site is not available. To improve radiation dose evaluation system, KHNP-RHI also developed a standard human phantom for radiation protection and has been participating in intercomparison exercises with domestic and foreign institutions periodically. ◆

News – From Network Members

FMU Designated as REMPAN Collaboration Center

By Zhanat Carr, WHO, Geneva, Switzerland

It is our great pleasure to congratulate the **Fukushima Medical University (FMU)** colleagues on being formally designated as a WHO Collaborating Center since May 18, 2018 and to welcome FMU to the REMPAN family – now in a new formal status.

This is a result of our collaboration since the time of the Great Japanese Earthquake and triple disaster including Fukushima Daiichi Nuclear Power Plant accident in 2011. It is a great honour but also a big responsibility for an institution to carry the name of a **WHO Collaborating Center**.

We appreciate FMU's tireless efforts on mitigation of the consequences of the accident, but also contributing to the development of the knowledge base on building national and regional capacities to response to a nuclear emergencies, long-term follow-up of the affected persons, and developing of risk communication strategies and tools, and we look forward to the next four years of fruitful collaboration. ◆

Coming, going…

Steve Sugarman, MS, CHP, left REAC/TS at the end of September 2017 after almost 19 years of service to accept the position of Vice President and Corporate Health Physicist for **Summit Exercises and Training (SET)**.

He takes his almost 30 years of health physics experiences to SET where his new duties include serving as the radiological subject matter expert and providing health physics input and oversight for Summit projects, including exercise development and radiological emergency response training. Further, he is involved in the review of client emergency response plans and represents his company at various technical events. Steve will continue providing technical advice and remain involved in REMPAN activities as an Observer ◆

Nicholas Dainiak, MD, FACP, former Director of **REAC/TS**, has returned full-time to the Department of Therapeutic Radiology, Yale University School of Medicine, New Haven, where he continually maintained the academic appointment of Professor of Medicine, his research laboratory and the Yale CBL. He plans to be actively engaged in REMPAN and WHO activities to transfer new knowledge and technical capabilities to colleagues residing in both developing and developed countries around the globe. ◆

Nick Dainiak, Yale University School of Medicine, New Haven, USA

Dr John Gilstad – New Director of AFRRI

An experienced leader in Navy Medicine, Navy Capt. (Dr.) John Gilstad, was recently selected to serve as new director of the **Armed Forces Radiobiology Research Institute** (AFRRI) at the Uniformed Services University of the Health Sciences (USU). Gilstad assumed his new position in April 2018, succeeding Air Force Col. (Dr.) Lester Huff, who will retire after 34 years of service.

Board-certified in Internal Medicine, Gilstad earned his undergraduate degree in 1987 from the U.S. Naval Academy and is a 1993 graduate of USU's F. Edward Hebert School of Medicine. As a medical student, he participated from 1989 to 1991 as a Howard Hughes Medical Institute Research Scholar at the National Institutes of Health. He trained in Internal Medicine at the National Naval Medical Center from 1994 to 1996, then later completed a geriatrics fellowship at Johns Hopkins University. He is also an assistant professor in USU's Department of Medicine, and has previously served at AFRRI as head of the Scientific Research department from 2010 to 2012.
◆

Coming, going…

Prof. Shunichi Yamashita

has retired from the Nagasaki University on March 31 2018, and joined the staff of the Fukushima Medical University as a Vice-President for International Cooperation.
Since 1990, Prof. Yamashita worked at the Atomic Bomb Disease Institute, Nagasaki University School of Medicine and was the Head of the WHO Collaborating Centre for more than two decades. We look forward to continue working with him.

◆

REAC/TS Strengthening Cooperation with REMPAN Institutions in Japan

In early 2018, **Dr. Carol Iddins**, currently Acting Medical / Technical Director of the **Radiation Emergency Assistance Center / Training Site** (REAC/TS), visited three Japanese REMPAN Centers in Nagasaki, Hiroshima and Chiba, respectively.

Carol Iddins, Acting Medical / Technical Director of REAC/TS

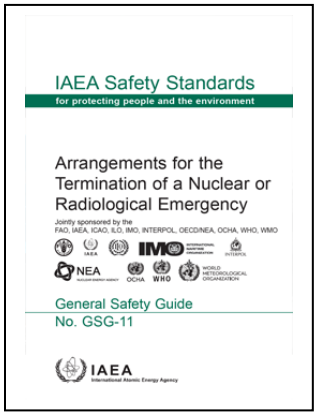
She took part in the 2nd International Symposium For the Establishment of the Science of Resilience at the Nagasaki University, visited the Institute for Radiation Biology at the Hiroshima University, and the National Institutes of Quantum and Radiological Sciences and Technology (QST) in Chiba, Japan. ◆

New Publications

IAEA General Safety Guide - Arrangements for the Termination of a Nuclear or Radiological Emergency GSG-11

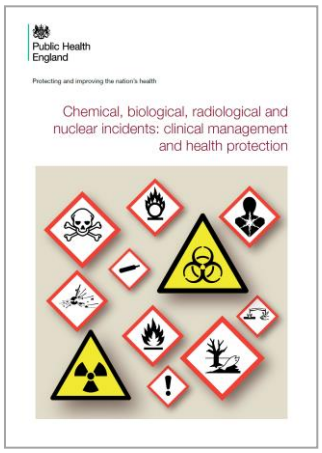
This Safety Guide provides guidance on arrangements to be made at the preparedness stage for the termination of emergency and the subsequent transition from the emergency exposure situation to either a planned or an existing exposure situation. It is intended to assist in the application of GSR Part 3 and GSR Part 7.

