

**Note for the Record**  
**Government of Nepal and NCIP Meeting**  
**25-26 March 2012**  
**Kathmandu, Nepal**

**BACKGROUND**

The Nepal National Committee on Immunization Practices serves as an independent advisory body to the Government of Nepal on the topics related to vaccine preventable diseases including surveillance, estimation of disease burden, vaccination policy and introduction of new or underutilized vaccines.

The Nepal NCIP meets once or twice yearly at the request of the Child Health Director, Department of Health Services and Chairperson of the NCIP to consider various topics.

**TOPICS FOR DISCUSSION**

At the March 2012 meeting, the NCIP and Government of Nepal considered the following topics:

1. Burden of disease for rotavirus;
2. Burden of disease for pneumococcal disease;
3. Considerations for rotavirus and pneumococcal vaccine introduction;
4. Update on 2011 typhoid vaccine demonstration project;
5. Report of typhoid sentinel surveillance outside Kathmandu Valley;
5. Proposal for cholera demonstration project.

The detailed agenda is attached in annex 1.

**PARTICIPATION**

The meeting was attended by NCIP Committee members, as well as by representatives from Ministry of Health and Population; Directors in the Department of Health Services; subject matter experts from Nepal, Chairs of the National Certification Committee, Expert Review Committee, and AEFI Committee, ICC members, and members of the NCIP secretariat. In addition, technical support was provided by Dr. Thomas Cherian, WHO-HQ; Dr. Mary Agocs, WHO-HQ; Mr. Leon Ochiai, IVI; and Dr Binod Sah, IVI. Detailed participant list is attached in annex 2.

**RECOMMENDATIONS**

General Recommendations:

- The Government of Nepal should review and prioritize research needs for new vaccine introduction and include funding for prioritized activities in the annual Government work plan.
- The cold chain and logistics system should be updated as per the effective vaccine management (EVM) assessment as necessary to accommodate new vaccines.
- The AEFI Committee and follow up of reported AEFI cases should be strengthened.
- Vaccine introduction for enteric vaccines (rotavirus, typhoid, cholera) should be one component of an integrated child health program to decrease morbidity and mortality from diarrheal disease including safe water, hygiene, sanitation, nutrition, and IMCI.

Rotavirus Recommendations:

- Rotavirus sentinel surveillance provides valuable information and should be continued.
- Regular reports (quarterly) from rotavirus sentinel surveillance should be shared with Government of Nepal and WHO Country Office.

- Consideration should be given to expand rotavirus surveillance to additional sites as feasible.
- As expressed in cMYP 2011-2016, rotavirus vaccine should be prioritized for introduction in Nepal following introduction of pneumococcal vaccine;
  - Given differences in cold chain requirements and no VVM on the Rotateq, Nepal may wish to consider Rotarix (two dose schedule with penta1 and penta2);

#### Pneumococcal Recommendations:

- The quality of sentinel surveillance should be optimized with standardization of enrollment, data collection, and laboratory procedures;
  - Sheep red blood should be used instead of human red blood;
  - To optimize culture yield, CSF specimens should be forwarded for culture within one hour without waiting for results of cell count;
- Sentinel sites should continue to closely monitor circulating serotypes of *S. pneumoniae*.
- Attempts should be made to better define catchment populations of sentinel sites;
- Regular reports (quarterly) from IBD sentinel sites should be shared with Child Health Division and WHO Country Office.
- NPHL should serve in a coordinating role for the laboratory-based surveillance of invasive bacterial disease at sentinel sites and national antimicrobial resistance surveillance.
- Consideration should be given to expand invasive bacterial sentinel surveillance to sites outside of Kathmandu Valley.
- Regular (annual) independent assessment of sentinel sites should be made by technical experts.
- Existing surveillance for pneumonia cases and deaths among children <5 years should be strengthened to document baseline and later impact of vaccination.
- As expressed in cMYP 2011-2016, pneumococcal vaccine should be prioritized for introduction in the National Immunization Program from 2014.
  - Exact vaccine to be decided at the time of application.
  - Given the disease burden among very young children, Nepal may wish to consider three primary dose series.

#### Typhoid Recommendations:

- Sentinel surveillance for typhoid should be rolled into the national antimicrobial resistance (AMR) surveillance coordinated by NPHL.
- Typhoid sentinel surveillance should be expanded to sites already in the AMR surveillance system especially in hospitals located in larger municipalities outside Kathmandu Valley.
- Consideration should be given to reviewing and standardizing laboratory procedures used by sentinel sites;
- Consider completion of additional analyses of previously reported sentinel surveillance data to stratify by VDC / municipality.
- Mapping of high risk persons/populations/areas using surveillance data should be completed in preparation for expansion of typhoid vaccination programs.
- Consideration should be given to continue targeted typhoid vaccination program reaching high risk persons.
- Vaccination of school aged children in Kathmandu District should be completed with support from donors and partners.
- Government of Nepal should promote typhoid vaccination among food handlers.

#### Cholera Recommendations:

- Cholera sentinel surveillance should be included in the national antimicrobial resistance program at NPHL.
- Government of Nepal should develop a cholera vaccination preparedness plan in response to outbreaks.
- A cholera vaccine demonstration project using modified bivalent killed vaccine should be considered for implementation in Nepal in one or more locations with evidence of endemic cholera.