

Rotavirus Surveillance News

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Upcoming Meetings

Meeting on New Vaccine Surveillance Systems and their Integration, November 14-16, 2007, Geneva, Switzerland

WHO Meeting on Rotavirus Clinical Trials, November 27-29, 2007, Atlanta, GA

6th Asian Rotavirus Surveillance Network Workshop, December 3-4, 2007, Bangkok, Thailand

8th International Rotavirus Symposium, June 2-3, 2008, Almaty, Kazakhstan

In Upcoming Issues...

- Update –Latin American Regional (PAHO) Network

Links to Partners

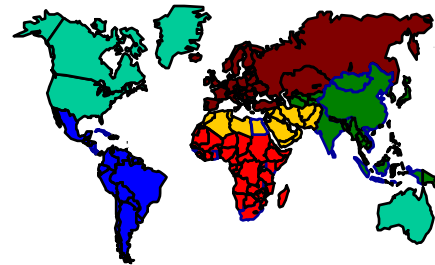
http://www.cdc.gov/rotavirus/global_surveillance/surveillance.htm – U.S. Centers for Disease Control and Prevention

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 sixth edition of Rotavirus Surveillance News. The newsletter is a product of the Rotavirus Vaccine Program (RVP), 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 provide an update of the activities of PATH-funded rotavirus surveillance in the African region

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Update –African Regional Network

Rotavirus disease is estimated to cause the death 527,000 young children annually, with approximately 250,000 of these deaths occurring in Africa.

In May 2005, in response to this tremendous disease burden, a meeting convened by WHO/AFRO in Accra, Ghana, re-emphasized the critical need for local epidemiologic and strain data to inform country level decision-making to introduce rotavirus vaccines.

Moreover, the need to collect these data in a

standardized fashion throughout the region using the WHO generic protocol was emphasized. The meeting also recommended the establishment of rotavirus surveillance in Africa as part of the existing Hib-PBM and other regional surveillance networks coordinated by WHO/AFRO. The countries were selected on a case-by-case basis using agreed criteria including EPI programme quality, national surveillance capacity, and experience with other AFRO supported surveillance networks for infectious diseases.

AFR RSN was initiated in July and August 2006 initially in four countries (Ghana, Kenya, Uganda and Zambia) to conduct sentinel-hospital based surveillance of rotavirus disease in children under 5 years using the standardized WHO protocol and comparable Enzyme Immunoassay (EIA) rotavirus diagnostic technique. The surveillance is performed by the respective ministries of Health (MoH) with the support from WHO and partners (CDC, RVP-PATH).

Figure 1

Summary of preliminary rotavirus surveillance data in hospitalized children <5 years of age				
Country (# of Sites)	Time Period	# < 5 yr children hospitalized	# stool samples collected	# EIA Rota +ve
AFRO Coordinated Surveillance				
Ghana (1)	Jun 2006 – May 2007	653	158	93 (58.9%)
Kenya (1)	Aug 2006 – May 2007	895	895	423 (47%)
Uganda (1)	Jun 2006 – May 2007	1269	673	314 (47%)
Zambia (1)	Aug 2006 - Feb 2007	233	233	66 (28%)
Senegal (1)	Aug 2007 - present	N/A	47	15 (32 %)
Zimbabwe (1)	Jan 2007 – June 2007	51	51	7 (14%)
RVP Coordinated Surveillance Sites				
Ghana (2)	Nov 2005 – Feb 2007	580	307	126 (41%)
Kenya (2)	May 2005- May 2007	1061	1061	241(23%)
Malawi (2)	July 2005 – Aug 2006	683	683	262 (38%)
South Africa (1)	Jan 2005 – July 2007	1955	1951	568 (29%)

Ghana: In June 2006, the Ministry of Health and AFRO started surveillance at Korle Bu Teaching Hospital, Accra. In addition, RVP-PATH funded surveillance has been conducted since January 2005 at both Korle Bu Teaching Hospital in Accra and the Navrongo War Memorial Hospital in Navrongo. Because of the clear seasonality of rotavirus infection exhibited in past studies, the hospital surveillance has been limited to the months of November to February each year.

Kenya: In August 2006, the Ministry of Health and the Expanded Program on Immunization (KEPI), initiated the rotavirus surveillance at Kenyatta National Hospital (KNH), Nairobi. RVP-PATH funded surveillance coordinated by the CDC was conducted for two years (May 2005- May 2007) in Kisumu Kenya and has now ended.

Uganda: In June 2006 the Ministry of Health and Uganda Expanded Program on Immunization, (UNEPI) started surveillance at Mulago Hospital, Kampala. Of the 314 rotavirus positive children detected in one year, 96% were in children under 2 years of age.

Zambia: The MoH started surveillance in August 2006 at the University Teaching Hospital, Lusaka.

Zimbabwe: Surveillance began at the Pairirenyatwa Hospital in January 2007.

Malawi

Since August 2006, rotavirus surveillance has been conducted in Malawi at the four following sites: Kamuzu Central Hospital in Lilongwe, Mangochi District Hospital, the Karonga District Hospital and the Queen Elizabeth Central Hospital in Blantyre.

South Africa

RVP coordinated surveillance has been ongoing in Dr. George Mukhari and Brits Hospitals since January 2005.

Other Updates

Three national data managers (from Kenya, Uganda and Zambia) were trained during the orientation workshop held in Arusha, Tanzania (4th – 10th June 2006) for Eastern Block data managers and surveillance officers. Four additional countries (Ethiopia, Cameroon, Senegal and Tanzania) have either just begun surveillance or will do by August 2007. Since surveillance began, two new rotavirus vaccines have been licensed in

several African countries; Rotarix® has been licensed in 19 and RotaTeq® in seven African countries as of August 2007. No country has yet started routine rotavirus vaccination.

Strain typing

Two regional rotavirus reference laboratories (RRL), funded by RVP-PATH were established to support the AFR RSN. These RRL are based at the Noguchi Memorial Research Institute (NMRI), Accra, Ghana to support the surveillance in West/Central block and Diarrhoeal Pathogens Research Unit (DPRU), University of Limpopo, Medunsa Campus, South Africa to support the East/South Block. These laboratories continue to train laboratorians in Africa. The 7th rotavirus training workshop was held at the DPRU on 5th – 30th March 2007 for members of the AFRO network and other countries. A further training workshop in typing methods was held in Noguchi Memorial Research Institute (NMRI), Accra, Ghana, September 17 – October 6, 2007.

List of Principal Investigators

- Dr. Christabel Enwerou-Laryea and Dr. George Armah, Ghana
- Dr. Rose Kamenwa, Mr. Munyi Bakari, Mr. James Nyangao, Kenya
- Dr. Mwaka Monze, Dr. Evans Mwila
- Mpabalwani, Ms. Julia Namwaka, Zambia
- Dr. Eric Wobudeya, Uganda
- Dr. I. Pazvakavanbwa, Ms. Chipso Berejena, Zimbabwe

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- Dr. Jason Mwenda
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Questions or comments?

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What's new?

- RotaTeq® efficacy trials have begun in Vietnam, Kenya, Bangladesh, Mali, and Ghana.
- Enrolment in Rotarix® efficacy trials in Malawi and South Africa has now ended.