WHO European Region well represented in Journal of Infectious Diseases: measles supplement

*The Journal of Infectious Diseases* released the online version of its 2011 measles supplement at the end of June 2011. The supplement, titled “Global Progress Toward Measles Eradication and Prevention of Rubella and Congenital Rubella Syndrome,” contained more than 70 articles grouped into subtopics such as: public health importance of measles and rubella; feasibility of measles eradication; measles vaccine safety and effectiveness; and regional and country experiences.

The experiences from Member States in the WHO European Region were covered in eight articles: six addressing measles and two addressing rubella. Germany, Russian Federation and Poland authored articles highlighting progress towards measles and rubella elimination. Four regional articles are summarized below.

These articles and the entire measles supplement can be accessed via: [http://jid.oxfordjournals.org/content/204/suppl_1.toc](http://jid.oxfordjournals.org/content/204/suppl_1.toc)

**What Will It Take to Achieve Measles Elimination in the World Health Organization European Region: Progress From 2003–2009 and Essential Accelerated Actions** (WHO/Europe authors: Rebecca Martin, Nedret Emiroglu, Sergei Deshevoi, Dragan Jankovic, Ajay Goel)

*From Abstract*
Measles elimination in the WHO European Region is attainable, but the target date of 2010 has been missed. Countries should ensure political commitment and resources to protect the gains made to date and address these challenges to sustain the progress and achieve the elimination goal.

**Molecular Genotyping and Epidemiology of Measles Virus Transmission in the World Health Organization European Region, 2007–2009** (WHO/Europe authors: Mick N. Mulders, Dragan Jankovic, Rebecca Martin, Eugene Gavrilin)

*From Abstract*
The WHO European Region 2010 goal will not be met, as indigenous transmission of measles virus has not been interrupted. As the region begins to document its process of elimination verification to monitor progress toward the goal, countries will need to ensure that genotyping is performed in all measles outbreaks.

**Status of Rubella and Congenital Rubella Syndrome Surveillance, 2005–2009, the World Health Organization European Region** (WHO/Europe authors: Dragan Jankovic, Ajay Goel, Rebecca Martin)

*From Abstract*
As the foundation to achieving and verifying rubella elimination, high-quality rubella and CRS surveillance needs to be implemented and sustained in all Member States.

**Supplementary Immunization Activities to Achieve Measles Elimination: Experience of the European Region** (WHO/Europe authors: Sergei Deshevoi, Ajay Goel, Rebecca Martin, Nedret Emiroglu)

*From Abstract*
SIAs have made a substantial contribution to the success of interruption of endemic measles virus among wide-age groups and will remain an important strategy for elimination in the European Region.

**IN THIS ISSUE:**

- Page 1: WHO European Region well represented in Journal of Infectious Diseases: measles supplement
- Page 2: European Immunization Week 2011
- Page 3: Polio SIAs in response to the 2010 outbreak of wild poliovirus: Tajikistan's experience
- Page 4: Measles in the WHO European Region
- Page 6: Meetings
- Page 7: Quick Euro Stats: Timeliness and completeness of reporting
From 23–30 April 2011, the sixth European Immunization Week (EIW) provided a platform for WHO/Europe and Member States to raise awareness of immunization and increase the Region’s commitment to maintaining high immunization coverage. EIW 2011 took place against the backdrop of alarming measles outbreaks across the Region, with more than 11,000 cases reported at the time of initiative. Thus, EIW played a critical role at a critical moment for immunization in many countries in the European Region.

An unprecedented 52 Member States joined EIW 2011, compared with 47 in 2010, and participants undertook a broad range of activities throughout the week.

Supplementary Immunization Activities (SIAs)
More than 10 countries used EIW to launch widespread immunization campaigns. Bulgaria mobilized outreach teams to immunize against polio in Roma populations and geographically remote villages. Synchronized supplementary immunization activities (SIAs) were conducted around EIW, in Azerbaijan, Kazakhstan, Kyrgyzstan, Russian Federation, Tajikistan, Turkmenistan and Uzbekistan, to close any remaining immunity gaps after the importation of wild poliovirus into the Region in 2010. Over 18 million children were reached with two doses of OPV vaccine (see article below).

