Note for the Record
NCIP Joint Consultative Meeting
17-18 November 2011

BACKGROUND
Government of Nepal/NCIP Joint Consultative Meeting on JE, Maternal Neonatal Tetanus and Polio was held in Kathmandu on 17-18 November 2011 in Hotel Himalaya. The meeting was chaired by Professor Ramesh Kant Adhikari, Chair of the Nepal National Committee on Immunization Practices (NCIP). Participants included NCIP members, numerous staff members of the Department of Health Services including the Director General and many Division Directors, as well as subject matter experts from Nepal. Outside participants providing technical support included Dr. Pem Namgyal, WHO/HQ; Dr. Nihal Abeysinghe and Dr. Jagadish Deshpande, WHO/SEARO; Dr. Yin Yin Aung, UNICEF/ROSA; Dr. Christina Cardemil, Dr. Concepcion Estivariz, Dr. Susan Hills, and Dr. Hardeep Sandhu, CDC; and Dr. Nyambat Batmunkh, IVI. List of participants is attached in Annex 1.

AGENDA
Topics of the meeting included developing next steps in Nepal’s Japanese Encephalitis Control program; possible strategies to increase seroconversion to OPV including providing a birth dose of OPV and/or treatment of diarrhea caused by Giardia or other causes prior to administration of OPV; and mechanisms to ensure Nepal maintains its neonatal tetanus elimination status. Agenda of the meeting is attached as Annex 2. Background materials were distributed before and at the meeting.

1. Japanese Encephalitis
Nepal initiated its JE control program in 2006 when it initiated phase wise implementation of JE campaigns using the live attenuated SA-14-14-2 JE vaccine manufactured in China. Districts with very high rates of confirmed JE transmission (>16.0/100,000) were prioritized to receive vaccine first. Age groups targeted for vaccination included all persons more than 12 months of age. Districts with intermediate rates of JE transmission (>1.6/100,000) were included for JE vaccination later with age groups targeted including children 12 months to 15 years of age. JE vaccine was introduced in the routine immunization program in post-campaign districts beginning in 2009. In 2010, Dr. Susan Hills and Dr. Kristen Janusz from the US Centers for Disease Control and Prevention conducted a disease impact evaluation and concluded that the JE vaccination program had resulted in significant decrease in JE transmission in post-campaign districts. Based on their findings, the Government of Nepal decided to include persons of all ages in JE campaigns beginning in 2010. However, as of 2011 all high-risk and intermediate risk districts had completed JE campaigns and 31 post-campaign districts had initiated JE in routine immunization for children 12-23 months of age. Incidence rates of all districts in Nepal had dropped dramatically and when averaging three year JE incidence rates from 2009 to 2011 only four districts had JE incidence of more than 1.0 per 100,000 population. Two of the four districts (Kathmandu and Surkhet) had recently completed JE campaigns during the interval between 2009 and 2011. Based on these discussions, the following recommendations were made:

- Nepal has successfully implemented JE catch up campaigns in all high and moderate risk districts and achieved marked reduction in incidence of JE disease.
In the future, consider implementation of mass vaccination campaigns in response to documented increasing incidence of JE.

**Routine Immunization Strategy**

- Expand to non-campaign districts the routine immunization programme already implemented in post-campaign districts with a single dose of live attenuated SA-14-14-2 vaccine at 12 months of age
- Explore public private partnership to make available JE vaccine at cost reimbursed basis to persons of all ages who may be at risk of JE

**AEFI Considerations**

- When serious AEFIs occur, the AEFI committee should conduct a comprehensive evaluation including causality assessment
- CSF should be collected in the case of encephalitis following vaccination
- Clear and consistent messages to the community to ensure maintenance of confidence in the JE immunization programme

**JE Vaccine**

- WHO should prioritize process to achieve WHO-prequalification of live attenuated SA-14-14-2 vaccine as it has important programmatic and funding (GAVI) implications

**IEC Strategy**

- A comprehensive package of IEC materials should be developed to promote JE control efforts emphasizing use of JE vaccination in the routine immunization programme

**Surveillance Strategy**

- Continue with nationwide surveillance of AES in the integrated VPD surveillance system
- Emphasis should be given to collect specimens (serum or CSF) at 10 days after symptom onset to increase sensitivity of JE testing
- CSF is necessary in the presence of history of recent (<1 year) JE vaccination in AES case investigation
- Improve timeliness of specimen submission to the laboratory
- Closely monitor case based surveillance data to detect evidence of waning immunity that may necessitate a booster dose of vaccine
- Improve 6 month follow up of AES/JE cases to determine level of disability
Laboratory Strategy

- JE IgM to be detected using NIV Pune test kit to be provided by WHO/SEARO at NPHL and BP KhS
- Consider expansion of JE laboratory network as resources allow
- Develop ability to conduct JE neutralizing antibody test at NPHL

Research Priorities

- Case control study in post campaign districts to evaluate protective effect of JE vaccine
- Evaluate concordance between reported and documented JE coverage in routine immunization

Other Issues

- Better integration between human and zoonotic control efforts of JE including entomological studies

II. Neonatal Tetanus
Neonatal tetanus elimination was documented in 2005. Since that time efforts have focused on maintaining a sensitive surveillance system to ensure that neonatal tetanus remains less than 1 per 1,000 live births at district level. A school based tetanus immunization program providing TT vaccine to children of grade 1,2,3 has been piloted, based on WHO position paper from 2006. Further discussions were suggested.

Recommendations on Sustaining Tetanus Elimination

- Finalize tetanus strategy to sustain MNT elimination at the next NCIP meeting
- Prepare to substitute Td instead of TT

III. Polio and Seroconversion of OPV
Presentations were made on WHO position paper recommending a birth dose of OPV followed by presentation by Dr. Cristina Cardemil and Dr. Laxman Shrestha about a planned study to evaluate the seroconversion of OPV among children with diarrhea following treatment with a broad spectrum antimicrobial agent.

Recommendations on Increasing Polio Seroconversion

- Implement policy of providing birth dose of OPV to increase seroconversion
  - OPV birth dose within 72 hours in all institutional deliveries where OPV is available
  - Expand where feasible with emphasis on high risk districts
- Studies should be implemented to determine what factors are important for OPV seroconversion