

## REMPAN

## e-NEWSLETTER



World Health Organization

Issue 16

December, 2017

## Editorial

Dear REMPAN family,

It is with enormous gratitude and appreciation that we look back at the year behind... 2017 may have often been busy and stressful, but it was also rewarding and extremely satisfying in terms of the things we have accomplished together with all of you – our colleagues, collaborators, partners, advisers, consultants, contributors, supporters, observers, stakeholders, friends and family! The brightest moments that come to mind are of course those in which we invested most of our time and efforts in preparing, developing, delivering, and reporting afterwards. To name a few these include (but are not limited to) the ConvEx-3 interagency exercise that took place in June, the 15<sup>th</sup> coordination meeting of REMPAN that gathered us in Geneva in July and marked the 30<sup>th</sup> anniversary of this great network, and the completion and eventual release of the new WHO guideline on iodine thyroid blocking in nuclear emergencies that I am so happy to hold in my hands today. These and many more events that this network carries out, make a huge difference in improving the preparedness in countries and regions, in raising awareness, fostering international cooperation, advancing research in the area of radiation emergency medicine and radiation epidemiology.

Thank you to all of you for being part of REMPAN!



With warmest  
Season's Greetings,

*Dr Zhanat Carr*  
WHO REMPAN  
Secretariat

## In this issue

<b>Editorial</b>	<b>1</b>
<b>News – REMPAN Secretariat</b>	<b>2</b>
<b>Education, Training, Exercise</b>	<b>4</b>
- NIRS training course, Japan	
- Radiation therapy training course, Russia	
<b>News – Network Members</b>	<b>5</b>
- CDC national preparedness month in the USA	
- URCERM, Russia	
- Civil Protection School, Austria	
- Karolinska University, Sweden	
<b>New Publications</b>	<b>7</b>
<b>Upcoming Events and Training Courses</b>	<b>8</b>
<b>Disclosure</b>	<b>8</b>

## News – From REMPAN Secretariat

### ◆ September 12-13: the 15th meeting of the HERCA-WGE.

The Working Group for Emergency (WGE) Preparedness and Response under EU HERCA framework: Heads of Radiation Protection Competent Authorities - HERCA-WGE was hosted by Norwegian Radiation Protection Authority in Oslo, Norway. The participants discussed the WG's terms of reference and the action plan for its future work. The agenda also included the discussion on the lessons learned from the ConvEx(3)-2017 nuclear emergency exercise held in Hungary in June 2017, on the need to harmonize policies on urgent protective actions for cross-border emergencies; and on the variability of scenarios in national planning for radiation emergencies. The WHO and other international partners (IAEA, NEA, EC, and ICRP) were invited to report on the ongoing relevant activities.



### ◆ October 26-27: WPNEM meeting – Paris, France

The 42nd Meeting of the Working Party on Nuclear Emergency Matters (WPNEM) of the Committee on Radiation Protection and Public Health (CRPPH) led by the Nuclear Energy Agency (NEA/OECD) was held in Paris. Among other items of the agenda, the committee considered the proposal of the German government to address the non-radiological health outcomes of nuclear emergencies (e.g. psycho-social issues) how these can be tackled at the stage of preparedness and planning for effective responses. Discussion is underway on potential cooperation between WHO and NEA on this specific project in 2018-2020. ◆

### ◆ November 7: EUROSAFE Forum – Paris, France

With a view to promoting the formation of a European scientific and technical network in the field of nuclear safety, the EUROSAFE Association held its regular Forum in the format of five parallel sessions/Seminars, where WHO was invited to report on its work in the area of strengthening emergency preparedness and response in its member states. The proceedings of the EUROSAFE forum can be found at:

<https://www.eurosafe-forum.org/eurosafe2017> ◆



## News – From REMPAN Secretariat

### ◆ The International Conference on Radiation Protection in Medicine 11-15 December 2017 – Vienna, Austria

The [IAEA conference](#), co-sponsored by the World Health Organization (WHO) and Pan American Health Organization (PAHO), gathered more than 500 participants and concluded that More training, more awareness and more effective implementation of regulations are needed to better protect patients and health professionals from undue radiation exposure related to medical procedures.