Advocacy
Countries across the WHO European Region planned and held meetings, workshops, conferences and training sessions on immunization throughout EIW. Albania hosted a meeting with 10 neighboring Member States to discuss the EIW 2011 theme, “Shared solutions to common threats”. The meeting focused on subregional cooperation to reach high immunization coverage rates among vulnerable populations in southeastern Europe.

More than 25 countries carried out information campaigns for the general public, and 25 countries conducted active media outreach campaigns during EIW, yielding widespread coverage in print, online and broadcast media across the Region and even beyond. High profile international news outlets, such as CNN and Al Jazeera, interviewed WHO/Europe on the measles outbreaks and EIW.

Embracing new media
Several Member States used innovative communication techniques, including the launch in Switzerland and Ireland of iPhone applications to help track and manage immunization status. WHO/Europe produced a two-part podcast series on measles outbreaks and the shared threat from vaccine-preventable diseases and posted pro-immunization videos on the WHO/Europe website, the EIW campaign site and YouTube. Thousands of people listened to, viewed and/or downloaded these materials throughout EIW. Many members of the EIW campaign site also posted blogs, comments and pictures from events.

Related links
EIW podcasts: http://soundcloud.com/who_europe/sets/european-immunization-week/
EIW video: http://www.youtube.com/watch?v=BM6h-EesF-s

Partners
At the regional level, Mrs Zsuzsanna Jakab, WHO Regional Director for Europe officially launched EIW 2011 in Brussels, Belgium with Her Royal Highness Princess Mathilde of Belgium, WHO/Europe’s Special Representative for Immunization. High-level representation from partners included Mr Steven Allen, United Nations Children’s Fund (UNICEF) Regional Director, Dr Johan Gieseke from the European Centre for Disease Prevention and Control (ECDC) and Mr John Ryan of the Euro-
pean Commission. The launch was followed by a round-table discussion moderated by Professor Pierre Van Damme, Chairperson of the European Technical Advisory Group of Experts on Immunization in the WHO European Region (ETAGE). Participants included health officials from Belgium, France, Germany and Switzerland who shared their experiences in controlling the ongoing measles outbreaks and lessons learned to prevent future outbreaks. All participants agreed that health care professionals are a critical factor in successful and timely vaccination. The participants also renewed their commitment to the goal of eliminating measles from the Region by 2015.

Looking ahead
The seventh annual European Immunization Week will be held 20-27 April 2012 and countries will soon begin the planning process. Since WHO/Europe started EIW in 2005, the initiative has grown into one of the most visible public health events in the European Region, and EIW 2011 clearly showed how firmly Member States have embraced it. Although EIW lasts for only one week in April, it provides important momentum and helps strengthen the commitment needed to carry immunization forward in the European Region throughout the year.

Visit the EIW campaign site: http://eiw.euro.who.int

EIW by numbers
- 52 participating Member States
- more than 10 million children immunized through immunization campaigns in 10+ Member States
- 25+ countries launched media outreach campaigns
- 25+ countries held meetings, round tables, and conferences, while others conducted immunization trainings for public health workers
- 25+ countries developed and implemented information campaigns through a variety of mediums
- 550+ media “hits” across the European Region and globally
- 2200+ views/listens/downloads of EIW multimedia materials
- 145+ members contributed dozens of blog posts, comments and pictures to the EIW campaign site

Polio SIAs in response to the 2010 outbreak of wild poliovirus: Tajikistan’s experience

Background: In April 2010, the WHO European Region experienced its first importation of wild poliovirus since the Region was certified as polio-free in 2002. The importation resulted in a large-scale outbreak of poliomyelitis in Tajikistan and neighbouring countries, with 457 laboratory-confirmed cases of wild poliovirus type 1, including 29 deaths, reported in 2010.

At the January 2011 meeting of the European Regional Certification Commission for Poliomyelitis Eradication (RCC), the WHO Regional Office for Europe discussed with Member States the need to coordinate their supplementary immunization activities (SIAs) in order to effectively close any remaining immunity gaps and prevent the transmission of wild poliovirus across borders in the future. Acting on this advice, seven countries conducted synchronized SIAs during the first half of 2011: Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan conducted two rounds each with trivalent OPV (tOPV); Kazakhstan and the Russian Federation conducted two rounds of sub-national SIAs with monovalent OPV type 1 (mOPV1) and tOPV to halt transmission of
wild poliovirus in high-risk territories; and Azerbaijan implemented two rounds with tOPV in districts bordering the Russian Federation. In total, more than 18 million children were reached with polio vaccines in 15 rounds of SIAs.

