In accordance with the 2003 World Health Assembly resolution, as well as the current global and South-East Asia Regional measles reduction strategy, the Government of Bangladesh (GoB) has developed and adopted a Measles Control Plan of Action 2004-2010. In the 1st meeting of the National Steering Committee on Polio Eradication and Measles Control held on 6th March, it was decided to conduct a nationwide Measles Catch-up campaign in two phases throughout the country.

Facts on measles in Bangladesh

- Nearly 20,000 children <5 die from measles annually in Bangladesh
- It is the 5th leading cause of death of <5 children
- 71% immunization coverage has been achieved so far
- Approximately 40% of children in each birth cohort remain susceptible to measles

The biggest public health event in Bangladesh: Measles Catch-up Campaign Phase-2

Do you have any plans for the 25th of February this year? Even if you don't, millions of children and their parents will be lining up to take part in a momentous event that day. February 25 marks the beginning of Phase-2 of the Measles Catch-up Campaign.

If ever Bangladesh needed a truly all out effort to fight measles - which is a leading cause of death and disability among children - it is now. Nearly 20,000 children under five years of age die from measles annually in Bangladesh. Yet, the routine measles vaccination coverage has reached only 71% and measles vaccine is 85% efficacious when given at 9 months of age. As a result, around 40% of children in each birth cohort remain susceptible to measles due to dropout, left out and failure to develop immunity. These children need a second opportunity of vaccination against measles for survival. The Measles Catch-up Campaign in Bangladesh, which is called the Haam Protirodhe Tikadan Campaign 2005-2006, is just such an opportunity. During this campaign, approximately 35 million children of the age of 9 months to <10 years will be vaccinated against measles. Phase-2 will cover 33.5 million children.

Campaign Phase-1 kick off in 2005

September 2005 saw Bangladesh experience the launch of one of the largest mass measles campaigns ever implemented in the world. A fitting answer indeed to the clamour for a second opportunity for vaccination.

Of the campaign's targeted 35 million children of the ages of 9 months to <10 years, approximately 1.5 million children were vaccinated through intersectoral collaboration and a partnership between the Bangladesh Government, Government of Japan, Centres for Disease Control (CDC), WHO and UNICEF. Phase-1 of the campaign had a total 1,622 vaccinators and 15,500 volunteers vaccinate over a million children in more than 10,000 sites in 3 weeks. Not a mean feat!
Lessons that have paved the way

The 3rd National Steering Committee on Polio Eradication & Measles Control endorsed the dates of the Phase-2 Campaign. Phase 2 will be conducted over 3 weeks in 62 districts and 5 city corporations from 25th February to 16th March, 2006. The campaign will be the largest public health undertaking in the history of Bangladesh involving more than 50,000 skilled vaccinators, 750,000 volunteers, more than 100,000 schools and 150,000 EPI centres.

Preparing for Phase-2 of the campaign involved a close look at the reasons behind the success of Phase-1, conducted in the districts of Bogra and Rajshahi, and Rajshahi City Corporation.

Intersectoral collaboration played a unique role in the success of the first phase, which was implemented with resources mainly from the Government of Japan. At the national level Government ministries, NGOs, and private sectors were involved, with the Ministry of Health and Family Welfare leading and coordinating the campaign activities.

Advocacy meetings were key elements of success. Such meetings were held at all levels to convey the campaign message to the national leaders, policy makers, NGOs and professional bodies like teachers, physicians, journalists and nurses.

Lessons learned / key success factors:

- High level of commitment by different GoB and non-GoB sectors as well as national leaders and international partners.
- Participation from education, administration, religious affairs, local people's representatives, social bodies and NGOs.
- Realistic and comprehensive micro-planning. IPC was reported to be the most common and effective method of communication, that followed miking. School children also played a great role in the dissemination of campaign messages.
- Adequate and timely supply of vaccine and logistics. No shortage of either.
- Effective implementation of supervision and monitoring plans in most places. Local, national and international observers supervised and monitored the campaign.

Health and family planning workers cooperated fully with each other while conducting their campaign duties.

