

PRESS INFORMATION – FOR IMMEDIATE RELEASE



Hib vaccine: A critical ally in Asia's effort to reduce child deaths
New study shows Hib vaccine protects children from significant burden of life-threatening pneumonia and meningitis

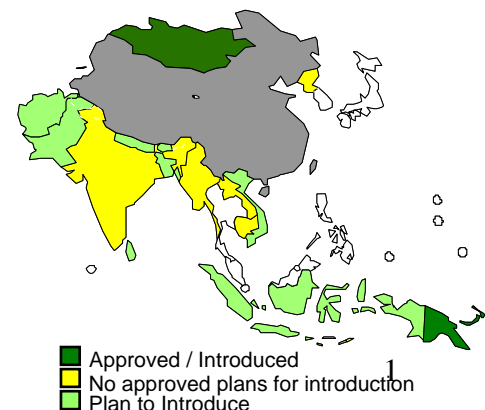
- **Study shows Hib vaccine could prevent about 1/3 of life-threatening cases of bacterial pneumonia, the leading infectious cause of death in Asian children**
- **Findings confirm burden of Hib pneumonia and meningitis grossly underestimated in Asia**
- **More Asian countries now planning introduction of Hib vaccine, others still considering this option**

Dhaka, Bangladesh, 27 June 2007 – A new study from Bangladesh published online today in *The Pediatric Infectious Disease Journal* shows that routinely vaccinating infants against *H. influenzae* type b (Hib), a bacterium that causes deadly Hib pneumonia and meningitis, could save hundreds of thousands of children in Asia. Results showed that routine immunization of infants with a Hib conjugate vaccine prevented over one-third of life-threatening pneumonia cases and approximately 90% of Hib meningitis cases. A similar impact would be expected in other parts of the region.

Although countries in Asia with high mortality rates have long known that pneumonia and meningitis are a significant concern, many assumed that Hib was not a major cause. This vaccine study builds the evidence of the real burden of Hib pneumonia and meningitis as has been shown in other studies in Chile and Indonesia, that is that the proportion of pneumonia and meningitis prevented by the Hib conjugate vaccine is significantly higher than what can be detected through routine surveillance.

“There has been an ongoing disagreement about the total burden of Hib pneumonia and meningitis in Asia, but our findings provide evidence challenging the commonly held notion that these diseases are rare in Asia,” said Dr Abdullah Baqui, Associate Professor, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA. “Our research shows that routine Hib vaccination is a feasible and highly effective way of preventing death

**Status of Hib Vaccine Introduction
in GAVI Eligible Countries in Asia
May 2007**



related to Hib pneumonia and meningitis and could save the lives of a significant number of Asian children who die under the age of five.”

“Bangladesh views Hib vaccine as an integral tool in our mission to improve child survival in Bangladesh,” said Dr. Md. Abdul Quader Mian, Deputy Director EPI and Programme Manager Child Health & LCC, Ministry of Health, Bangladesh. This study supports the conclusion of the consultative workshop organized in June 2006 by WHO around the introduction of the Hib vaccine into Bangladesh.

The study was conducted by researchers from International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR, B), Dhaka Shishu Hospital and John Hopkins University. The vaccine used in the study replaced the routine diphtheria, tetanus and pertussis (DTP) vaccine with a DTP-Hib combination. The combination vaccine did not require additional injections or visits to benefit from the expanded protection. Bangladesh recently applied for funding from the GAVI Alliance to introduce a DTP-Hepatitis B-Hib “pentavalent” combination which they hope to introduce into the routine childhood immunization program in 2008.

Despite a growing body of evidence, only 26% of the world’s children live in countries with access to Hib vaccine. This means hundreds of thousands of children in Asian countries are currently not benefiting from this simple, life-saving vaccine. However, Bangladesh, Pakistan, Afghanistan, Sri Lanka and Bhutan have reviewed available evidence and made the decision to introduce Hib vaccine and applied for support from the GAVI Alliance.

“We are delighted that so many Asian countries are preparing to introduce the Hib vaccine and protect their children against Hib pneumonia and Hib meningitis” said Julian Lob-Levyt, Executive Secretary of the GAVI Alliance. “This is a clear indication of these governments’ commitment to reduce child mortality.”

The WHO recommends that all countries adopt Hib vaccine into routine child immunization programs. They estimate that Hib globally is responsible for 400,000 deaths each year in children under five years of age and around 3 million cases of serious illness resulting in long term consequences such as deafness, learning disabilities, paralysis and mental retardation.

