

Bangladesh introduces new vaccine to prevent severe forms of child pneumonia and meningitis

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Today, Bangladesh introduces a new combination vaccine that will protect its children against five killer diseases in one injection, including, for the first time, the deadly bacterium *Haemophilus influenzae* type b (Hib) that causes some severe forms of pneumonia and meningitis. In a ceremony in Khulna District, southwest of the capital Dhaka, the Minister of Health and Family Welfare, Professor A.F.M. Ruhul Haque, along with other health officials and representatives of UN agencies and development partners will administer the first shots of the combination vaccine to Bangladeshi children.

Hib is one of the causes of severe pneumonia and meningitis among children. Each year, Hib is estimated to cause millions of serious illnesses and 400,000 deaths globally, the majority of them among children under five years of age. Even with treatment, thousands of children die of Hib disease every year. Survivors are often permanently disabled—paralyzed, deafened or brain damaged. The vaccine can prevent about one third of life-threatening cases of bacterial pneumonia, the leading infectious cause of death in children worldwide. In Bangladesh, it is estimated that 24% of under-five child deaths is due to pneumonia.

The vaccine will be provided under the routine immunisation programme to nearly four million children born in Bangladesh every

year. As Bangladesh records high routine immunisation coverage, it is estimated that Hib vaccine can save about 20,000 children's lives annually.

"This life-saving vaccine represents an important step forward in preventing childhood diseases in Bangladesh", said A.M.M. Nasir Uddin, Secretary of the Ministry of Health and Family Welfare at the launch. "It will greatly help our country to achieve Millennium Development Goal 4 which aims at reducing under-five mortality."

"Hib vaccine is a safe, effective and highly cost-effective intervention used for more than 18 years in developed and many developing countries. Where used routinely, it has virtually eliminated Hib disease," commented Dr. Rana Hajjeh, Director of the Hib Initiative at Johns Hopkins University. "Clearly, Hib vaccine will have a major impact in Bangladesh in the same way it has saved thousands of children in other countries." In South-Asia, Sri Lanka and Pakistan introduced the Hib vaccine in 2008.

The new combination or 5-in-1 vaccine will protect children against Hib and four other deadly diseases: diphtheria, tetanus, pertussis, and hepatitis B. Instead of three different injections (for DPT, Hepatitis B and Hib), children will only need one injection at three different times during their first year of life: at the age of 6 weeks, 10 weeks and 14 weeks. This will make it easier for health workers who will need less time and less logistics to immunise all children. It will also increase the uptake of vaccine as each child will get all five vaccines at once.

"We are proud to be part of this new initiative by helping with the procurement of the vaccines and supporting the training of about 60,000 health workers together with WHO," said UNICEF Deputy Representative in Bangladesh, Dr. Iyorlumun J Uhaa.

The introduction of the 5-in-1 vaccine in Bangladesh is carried out with financial and technical support from the GAVI Alliance and its key partners including UNICEF, WHO and the Hib Initiative. GAVI will spend more than US\$95 million for procuring more than 27 million doses for 2009 - 2010. The Government of Bangladesh will co-finance the purchase by investing US\$5.6 million during the same period.

"Vaccines and improvement in health and immunisation systems are much needed in this part of the world," said Dr. Julian Lob-Levyt, Executive Secretary of the GAVI Alliance. "We applaud Bangladesh for taking this important step to help prevent more childhood diseases."

"The introduction of new Hib vaccine will drastically reduce the burden of Hib disease. At the same time, the use of the combination vaccine containing five antigens in one shot will increase the Routine Immunisation Coverage and it will result in reduction of morbidity and mortality from other vaccine preventable diseases", said WHO Representative in Bangladesh, Dr Duangvadee Sungkhobol.

With high poverty, low literacy levels, and limited access to healthcare, many sick children in this densely populated country of 155 million never reach a hospital and often die at home. Vaccines that protect children against preventable high-mortality infections, such as Hib, are urgently needed.

"The situation with Hib disease in Bangladesh is very grave, since drug-resistant strains are increasing, and to treat infection doctors must use expensive drugs, which are not readily available in most hospitals," said Dr. Samir Saha, a Microbiologist at Dhaka Shishu Hospital. "This vaccine will prevent needless suffering, disability, and death." Dr. Saha coauthored a case-control study showing that routine immunisation of infants with Hib vaccine prevents one third of serious pneumonia cases

and more than 80% of probable bacterial meningitis cases in Bangladesh.

Source: GAVI Alliance

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