Extensive mass media communication efforts were carried out. National and international observers supervised and monitored Phase-1.

Some special initiatives were also undertaken by GoB. EPI headquarters arranged observation visits of Divisional Directors (Health & Family Planning), Civil Surgeons, Deputy Directors (Family Planning) and Chief Health Officers of City Corporations from all over the country with the view that this would ultimately help them in planning and preparing for Phase-2 in their respective areas.
Phase-2 preparations in full swing!

All pre-campaign activities were planned well ahead of time. EPI and UNICEF with technical assistance from WHO, made a contingency plan and temporarily hired 420 M3 cold storages near the International Airport to use as a temporary store for the campaign from mid December 2005 to mid March 2006. A comprehensive vaccine and logistics plan was also developed based on the number of target children and storage capacity at each level. A logistics consultant was appointed for planning and distribution of vaccine and logistical support.

Four hundred freezers /ILRs were distributed and are already installed at different districts and upazilas for storing the measles vaccine and freezing ice-packs. Vaccines for the campaign started arriving in Bangladesh from mid December 2005 and are being stored at the Bangladesh Agricultural Development Corporation (BADC) storeroom. Vaccines are being distributed to different districts according to the distribution plan. Other logistics, such as Auto Disable & reconstitution syringes & safety boxes, have also reached the Chittagong port and are already being distributed to different upazilas according to the distribution plan.

As Phase-2 will be conducted nationwide, effective intersectoral collaboration is essential for campaign success. So letters are being issued to different Ministries and Directorates to seek their support at all levels.

To ensure quality of the campaign, national and district level Training of Trainers (TOT) and upazila level training have been completed. And now volunteer orientation has been initiated. These activities, facilitated by the WHO supported Surveillance Medical Officers’ network, is being implemented by the Government.

WHO’s technical assistance to the campaign includes procurement of cotton wool, printed materials for training, monitoring & supervision, and reporting. A campaign guide book for managers, field workers and volunteers has already been developed by EPI supported by WHO, and printed and distributed according to the training plan. Registration and reporting forms and five types of micro-planning forms have also been developed and printed under this process. WHO has also provided finger markers to mark all children after vaccination.

In addition to procurement of vaccines, injection materials and cold chain equipment, UNICEF is supporting the EPI communication sub-group for the campaign and handling media coverage of the event. A work plan has been developed in collaboration with EPI and other development partners. UNICEF has also taken on the responsibility for social mobilization events and IPC, including developing, printing and distribution of all communication materials (poster, planner, banner, folder, fact sheet & leaflet). UNICEF also provided support for advocacy activities, child registration, miking, banners, cold chain management etc.

In all, preparations are proceeding well pointing the way for a highly successful Phase-2 campaign. This phase is mainly funded by the American Red Cross through the United Nations Foundation (UNF). GoB is contributing a substantial amount (25%) of the operational costs.

Items procured for the campaign:
- Vaccines - 40 million doses
- AD syringes - 40 million
- Reconstitution syringes - 4 million
- Safety boxes - 200,000
- Cold boxes - 455
- Vaccine carrier -18,000
- Ice packs - 70,000
- Ice-lined refrigerator - 400
The partners speak about the campaign...

Since the first phase of the Measles Catch-Up Campaign, strong partnership has played a very crucial role. There is no question that GoB, American Red Cross, CDC, WHO and UNICEF are contributing their best efforts to make Phase-2 a success.

**GoB talks about:**

- *Why Bangladesh has decided to undertake such a large scale Measles Catch-Up Campaign, and whether GoB feels prepared to undertake such a large initiative.*

Since 1995, Bangladesh has demonstrated, through as many as 12 National Immunization Days, its capability to successfully conduct nation wide health campaigns. The excellent health infrastructure, already trained vaccinators, multisectoral involvement and people's commitment all contribute to the conviction that such a large initiative can be successfully implemented in this country.