“This simple, life-saving vaccine can prevent Hib pneumonia and meningitis in children, often called the ‘invisible cause of forgotten child killers’ in Asia,” said Dr. Kent R. Hill, Assistant Administrator, Global Health. “Immunization programs, including Hib, are an essential component of USAID’s strategy to prevent life-threatening childhood infections. These data are clear - Hib vaccine is an important addition to immunization programs through out Asia. Supply studies tell us quality manufacturers from developing countries are coming into the market very soon and prices for this vaccine will be coming down in the very

near future. Now is the time for additional Asian countries to make this important addition to the EPI programs. I commend the GAVI Alliance and the countries of Bangladesh, Pakistan, Afghanistan, Sri Lanka and Bhutan for moving quickly to reduce needless Hib related child deaths

[ENDS]

Notes to Editors

Study Facts

- This was a case-control study in a birth cohort of approximately 68,000 children aged less than two years in Dhaka.
- Children were randomly assigned DTP-Hib vs. DTP vaccine,
- Cases, children confirmed as having pneumonia or meningitis, were compared with controls, children with similar characteristics who did not have these diseases
- Each case was matched with four community based controls on age, sex, season and distance; each case was also matched with two hospital controls
- Vaccination status in the cases and controls was compared, in order to determine vaccine effectiveness
- The study aimed to help Bangladesh to estimate the effectiveness of Hib vaccine in preventing bacterial meningitis and X-ray confirmed pneumonia
- All pneumonia cases were confirmed by X-ray according to the WHO methodology; all Hib meningitis and probable bacterial meningitis were confirmed by laboratory tests
- The preventable fraction of X-ray confirmed pneumonia using community and hospital controls respectively, was 34% and 44%
- The preventable fraction of confirmed Hib meningitis using community and hospital controls was 89% and 93% respectively
- The protocol was reviewed and approved by ICDDR, B and Dhaka Shishu Hospitals' Research and Ethics Committees.
- The study was funded by the Urban Primary Health Care Project (UPHCP) of the Government of Bangladesh, Asian Development Bank, the United States Agency for International Development (USAID) and the National Vaccine Program Office (NVPO) of the USA. Technical assistance was provided by WHO.

Hib Pneumonia and Hib Meningitis

The Hib bacterium is the leading cause of meningitis in children and one of two major causes of severe childhood bacterial pneumonia. Pneumonia and meningitis caused by other bacteria such as pneumococcus and meningococcus (which causes meningitis only) will not be prevented by Hib vaccine, but vaccines for these diseases will be available in the near future.

World Health Organization (WHO)

The World Health Organization is the United Nations specialized agency for health. It was established on 7 April 1948. WHO's objective, as set out in its Constitution, is the attainment by all peoples of the highest possible level of health. Health is defined in WHO's Constitution as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The GAVI Alliance

An alliance of all the major stakeholders in immunization, the GAVI Alliance includes among its partners developing country and donor governments, the World Health Organization (WHO), UNICEF, the World Bank, the vaccine industry in both industrialized and developing countries, research and technical agencies, NGOs, and the Bill & Melinda Gates Foundation. It is estimated that more than 2.3 million early deaths will have been prevented as a result of support by GAVI up to the end of 2006. GAVI's efforts are critical to achieving the Millennium Development Goal on child health, which calls for reducing childhood mortality by two-thirds by 2015. Of the more than 10 million children who die before reaching their fifth birthday every year, 2.5 million die from diseases that could be prevented with currently available or new vaccines.

The Hib Initiative

In December 2005, the GAVI Alliance launched a \$37 million program called the Hib Initiative, which unites infectious disease experts from Johns Hopkins Bloomberg School of Public Health, the London School of Hygiene and Tropical Medicine, the U.S. Centers for Disease Control and Prevention (CDC), and WHO to advance evidence-informed

decision-making regarding the use of Hib vaccine in the developing world. An estimated 3 million cases of Hib disease occur each year in children under the age of 5 years, resulting in approximately 400,000 deaths. For more information, please visit: www.hibaction.org.

For further information on Hib pneumonia and meningitis or to arrange an interview with an expert, please contact:

Dr. Serguei Diorditsa

Medical Officer
Immunization and Vaccine Development
World Health Organization Bangladesh
Office: +880 2 989 95 40
Email: diorditsas@searo.who.int

Tim Parsons

Director, Public Affairs
Johns Hopkins Bloomberg School of Public Health
Office: +1 410 955 7619
Website: www.jhsph.edu/communications

Ruth Landy

Senior Programme Officer, Advocacy & Communications
The GAVI Alliance
Mobile: +41 79 336 3031
Email: rlandy@gavialliance.org
Website: www.gavialliance.org

Lois Privor-Dumm, MIBS

Director, Communications Strategy
The Hib Initiative
Mobile: +1 484 354 8054
Email: lprivord@jhsph.edu
Website: www.hibaction.org

Dr. Md. Abdul Quader Mian

Deputy Director EPI and Programme Manager
Child Health & LCC
Directorate General of Health Services
Ministry of Health and Family Welfare
Government of Bangladesh

Christopher Thomas

Communications Director
USAID
Office: +1 202-712-1092
Email: chthomas@usaid.gov
Website: www.usaid.gov

Melinda Henry

Immunization, Vaccines and Biologicals
World Health Organization (WHO)
Office: +41 22 791 2535
Email: henrym@who.int
Website: www.who.int

Georgina Pinnington

Consultant
Ruder Finn Communications
Office: +44 20 7462 8932
Email: gpinnington@ruderfinn.co.uk