The conference concluded that that efforts should focus on monitoring to reduce radiation exposure of tissue outside the targeted area in radiotherapy patients, eye protection from radiation in interventional procedures, and the implementation of clinical imaging guidelines.

Intensified work in these areas is conducted in response to [the Bonn Call for Action](#), which was issued by IAEA and WHO following a 2012 international conference in Bonn, Germany, which provided for a decade long global roadmap on radiation protection in medicine. ◆

## News – From REMPAN Secretariat

### ◆ November 19-23: Joint External Evaluation Mission – Jakarta, Indonesia

WHO continues supporting its member states efforts for implementation of the International Health Regulations (IHR 2005). As a part of the IHR implementation framework, the [Joint External Evaluation \(JEE\) tool](#) is applied since 2016. Some 60 JEE missions have been rolled out world-wide. Indonesian Government hosted the JEE mission in November, in the scope of which national capacity and preparedness for radiological and nuclear emergencies were reviewed among other categories of preparedness for health emergencies. The JEE Mission report is being currently prepared and will be eventually available at: <http://www.who.int/ihr/procedures/mission-reports/en/>



### ◆ November 27-29: the meeting of the IACRNE – Brussels, Belgium

The Inter-Agency Committee on Radiological and Nuclear Emergencies is the co-ordination mechanism between relevant international intergovernmental organizations to ensure that coordinated and consistent arrangements and capabilities for preparedness and response to nuclear and radiological incidents and emergencies are developed and maintained. The IAEA's Incident and Emergency Centre (IEC) coordinates the work of the Committee. International organizations that are members of the IACRNE develop, maintain and co-sponsor "Joint Radiation Emergency Management Plan of the International Organizations" (the Joint Plan). The IAEA provides the Secretariat for the IACRNE and is the main coordinating body for the development and maintenance of the Joint Plan. The 26<sup>th</sup> meeting of the Committee was hosted by NATO's Euro-Atlantic Disaster Response Coordination Centre (EADRCC) on 26-29 Nov 2017 in Brussels, Belgium. The participating agencies, including WHO, discussed the lessons of the ConvEx (3) 2017 exercise; upcoming relevant activities, coordination and cooperation in the next two years.



## News – From REMPAN Secretariat

### ◆ The 5<sup>th</sup> meeting of the IAEA EPReSC – 7-9 November, Vienna, Austria

The WHO participated remotely via WebEx presented updates on its work pertaining to the emergency preparedness and response area to the participants of the 5<sup>th</sup> meeting of IAEA's EPReSC committee. The Committee gathered senior officials of the national competent authorities charged with the responsibilities for planning and managing response to radiological and nuclear emergencies. WHO and several other international organizations are observers of the Committee.

Among other issues, the question of strengthening coordination between two sister UN agencies in the area of radiological and nuclear emergencies preparedness and response was discussed. The report of the WHO and all other agenda items [are available on line](#).





## Education, Training, Exercise

### **NIRS Training Course on Radiation Emergency Medicine in Asia 2017**

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

The **National Institute of Radiological Sciences (NIRS)** organized the "NIRS Training Course on Radiation Emergency Medicine in Asia 2017" from September 19-21, 2017 at NIRS, Chiba Japan in cooperation with WHO and IAEA. Twenty-two physicians and one radiation protection expert coming from 19 countries participated.



### **NIRS Training Course on Radiation Emergency Medicine in Asia 2017** – Chiba, Japan – September 2017

The program, consisting of lectures, practical drills and a desktop drill, was focused on the countermeasures for radiation protection of the public in radiological emergencies, sharing the lessons learned from the Fukushima Daiichi Nuclear Power Plant accident and the latest problems in the recovery process. This course was aimed to train core members of medical professionals who will be a trainer of radiation emergency medicine (REM) in each country.

In order to build up a close network of medical preparedness in radiological emergencies in Asia, NIRS has conducted the continuing training courses and workshops on REM since 2001. More than 650 medical professionals and radiation experts from 53 countries have participated in those opportunities. ◆



## Education, Training, Exercise

### **Advanced Training in Radiation Therapy in Russia**

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

The Moscow WHO REMPAN Collaborating Center started training medical physicists and radiotherapists from the countries of the former USSR and Russia. The training is carried out within the IAEA's Technical Cooperation Program for the Cancer Treatment (PACT), as well as the IAEA Technical Cooperation Project RER/6/033, "Advanced Training in Radiation Therapy (Radiation Oncologists, Medical Physicists and Radiologist Technicians)".