- *Some of the experiences of the EPI program in mobilizing intersectoral partnerships in support of the campaign, a major strategy of which is reaching children through school.*

There are 4 crucial means by which intersectoral partnerships have been mobilized. Firstly, through high level political commitment; secondly by mobilizing the members of the National Steering Committee on Polio Eradication and Measles Control; thirdly, by mobilizing all Ministers through an intersectoral Ministerial meeting; and fourthly, by mobilizing professional groups and the private sector entities through advocacy meetings.

- *Some important lessons learnt from Phase-1 of the campaign that will ensure success in Phase-2.*

There are two key lessons from Phase-1, which are: the importance of a very good campaign plan, and the undeniable need for a multisectoral approach.

**WHO and UNICEF talk about:**

- *How they are supporting the Measles Campaign.*

WHO: In the joint strategic plan for the reduction of measles mortality (2001-2005), WHO and UNICEF targeted 45 priority countries (including Bangladesh) for the implementation of a comprehensive strategy for accelerated and sustained reduction of measles related deaths. In line with this, WHO is providing technical support to the Measles Catch-Up Campaign in terms of Surveillance Medical Officers and EPI facilitators in the field, training materials and operational support costs.

UNICEF: UNICEF support to the campaign should be seen in the context of its overall support to GoB, the essence of which is to make sure that children do not die of vaccine preventable diseases, in particular, measles. For this campaign, UNICEF's support is in terms of ensuring vaccine supply, community mobilization, media coverage of the event, and ensuring the cold chain system for the vaccines.

- *Lessons learnt from Phase-1 that will help make Phase-2 a success.*

WHO: GoB, with WHO assistance has demonstrated that through careful planning and multisectoral collaboration, a safe measles control campaign can be conducted without hampering routine EPI.

UNICEF: In addition to the need for strong partnership, an important lesson is the need to train health workers to prevent vaccine wastage. The vaccine quantities in vials differ when they are bought from different manufacturers (because of the global vaccine shortage). The health workers must be trained to recognize this difference and not throw the diluents away when there are more left.
**Campaign strategy**

- The measles campaign will be conducted as a rolling campaign in wards over 3 weeks.

- In the rural areas, it will be conducted in educational institutions and in the community separately. The same regular vaccinators will work both in educational institutions and in outreach sites at community level. Vaccinators and volunteers will be grouped into 3 teams, one for each of the 3 wards in each union. The vaccination will be conducted in educational institutions during the 1st week and in the routine EPI sites during the 2nd and 3rd weeks.

- In urban areas, educational institutions will be covered in the 1st week using all available vaccinators, including trained temporary vaccinators. It will continue through regular EPI sites (as in rural areas) in the following 2 weeks without interrupting routine EPI services.

- At least one fixed site in each City Corporation ward, upazila and municipality will remain open on every working day throughout the campaign period.

- Additional teams will be deployed as needed.

**Who will be vaccinated?**

All children aged 9 months to <10 years will be vaccinated regardless of previous vaccination status and measles illness.

So what happens when during the campaign, vaccinators or volunteers encounter children who have already received a dose of routine measles vaccine just less than 4 weeks prior to the campaign? These children may be given vaccine doses from any site during the campaign period; but 4 weeks have to pass from one dose to another.

If a child aged 9-23 months has not received any routine measles vaccine, the dose given during campaign will be considered as campaign dose. Guardians will be requested to bring the child 4 weeks later to any routine EPI session to receive the regular dose before they reach two years of age.

And what about the target-age children hospitalized during the campaign? They will be vaccinated after consultation with their physicians of course!

**Street children won't be overlooked**

Street children and other high-risk populations in urban areas probably will not visit a school or community vaccination site. These children are most likely to have missed their routine dose in their infancy and may also miss the second opportunity. As a special approach to reach them, additional teams will be assigned, as needed, to cover railway stations, bus stations, river and sea terminals, parks or even footpaths. They shall need to work in rural areas, such as in haor and char areas, big market areas, and places where working mothers stay with their children, as well as in rice mills, brick fields, brothels and jails.
Mobilizing the population

Field workers and volunteers have already started house-to-house visits to register target children and to inform guardians about the importance of the campaign and the vaccination schedule in the area.