**Tajikistan's experience:** Under the framework of European Immunization Week 2011, Tajikistan's Ministry of Health worked with WHO/Europe and UNICEF to hold national immunization days (NIDs) against polio on 18-22 April 2011. A second round was held on 23-27 May 2011. These campaigns, both conducted with tOPV, reached more than 2 million children.

Based on lessons learned during 2010 SIAs, the communication campaign for the NIDs against polio in 2011 focused largely on building and enhancing the capacity of health workers in the area of social mobilization. To assist with this goal, WHO/Europe and UNICEF organized a series of micro-planning workshops in March for more than 260 immunization officials across the country. The workshops included sessions on effective communication and social mobilization skills, with a particular emphasis on working with marginalized and underserved population groups.

The communication campaign also sought to spread the message about NIDs through broadcast media and printed materials. The WHO Country Office in Tajikistan, the Ministry of Health and UNICEF developed a special public service announcement, which was aired before and during NIDs on national television and radio, inviting parents to bring their children to get immunized. More than 30,000 posters and 5,000 banners were disseminated across the country to spread the message, as well.

Additionally, on 14 April the Ministry of Health organized a special annual press conference on matters related to the health sector in Tajikistan, which included the participation of all heads of health care facilities and medical institutions and was chaired by the Minister of Health. The press conference addressed the situation of the health sector in Tajikistan and the importance of the upcoming immunization rounds. It provided the mass media with an opportunity to ask questions and receive the latest information from the ministry of health.

To a large extent, the success of the polio national immunization days depended on the quality results of the communication campaign and whether correct, timely and sufficient information was provided to the public. The NIDs were deemed a success, with independent monitoring reporting coverage of 96% and 98.1%, respectively, for the two rounds.


---

**Measles in the WHO European Region**

**Overview of outbreaks April-June 2011**

Countries in the WHO European Region continued to battle large measles outbreaks in the second quarter of 2011, with outbreaks spreading between countries and to other regions of the world. For the period January – June 2011, of the 49 countries in the European Region that reported measles data, 39 countries reported a total of 24,493 cases of measles.

An increase in international travel during the Easter holidays in April further increased the risk of exportation and importation of measles, leading WHO/Europe to encourage health authorities of Member States to advocate for immunization before international travel and to make vaccines available to travellers. Summaries of the measles situation from April – June 2011 are available in the WHO Epidemiological Briefs 14, 15 and 16 (see link below).

Measles and rubella self-assessment tool (MESSAGE) launched by ECDC and WHO/Europe

The European Centre for Disease Prevention and Control (ECDC) and WHO/Europe jointly released "MESSAGE - MEaSles and rubella Self Assessment GEnerating tool" in May 2011. This self-administered, web-based questionnaire targets public health experts responsible for implementing preventive and control actions for measles and rubella. It offers a simple way for such experts to do a self-assessment of progress made towards eliminating measles and rubella and supports them in: identifying progress and gaps in program planning; evaluating the implementation process and preparing for the WHO verification process; and renewing their commitment to elimination targets. The report automatically generated by MESSAGE can be used as a basis for further systematic and more detailed country-specific assessment and action. MESSAGE uses the WHO European Region Measles and Rubella Elimination Strategic Plan to suggest actions that countries can take.

The MESSAGE tool can be accessed at: http://venice.cineca.org/register.php

Meetings

Laboratorians and epidemiologists need to work together to reach measles and rubella elimination in the WHO European Region

WHO/Europe and the Slovak Ministry of Health jointly organized a meeting in Bratislava, Slovakia from 15-17 June 2011, on strengthening the WHO European regional network of measles and rubella reference laboratories. Participants from the measles and rubella national reference laboratories from 33 Member States in the European Region discussed common challenges in the national measles and rubella surveillance systems and the need for enhanced communication and integrated information among the national laboratory, subnational laboratories and the epidemiology departments. Common issues concerning sample collection and quality laboratory confirmation were reviewed. While noting some operational and financial difficulties, all participants agreed that reference laboratories should be encouraged to perform virus isolation and to send measles and rubella virus isolates to their designated regional reference laboratory. Key recommendations from the meeting included the following:

- Member states are requested to strengthen national surveillance systems by linking the epidemiological and laboratory data, preferably through the use of electronic registry systems to provide evidence of achieving elimination.
- As molecular surveillance of measles and rubella strains has becoming a critical component of the disease elimination program, laboratories in the lab network are encouraged to share and update measles and rubella sequence information in the MeaNS database (http://www.who-measles.org/) in a timely manner and no later than two months after completion of the viral sequence.
- An enhanced external quality assessment system needs to be developed and implemented for molecular techniques to ensure consistency across the labnet on the quality of the molecular assays used by the different laboratories.
- Seroprevalence studies should be considered among the general population and specifically among vulnerable groups to evaluate susceptibility profiles to aide in understanding the extent of potential risks for future outbreaks.
- To better understand the situation regarding rubella viruses circulating in the Region, the number of samples collected for rubella genotyping should be increased by Member States.
- Member States are encouraged to employ alternative sampling techniques to tackle challenges related to sample collection, storage and transportation to improve the national surveillance. These techniques (e.g. filter paper) can be applied in difficult situations such as cross border or long distance sample transportation to laboratories.
WHO/Europe sentinel surveillance network for rotavirus plans for external quality assurance program and new reporting software

The second annual meeting of the WHO/Europe Sentinel Surveillance Network for Rotavirus was held on 16 May 2011 in the historic town of L’viv in western Ukraine. Participants included representatives from laboratories in eight newly independent states (Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan and Ukraine), including the six that are currently conducting active surveillance for rotavirus at identified sentinel hospitals, as well as representatives from the WHO Regional Reference Laboratory (RRL) in Minsk, Belarus and the WHO Regional Office for Europe in Copenhagen, Denmark.

The meeting offered an opportunity to present and discuss the performance of individual laboratories, and extensive discussions were held on the challenges laboratories face in terms of case investigation, including sample transportation within a country and to the regional reference laboratory in Minsk. However participants agreed that a great deal of progress had been made since the first network meeting in 2010 and were pleased to hear presentations from the RRL describing the results of quality assurance (QA) / quality control (QC) testing, which showed that all laboratories are performing at a very high level.

Plans for the upcoming year include the first implementation of an external quality assurance (EQA) program and the introduction of software for managing and reporting the results of rotavirus surveillance. A meeting planned for 2012 will provide more time to address these topics.

April 2011 meeting of the Strategic Advisory Group of Experts on Immunization (SAGE)

On 5-7 April 2011, WHO's Strategic Advisory Group of Experts on Immunization (SAGE) met in Geneva. This meeting addressed a broad array of topics, including:

• vaccination against pandemic and seasonal influenza, tick-borne encephalitis and meningococcal meningitis;
• polio eradication;
• and ongoing research efforts relating to IPV options for low-income countries in the post-eradication era.

SAGE also reviewed the report from the working group on rubella, which summarizes information on rubella vaccine characteristics, the global burden of congenital rubella syndrome (CRS), and country and regional experiences with use of rubella vaccines. This information formed the basis for formulating recommendations on possible goals and strategies for rubella/CRS prevention. SAGE emphasized the imperative for countries vaccinating their populations against measles to also vaccinate against rubella.

The full report, including conclusions and recommendations, can be viewed at the link below. The most recent meeting of SAGE took place 8-10 November 2011. More information about this meeting will be available in the next issue of European Immunization Monitor.


Upcoming Meetings

• 7 December: Planning meeting of the European Technical Advisory Group of Experts on Immunization (ETAGE)
• 8-9 December: Measles and rubella surveillance meeting – Bonn, Germany
• 14-15 December: Polio simulation exercise for 5 countries – Bosnia and Herzegovina
• 24-25 January 2012: Meeting of the Measles and Rubella Regional Verification Committee (MRRVVC)
Measles and rubella surveillance activities are contingent on the timely identification and reporting of cases to public health authorities in order to ensure complete case-investigation and appropriate outbreak control action. All Member States in the WHO European Region have agreed to eliminate measles and rubella from the Region by 2015. To achieve this target, all Member States are urged to report monthly surveillance data to WHO/Europe and ECDC in timely manner. A monthly report received on or before the 25th day of the following month is considered timely. It is only considered complete if received after the 25th.

The two graphs above show the current situation of monthly reporting in WHO European Region for measles and rubella, respectively. For measles, a regional target of at least 80% completeness has been achieved through the year, though the timeliness is still far below the target of 80%. For rubella, both timeliness and completeness need to be improved.