GSG-11 publication was jointly sponsored by 10 international organizations, including WHO ◆



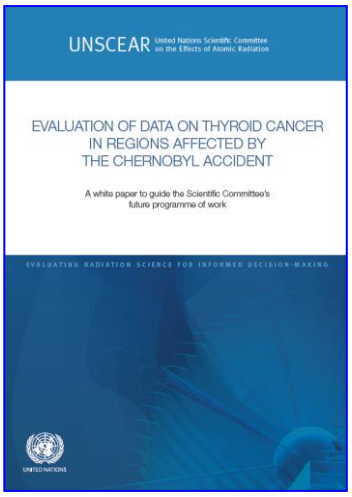
New CBRN Incident Handbook by Public Health England

The handbook **"Chemical, biological, radiological and nuclear incidents: clinical management and health protection"** was published by Public Health England in 2108 updates the chemical and biological guidance given in 2006 edition and adds material on a range of new and emerging threats in these areas. The radiation incident response section has been completely re-written to integrate the well-established European Society for Blood and Marrow Transplantation's rapid clinical assessment tool with care pathways derived from the WHO global consensus guidelines on radiation injury. ◆



"Evaluation of Data on Thyroid Cancer in Regions affected by the Chernobyl Accident" Published by UNSCEAR

The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) released a **White Paper** evaluating thyroid cancer data in regions affected by the Chernobyl accident to guide the Scientific Committee's future programme of work. The publication recapitulates previous findings of the Scientific Committee on this matter, reports the latest data provided by the three most affected countries (Belarus, the Russian Federation and Ukraine), summarizes key literature of the past years, and makes an assessment of the cases of thyroid cancer that could be attributed to radiation exposure. ◆

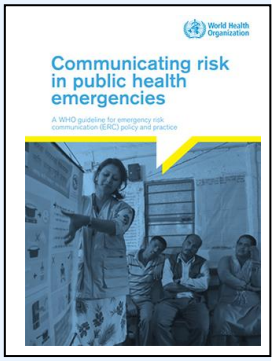


New Publications

A WHO Guideline for Emergency Risk Communication (ERC) policy and practice

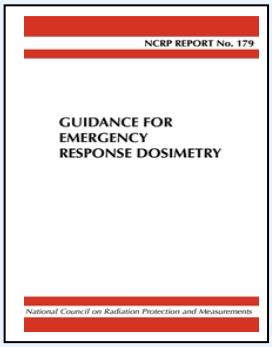
published in February 2018 and is available in six languages.

Recent public health emergencies, such as the Ebola virus disease outbreak in West Africa (2014–2015), the emergence of the Zika virus syndrome in 2015–2016 and multi-country yellow fever outbreaks in Africa in 2016, have highlighted major challenges and gaps in how risk is communicated during epidemics and other health emergencies. These guidelines provide overarching, evidence-based guidance on how risk communication should be practised in an emergency. The recommendations also guide countries on building capacity for communicating risk during health emergencies. ◆



NCRP Report No. 179 Published

National Council on Radiation Protection and Measurements (NCRP) Report No. 179, **Guidance for Emergency Response Dosimetry**, complements three previous NCRP publications that provide advice on planning and responses to radiological or nuclear terrorism incidents. The report provides guidance on the accrual and control of radiation dose in the emergency phase of a radiological or nuclear incident. It bridges the gap between trained and equipped emergency workers and the remainder community or responders. ◆



Upcoming Training Courses and Events

REAC/TS Training Courses are scheduled as follows:

Radiation Emergency Medicine (REM)

- **07-10 August, 2018, Oak Ridge, USA**

Advanced Radiation Medicine

- **13-17August, 2018, Oak Ridge, USA**

6th International Expert Course on Medical Management of Radiological and Nuclear Events

Date: **10-12 October 2018**
Venue: Foresta Hotel & Conference, **Stockholm, Sweden**
Contact: Mr. Ola Nerf, at **ola.nerf@sll.se** **before August 13, 2018**

EVENTS – MARK YOUR CALENDARS!

- **20-24 August 2018 – Stockholm, Sweden**
  NEA International Radiological Protection School
- **21-25 August, 2018, Pécs, Hungary**
  44th European Radiation Research Congress
- **30 August, 2018, Rockville, MD, USA**
  Growth Factors and Other Cytokines for Treatment of Injuries During a Radiation Public Health Emergency
- **6-9 September, Tunis, TUNISIA**
  The 5th African IRPA Congress - AFRIRPA-2018
- **19-21 September, 2018, Milan, Italy**
  Fifth Workshop on Science and Values in Radiological Protection Decision Making
- **19 September, 2018** – The 2nd REMPAN Webinar on Radiation and Thyroid Cancer – more info coming soon!
- **01-05 October, 2018, Vienna, Austria**
  International Symposium on Communicating Nuclear and Radiological Emergencies to the Public
- 08-11 October, 2018, Fontenay-aux-Roses, France
  HEIR 2018 – The 12th edition of the international Conference on Health Effects of Incorporated Radionuclides

ICRP: Guiding Radiological Protection for 90 Years

By Chunsheng Li, ICRP Secretariat

The celebration of the **90th Anniversary** of the International Commission on Radiological Protection (ICRP) will be held in collaboration with ICRU and the Swedish Radiation Safety Authority on 17-18 October 2018, in Stockholm, Sweden.

The colloquium will highlight 90 years of radiation science and radiation protection, with focus on what is on the horizon in terms of developments in the sciences and the evolution of society. To make ICRP these publications more accessible to the professionals and the interested public worldwide, in 2018, ICRP launched the **"Free the Annals"** to celebrate ICRP's 90th Anniversary.

◆

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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REMPAN FB page

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