

Newborn Health and Programs in Nepal

**A Rapid Assessment of Newborn Health in Nepal
Conducted by the Department of Health Services**

May 2007





Government of Nepal
Ministry of Health & Population

DEPARTMENT OF HEALTH SERVICES

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Foreword

There has been a remarkable decline in infant mortality rates in Nepal over past fifteen years from 113 in 1987 to 51 in 2006. However, similar fall was not achieved in neonatal mortality which has decreased from 45.2 in 1987 to 34 in 2006. Consequently neonatal mortality has inclined from 40% to 66% as a proportion of infant mortality. The significant reduction in infant and child mortality rates will largely depend upon the reduction in neonatal mortality.

The key statistic to be considered when to set priorities for interventions in reducing neonatal mortality in Nepal is that 90% of births take place at home in the absence of a skilled birth attendant. Recognising this fact, Ministry of Health and Population has formulated Skilled Birth Attendant Policy in 2005. For effective implementation of the Policy, it is essential to have clarity on roles and responsibilities of different partners involved in neonatal health and to perceive the current status of the various neonatal health programmes. I hope this document will be a valuable source of reference to all those who are working in the field of newborn health and survival. Let this be the beginning of periodic assessment of the Neonatal Health Programme.

The directors of Family Health Division and Child Health Division deserve appreciation for making collaborative efforts to make a difference in the field of Neonatal Health.

I take this opportunity to extend my sincere thanks to Saving Newborn Lives Program, SCF, US for the continuous technical and financial support provided towards the initiation and production of this document.

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Director General



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Preface

The Ministry of Health and Population has taken successful strides towards improving policy guidelines and implementation plan for improving reproductive health issues in the country. Neonatal health has been outlined as an important component of the National Reproductive Health strategy. Now it is making focussed efforts towards improving Neonatal Health and Survival. Following the publication of the State of the Worlds Newborn-Nepal in 2001, MoHP developed the National Neonatal Health Strategy in January 2004 with technical and financial support from the Saving New born Lives, Save the Children Federation US. A situation analysis of New born in the Country was conducted jointly by the MoHP and Saving Newborn Lives Program, SCF US. Gaps have been identified and recommendations made based on these gaps. This document has revealed the grave situation regarding the state of the Newborn Health in Nepal.

The first twenty- eight days of the life of a child is the most vulnerable period where most morbidity and mortality occur. In Nepal 66 percent of infants' death occur during the neonatal period. Nearly 87% percent children are born at home in the absence of skilled birth attendant and the lack of information about these children pose great challenge towards improving neonatal health and survival. The need is to recognise this challenge and prepare strategies to address this key problem.

Establishing contact between post partum mothers, newborns, and trained health care workers presents a huge logistical and health service delivery challenge and establishing contact between them is essential, if neonatal and maternal death rates are to be reduced. In Nepal, both Family Health Division and Child Health Division have the mandate to reduce neonatal death. Maternal health programmes covering pregnancy, child birth and early neonatal care lies with Family Health Division and child health programmes through infancy and childhood lies with Child Health Division. Addressing neonatal mortality requires a continuity between these elements of care, warranting closer coordination between the two divisions to ensure that neonates receive due attention in both maternal and child programmes.

The objective of this document is to bridge this gap between different organizations working in the area and to give a clearer picture of the activities being carried out by different stakeholders in the field of neonatal, maternal and child health. It is hoped that this document will serve as a useful guide to all involved in programming of neonatal health.

To save newborns lives at present and in the future it is necessary to integrate newborn health with maternal and child health. Therefore we the Child Health Division and Family Health Division need to function in collaboration. To show our commitment towards this goal, as a symbolic unification, we have joined hands together to write a single preface. Although symbolic, may this be the beginning to make an impact on the future steps that the two Divisions will take for the betterment of maternal, child health and save newborn lives.

We would like to appreciate the efforts of the Rapid Assessment Team who worked together in harmony to produce this document. We take this opportunity to extend our thanks to SNL Program, Nepal Team and SCF US for taking the initiative and providing financial and technical support towards producing this document.

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Abbreviation

ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
BCC	Behaviour Change and Communication
BPP	Birth Preparedness Package
CB-IMCI	Community Based Integrated Management of Childhood Illnesses
CB-MNC	Community Based Maternal and Neonatal Care
CHD	Child Health Division
CDD	Control of Diarrhoeal Diseases
DoHS	Department of Health Services
EHCS	Essential Health Care Services
ENC	Essential Neonatal Care
EOC	Essential Obstetric Care
EPI	Extended Program of Immunization
FHD	Family Health Division
HMIS	Health Management Information System
HSS	Health Sector Strategy
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
MDG	Millennium Development Goals
MIRA	Mother and Infant Research Activities
MMNHCSPP	Minimum Maternal & Neonatal Health Care Services Package
MMR	Maternal Mortality Rate
MNCH	Maternal Neonatal and Child Health
MoHP	Ministry of Health and Population
NDHS	Nepal Demography and Health Survey
NFHP	National Family Health Program
NFHS	National Family Health Services
NHSP-IP	Nepal Health Sector Programme – Implementation Plan
NNHS	National Neonatal Health Strategy
NNIPS	Nepal Nutrition Intervention Project Sarlahi
NNLTHP	National Neonatal Long Term Health Plan
NNTAC	National Neonatal Technical Advisory Committee
PRSP	Poverty Reduction Strategy Paper
SBA	Skilled Birth Attendant
SNL	Saving Newborn Lives
SC/USA	Save the Children USA
TBA	Traditional Birth Attendant
UNFPA	United Nations Population Fund
WHO	World Health Organization