IPC is being conducted in educational institutes by union/urban ward supervisors to motivate authorities and seek their support to ensure the presence of all target students on the day of the campaign.

Religious leaders are being requested to disseminate the campaign message through weekly prayers and personal communication. People's representatives e.g., union council members, chairmen, commissioners and MPs are being enlisted in motivating people to participate in the campaign and local resource mobilization.

In addition to these activities, an extensive media mobilization strategy has been undertaken with BTV, the Population Cell (Bangladesh Betar), Department of Mass Communication, Press Information Department, private TV channels, newspapers and renowned personalities. These groups are contributing their time to promote the campaign.

Advocacy to clinch all out support

The campaign planners are pinning their hope for support and participation of every section of the society on an intensive advocacy drive. Advocacy meetings are being held at national, divisional, City Corporation, district and upazila/municipality levels.

At the national and district levels meeting are also being held with professional bodies such as, the Bangladesh Medical Association (BMA), the Paediatric Association (at national level), renowned medical professionals, and news editors.

City Corporation Coordination meetings, District Coordination Committee meetings, and Upazila Coordination meetings are being held. Meetings are also being held with education officers and Teachers' Association leaders at the City Corporation and district levels.

As the campaign date draws closer, Press Conferences will be organized, including a national Press Conference. And finally, in a culmination of all the preparatory work, the campaign will be launched at all levels by local representatives on the 25th of February.
Training has been concluded up to the supervisor/field worker/vaccinator level. Two trainers from each district participated in the national TOT, and in turn facilitated TOT in their own districts. Besides them, officers in EPI HQ, Surveillance Medical Officers and District Immunization Medical Officers also participated in the national TOT.

City Corporation and District TOT were next initiated followed by the vaccinators' and supervisors' training. Volunteers' orientation has now been initiated.

Separate TOT were held in every district and City Corporation in batches. One batch for every 6 upazila and one batch for every City Corporation (except Dhaka City Corporation) were organized. The vaccinators' and supervisors' training were also conducted in batches at upazila/ municipality/ zone level. It was a one-day training on the operation of the campaign, responsibilities, management of Adverse Effects Following Immunization (AEFI), waste management and injection practice. Training was arranged separately for vaccinators and supervisors in such a way that routine EPI was not disturbed.

In each rural/municipality ward 24 volunteers are being oriented in batches. In City Corporation wards, more than one batch of volunteers may need to be oriented. Trained 1st line supervisors of the respective union or urban ward are facilitating the orientation.

Separate AEFI surveillance and management training will be conducted for all doctors, paramedics and field workers before the campaign as a part of the national AEFI surveillance program.
Distributing the vaccines: A Mammoth Task

EPI Bangladesh is primarily overseeing the handling of vaccines with assistance from the logistics consultant.

Planes were chartered to transport the vaccines to Bangladesh, and on arrival were stored at the BADC storeroom. The very next day, the vaccines were transported to different districts in closed trucks to avoid being exposed to direct sunlight.

During implementation, vaccines will be transported with large vaccine carriers containing four icepacks inside. Diluents will be kept between +2 to +8 degree celsius one day before they are used. Each immunization team will use 2 vaccine carriers, i.e., one for measles vaccines and the other for extra icepacks to boost the cold chain.

The EPI HQ will have buffer stocks of vaccines, injection materials, frozen icepacks and other cold chain equipment and transport arrangements ready for any emergencies. Similarly, the districts will have extra icepacks ready for upazilas that may experience power failures in the middle of the campaign. Moreover, senior managers of EPI, members of the logistics committee, EPI focal persons in UNICEF and WHO will be on standby coordinating campaign activities.

Logistics check list

√ Distribution plan specifying when and how supplies are to be sent from district to upazila to vaccinators/sites.

√ Porters recruited according to need who have previous experience, are well-oriented with the area and sites and can distribute and collect logistics/wastes efficiently.

√ Particular attention is given to logistics requirements for hard-to-reach and underserved areas.

For more information contact:

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