### *Participants of Advanced Training in Radiation Therapy – Moscow, Russia* – November 2017

Two courses were conducted: "Radiobiology for Radiation Oncologists and Medical Physicists" on October 23 to November 03, 2017 and "Radiation Protection and Safety and Accident Prevention in Radiotherapy" on November 13-17, 2017. The course programs were created with the support and approval of the IAEA.

Students from Russian-speaking countries – Republic of Armenia, Republic of Tajikistan, Republic of Uzbekistan, Republic of Kazakhstan, Republic of Belarus, Republic of Latvia, Republic of Serbia and Republic of Montenegro – were invited to participate. ◆

## News – From Network Members

### National Preparedness Month – September 2017

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



In support of National Preparedness Month in September, CDC's Radiation Studies Branch (RSB) will be highlighting information on the [Radiation Emergencies](#) website to help people understand what to do in a radiation emergency: Get Inside, Stay Inside and Stay Tuned.



Different topics will be highlighted throughout the month:

- [Protecting Your Family in a Radiation Emergency](#) – If a radiation emergency occurs, you can take steps to protect yourself, your family and your pets.
- [Medical Countermeasures \(Treatments\)](#) – Seek assistance from medical professionals about medical treatments that may be available to limit or remove radioactive contamination.
- [Make Sure Pets Are Safe in a Radiation Emergency](#) – Bring pets inside with you, if you can. Bring indoors any supplies from outside that your pets might need for at least 24 hours.
- [Pregnant Women and Nursing Mothers](#) – Pregnant women and nursing mothers should contact their health care providers for information on what to do in a radiation emergency.

The topics to highlight for National Preparedness Month were selected based on results from RSB's ongoing efforts to learn more about the primary concerns of the public in the event of a radiation emergency. Recent international concerns about nuclear detonations have also produced an interest in these topics. ♦



Image from: <https://www.cdc.gov/features/beready/index.html>

## News – From Network Members

### The 5th International Expert Course On the Medical Management of Radiological and Nuclear Events – October 2017

By Leif Peterson, Karolinska University Hospital – Stockholm, Sweden

This course was organized under the REMPAN framework and provided an update on medical radiation emergency preparedness and the medical management of RN events. The participants included medical professionals in charge of medical assessments and treatment of patients exposed to ionizing radiation in connection with accident or terrorist attack.



The content of the training programme included, in addition to a brief review of basic radiation physics concepts:

- medical preparedness at the national level and internationally;
- assessment and management of acute radiation syndrome (ARS);
- late medical complications of ARS and stochastic effects, mainly cancer development;
- experiences and lessons learned from major RN events, such as the Fukushima accidents and Chernobyl;
- medical information management at RN events, including use of web, social media, etc.
- group work based on different emergency scenarios and practical applications. ♦



## News – From Network Members

### Austrian Civil Protection School – New REMPAN Liaison Institution

By Stefan Schönhammer, Civil Protection School, Traiskirchen, Austria

The [Civil Protection School of the Austrian Federal Ministry of the Interior](#) has been accepted as a new REMPAN Liaison Institution in June, 2017. It is a training institution situated in Traiskirchen, approximately 35 kilometres south of Vienna.

Since 1963, the Civil Protection School conducts trainings for a special unit of the Austrian Police dealing with radiation incidents. Due to their high level of expertise in this field, the trainers of the institution are also well-respected as members in national and international working groups as well as observers or participants in national and international exercises on both field and table-top levels.

Further tasks of the Civil Protection School include trainings on national crisis and disaster management and CBRN trainings for yet another special unit of the Austrian Police, enabling its members to act under CBRN conditions.



*National Radiation Protection Training of the Austrian Police – Traiskirchen, Austria – October 2017*

Since 2016, the Civil Protection School cooperates closely with the IAEA as a Capacity Building Centre (CBC). The three-week course “International School on Radiation Emergency Management” has been held twice and for participants from Europe and Africa, respectively.



