

Rotavirus Surveillance News

March 2007
Volume 2, Issue 1

A quarterly newsletter edited by Centers for Disease Control and Prevention, Atlanta, GA, USA

Upcoming Meetings

Vaccines for Enteric Diseases Meeting, April 25-27, Lisbon, Portugal

European Rotavirus Biology Meeting, June 3-6, Stockholm, Sweden

Third Annual Lab Directors' Meeting, June 7-8, Stockholm, Sweden

In Upcoming Issues...

- Update – African Regional Office of WHO (AFRO) network

Links to Partners

New Link!

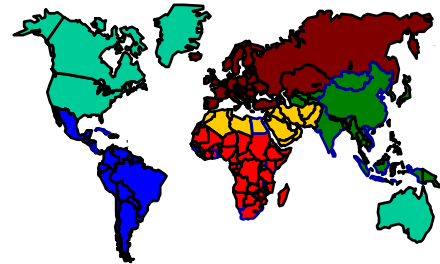
http://www.cdc.gov/rotavirus/global_surveillance/surveillance.htm – U.S. Centers for Disease Control and Prevention

www.who.int/en/ - World Health Organization

www.rotavirusvaccine.org – PATH's rotavirus vaccine program

www.ivi.org – International Vaccine Institute

www.cdcfoundation.org – CDC Foundation



Welcome

Welcome to the fifth edition of Rotavirus Surveillance News. The newsletter is a product of the Rotavirus Vaccine Program, a collaboration between the World Health Organization (WHO), the Program for Appropriate Technology in Health (PATH), and the U.S. Centers for Disease Control and Prevention (CDC) that is funded by the Global Alliance for Vaccines and Immunizations (GAVI). The Disease Burden and Surveillance Program, based at CDC, was

established to support surveillance activities and studies that would help define the disease and economic burden of rotavirus disease in countries and regions around the world. We intend for this quarterly newsletter to provide you with timely, helpful updates on the latest news related to rotavirus surveillance activities worldwide. Each issue will focus on one region or a type of activity, as well as provide updates on recent meetings, publications, and other

news of interest. In this edition, we will provide an update of the activities of the European Regional Network.

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Editor, Rotavirus Surveillance News

Update –European Regional Network

The Rotavirus Surveillance Network for the Eastern European/Central Asian countries of the WHO European Region was launched in December 2006, funded by a grant from the Rotavirus Vaccine Program (a partnership between PATH, CDC, and WHO). The region can look forward to obtaining important data on rotavirus disease from this collaborative effort. Published data on the burden of rotavirus disease in Eastern European and Central Asian countries with economies in transition are sparse. Establishing the national burden of rotavirus disease provides important

data for evidence-based decision making for introduction and sustained immunization with rotavirus vaccines. The WHO European Region includes several countries that may be early introducers of rotavirus vaccines. In November 2006, the Global Alliance for Vaccines and Immunization (GAVI) announced its decision to help fund subsidized vaccine purchase, thus accelerating public-sector introduction of rotavirus vaccine in GAVI-eligible countries in Europe and Latin America. In January 2007, WHO prequalified GSK's rotavirus vaccine, Rotarix™, paving the way for purchase by UNICEF

and other agencies. Merck has submitted its rotavirus vaccine, RotaTeq®, for prequalification by WHO. Among countries of the WHO European Region, two Central Asian Republics of Uzbekistan and Kyrgyzstan were the first to pilot rotavirus surveillance in 2003. These GAVI-eligible countries were originally counted as members of the Asian Rotavirus Surveillance Network.

Figure 1

<u>Country</u>	<u>RSN National Coordinator</u>
Azerbaijan	Dr. Nazifa Mursalova
Georgia	Dr. Marina Lashkarashvili
Kyrgyzstan	Dr. Kaliya Kasymbekova
Tajikistan	Dr. Sohbnazar Turkov
Ukraine	Prof. Ludmila Chernishova
Uzbekistan	Prof. Erkin Musabaev

Surveillance was expanded in 2005 and now includes 2 hospitals in Uzbekistan (in Tashkent and Bukhara) and 3 hospitals in Kyrgyzstan (1 in Bishkek and 2 in Osh). Recently published data from Uzbekistan have shown that 27% of hospitalizations for diarrhea in children under age 5 years are attributable to rotavirus infection [1].

In 2006, WHO European Regional Office (WHO/EURO) solicited rotavirus surveillance proposals from countries in the region. These proposals followed the WHO generic protocol for rotavirus surveillance. Four countries ultimately finalized plans for conducting surveillance at sentinel hospitals that care for children with severe diarrhea: Azerbaijan (2 hospitals in Baku), Georgia (1 hospital in Tbilisi), Tajikistan (1 hospital in Dushanbe), and Ukraine (1 hospital in Kyiv and 1 hospital in Odessa). Each hospital estimated that 400-1000 children aged < 5 years with severe diarrhea were treated annually at their institution.

For this new phase of surveillance in the region, site visits were made by teams representing CDC, PATH and WHO in August-October 2006. The teams met with country surveillance coordinators, hospital and laboratory coordinators, and officials from the ministries of health. It was clear that severe gastroenteritis in children was considered a major health problem in each country, and senior government officials were very interested in establishing surveillance for their country.

1. Isakbaeva, ET, Musabaev E, Antil L, et al. Rotavirus disease in Uzbekistan: cost-effectiveness of a new vaccine. *Vaccine* 2007; 25:373-380.

Hospital physicians and nurses were eager to develop local capability for identifying rotavirus as one of the major pathogens, and very likely the major pathogen, among the many children they care for daily with severe gastroenteritis. The groups discussed and finalized surveillance protocols and procedures based on the generic protocol developed by CDC and WHO. Additionally, laboratory capability and equipment needs were assessed.

Surveillance successfully began at each of the sentinel sites in December 2006. Each month, hospital coordinators collect enrollment data and report enrollment indicators. The national coordinator reviews and summarizes the data, and provides results to Ministry of Health officials. The data are then submitted to WHO/EURO following established reporting procedures. WHO/EURO staff review the submitted data, monitor the surveillance system, and work with countries to address any problems that arise. Technical consultants from CDC and PATH provide assistance to the network.

The start of rotavirus surveillance in these four countries marks the formation of the latest regional surveillance network. This network joins the established rotavirus surveillance networks in Sub-Saharan Africa, Latin America, Asia, and the Eastern Mediterranean region. The launch of surveillance in 4 additional countries in the European Region means surveillance is now underway in 6 of the region's 8 GAVI-eligible countries. This network will provide valuable data on the burden of severe rotavirus disease, and the evidence to support vaccine introduction.

Introduction of rotavirus vaccines in the WHO European Region could save an estimated 53,000 childhood deaths in GAVI-eligible countries by 2025. The recent commitment by GAVI has further invigorated country representatives in the European region to firmly establish their rotavirus surveillance platform, with an additional goal of using the network to monitor the impact of rotavirus vaccine introduction in the near future.

- Margaret Cortese, MD (CDC)
- Radmila Mirzayeva, MD, MPH (PATH)
- Robin Biellik, PhD (PATH)
- Elmira Flem, MD, MPH (Norwegian Institute of Public Health)
- Duncan Steele, PhD (WHO/HQ)
- Andrei Lobanov, MD, PhD (WHO/EURO)

Questions or comments?

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What's new?

- The GAVI Alliance approved the Investment Case for Rotavirus vaccines in November 2006.
- The CDC has a new website for global rotavirus disease burden and surveillance activities: http://www.cdc.gov/rotavirus/global_surveillance/surveillance.htm
- The CDC published post licensure safety data on Rotateq™ in March 2007 in the MMWR: <http://www.cdc.gov/MMWR/preview/mmwrhtml/mm5610a3.htm>