*First IAEA Regional Training Course, Vienna, Austria – October 2016*

As a REMPAN Liaison Institution, the Civil Protection School (Email: [civilprotectionschool@bmi.gv.at](mailto:civilprotectionschool@bmi.gv.at)) hopes not only to keep up its high level of expertise and strengthen the international network of radiation protection experts, but will also try to contribute to the REMPAN with its knowledge in the fields of CBRN and crisis and disaster management. ♦

## News – From Network Members

### Russian Federation Government Award 2017

By Alexander Akleyev, URCRM, Chelyabinsk, Russia

On October 25, 2017 the team of the Research Institutes of the FMBA of Russia received the Russian Federation Government Award in 2017 in the field of science and technology for the development and implementation of a complex of biomedical equipment and technology for the prediction, diagnosis and immunotherapy of radiation-induced pathology.



*Alexander V. Akleyev*

The work has been performed under the leadership of Professor Alexander V. Akleyev, MD, director of the URCRM. This unique complex was introduced into medical institutions of FMBA of Russia to assess the immune status and immunotherapy of over 45,000 people affected by radiation accidents at the Mayak PA and Chernobyl NPP. ♦

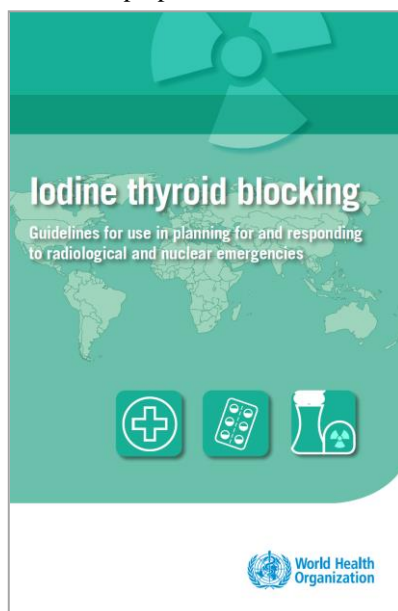
## New Publications

### Updated WHO Guidelines on Iodine Thyroid Blocking Published in November 2017

These guidelines are an update of the 1999 WHO guidance on the use of iodine thyroid blocking (ITB) with a special focus on public health considerations of ITB implementation.

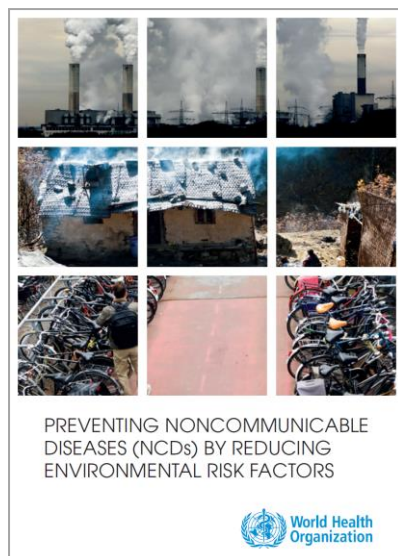
The guidelines [“Iodine thyroid blocking – Guidelines for use in planning for and responding to radiological and nuclear emergencies”](#) aim to support public health preparedness for radiation emergencies in Member States, as required by the International Health Regulations (IHR). It is confined to planning and implementation of ITB before and during a radiation emergency.

These guidelines do not address radiation protection basis set for ITB planning and implementation, but rather complements the relevant international safety standards and technical guides published by the International Atomic Energy Agency (IAEA) and cosponsored by WHO and other international organizations. ♦



### New WHO Publication on Noncommunicable Diseases

The newly released WHO publication [“Preventing noncommunicable diseases \(NCDs\) by reducing environmental risk factors”](#) highlights the special relevance of environmental risks for NCDs.



It presents the burden of NCDs caused by environmental risks, as well as the many areas where action on environmental determinants is needed to reduce the burden. It provides the evidence on why environmental risk reduction is essential in NCD prevention and control strategies.

Following the release of “Don’t pollute my future” and “The public health impacts of chemicals”, this is the third in the series, based on data from the publication “Preventing disease through healthy environments”. ♦

## New Publications

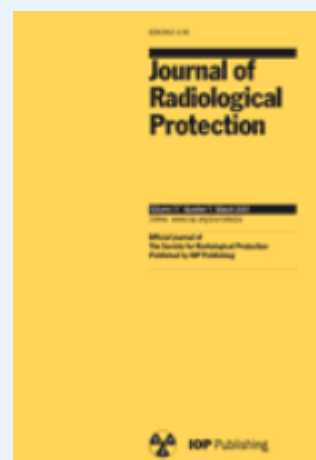
### 60<sup>th</sup> Anniversary of the 1957 Accident at Mayak PA

By Alexander Akleyev, URCRM,  
Chelyabinsk, Russia

The date of September 29, 2017 marked the 60th anniversary of the 1957 accident at Mayak PA (Russian Federation), which led to the formation of the East Urals Radioactive Trace.

A number of activities were devoted to this important event. In July 2017 Alexander V. Akleyev, director of the WHO Collaborating Center, Urals Research Center for Radiation Medicine (URCRM), gave the talk “Mayak PA Accident: 60 years later” at 15<sup>th</sup> REMPAN Coordinating Meeting held in Geneva.

The conclusions of this report were published by A. V. Akleyev, L.Yu. Krestinina, M.O. Degteva, and E. I. Tolstykh in the Journal of Radiological Protection 2017 (37): R19–R4.



The publication [“Consequences of the radiation accident at the Mayak production association in 1957 \(the “Kyshtym Accident”\)](#) is available online. ♦

## Upcoming Events and Training Courses

WHO Collaborating Center **REAC/TS training** courses are scheduled as follows:

### Radiation Emergency Medicine (REM):

- 06-09 February, 2018, Oak Ridge, USA
- 13-16 March, 2018, Oak Ridge, USA
- 24-27 April, 2018, Oak Ridge, USA
- 12-15 June, 2018, Oak Ridge, USA

### Advanced Radiation Medicine

- 30-May - 04 April, 2018, Oak Ridge, USA

### Health Physics in Radiation Emergencies

- 19-23 March, 2018, Oak Ridge, USA
- 18-22 June, 2018, Oak Ridge, USA

### **Upcoming IRPA regional Conferences:**

- The 5th European IRPA Congress - The Hague, The Netherlands – 4 to 8 June 2018. Web: <https://irpa2018europe.com/>
- The 5th Asian and Oceanic IRPA Regional Congress on Radiation Protection – AOCRP5 – Melbourne, Australia – 20 to 23 May 2018. Web: <http://www.aocrp-5.org/>
- XI Congreso Regional de Seguridad Radiológica y Nuclear, Congreso Regional IRPA – IRPACUBA - La Habana, Cuba, del 16 al 20 de abril de 2018. Web: <http://www.irpacuba.com/>

### **Other meetings:**

- NERIS Workshop 2018 & 9th General Assembly - 25-27 April 2018, Dublin, Ireland. Web: <http://www.eu-neris.net/index.php/activities/workshops/148-4-neris-workshop-25-27-may-2018-dublin.html>
- EPRBioDose 2018 International Conference – Munich, Germany – 11 to 15 June 2018. Web: <https://www.eprbiodose2018.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.

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.

The designations employed and the presentation of the information in this Newsletter do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. The World Health Organization does not warrant that the information contained in the Newsletter is complete and correct and shall not be liable whatsoever for any damages incurred as a result of its use.

### **Contacts / Feedback**

Dr. Zhanat Carr, REMPAN Secretariat  
Radiation Emergency Medical  
Preparedness and Assistance  
Department of Public Health and  
Environmental and Social Determinants of  
Health (PHE)  
World Health Organization HQ  
Email: [carrz@who.int](mailto:carrz@who.int)



**REMPAN FB**

### **WHO REMPAN e-NEWSLETTERS download**

### **Editors**

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

### **Design**

Dr Rita Schneider, REMPAN CC  
Würzburg

### **Contributors to this issue**

A. Akleyev, B. Aloisi, A. Bushmanov,  
Z. Carr, H. Ino, M. Sagara, R. Schneider,  
S. Schönhacker, H. Tatsuzaki,  
R. Whitcomb