1. Introduction:

Every year four million babies worldwide die in the first month of life. Nearly all of these babies die in developing countries from causes that can be prevented. Yet, almost all of the funding and research for newborn health focuses on high-tech solutions for the 1 percent of deaths that occur in affluent countries. The good news according to landmark research on newborn survival released March 3, 2005 in the British medical journal *The Lancet* — 3 million of the 4 million young lives could be saved with existing low-tech, low-cost measures. Examples of these measures include; providing tetanus immunizations for pregnant women, creating a clean delivery, teaching exclusive breastfeeding and providing antibiotics for infections. It has been very appropriately said "*No investment in global health has a greater return than saving the life of a child*"

1.1 Progress and Trend in Newborn Health

Nepal has the third highest neonatal mortality rate in the world at 34 per 1000 live births. This rate contributes to 66% of the current infant mortality rate of 51 per 1,000 live births, making it the key health status problem that requires action to better the lives of all children and to reach Nepal's Millennium Development Goals.

Table 1: Neonatal and Infant Mortality Rates in Nepal

Year	IMR	NMR	Percent of IMR
1991 ¹	80	46	58%
1996 ²	79	50.0	63%
2001 ³	64	38.6	60%
2006 ⁴	51	34	66%
Goal	45 (2015) ⁵	15 (2009) ⁶	33%

Source : *State of the World's Newborns: Nepal, SNL, SC/US, September 2002*

Hospital based data suggest that the major causes of neonatal death in Nepal are infection, birth asphyxia, preterm birth, and hypothermia.⁷ More recent, community based data present a similar picture.⁸ A constellation of underlying problems contribute to high mortality rates, including early childbearing, poor maternal nutrition, micro-nutrient deficiencies, inadequate access and utilization of quality care during pregnancy, delivery, and in the post partum period, fundamental to these problems is the low status of women and newborns.

The key factor that underpins immediate strategies to address neonatal mortality is that 81% of births take place at home in the absence of a skilled birth attendant⁴. The NDHS 2006 reported that Nineteen percent of births were delivered with the assistance of an SBA, 19 percent were delivered by a traditional birth attendant, and 50 percent were delivered by a relative or other untrained person. Seven percent of births were delivered without any type of assistance at all. The high neonatal mortality rate goes hand in hand with low skilled birth attendance and institutional delivery rates. The current rate of

¹ NFFPHS, 1991

² NFHS, 1996

³ NDHS, 2001

⁴ Nepal Demographic and Health Survey 2006, Preliminary Report, MoHP, Macro, New Era

⁵ NFHP-IP 2004-2009

⁶ Population Perspective Plan 2002-2027, 2005

⁷ Save the Children. *State of the Nepal's Newborns*. Kathmandu: Save the Children, 2002.

⁸ Manandhar D, Osrin D, Shrestha B, Meskey N, Morrison J, Tumbahanghe K, Tamang S, Thapa S, Shrestha D, Thapa B, Shrestha J, Wade A, Borghi J, Standing H, Manandhar M, del Costello A. Effect of a participatory intervention with women's groups on birth outcomes in Nepal, cluster randomized controlled trial. *Lancet* 2004; 364: 970-979.

deliveries assisted by health workers (not all of them qualify as SBA) is 20.2%⁹, and in low economic quintiles 6.5%¹⁰. This represents an enormous challenge to both MDG goals 4 and 5. Child survival programmes such as EPI, CDD, ARI and nutrition have contributed towards significant reduction in IMR, in particular post neonatal deaths. However, preventing neonatal deaths has not received the importance it deserves both in child survival and safe motherhood programs. Over the past several years, neonatal health has been the focus of increasing attention both globally and in Nepal. Policy and program have incorporated neonatal health as an integral component of the broader effort in safe motherhood. The Safe Motherhood Strategy however acknowledged the need for newborn healthcare as a goal in its results log frame, and specifically recommended that newborn health be addressed in a separate document.

1.2 Rapid Assessment Document:

A rapid assessment of neonatal health programs in Nepal was conducted in the year 2005-2006.

1.2a Objectives and Methodology:

Objectives:

- assess the current status of newborn health, program interventions and the roles of different partners in the country
- identify and analyze gaps and constraints to implement evidence-based newborn health strategies and interventions
- make recommendations for future programming

Methodology:

A rapid assessment team was formed that comprised of members from Family Health Division, Child Health Divisions, Save the Children US, independent consultants with the Directors of Family Health Division and Child Health Division as advisors. (Please refer to annex 4 for the composition of the rapid assessment team). The team engaged in desk review of relevant documents and finalized the tools for collection of information. The tools were then circulated among as many stakeholders as possible to collect information. The responses from the stakeholders were then compiled, gaps identified and recommendations made. The findings were shared with all stakeholders at a joint sub-committee meeting of Child Health & Safe Motherhood Neonatal Health Sub-committees (Annexes 2 and 3).

1.2b Findings:

Policy Environment and Programme Strategies

The Poverty Reduction Strategy Paper (PRSP)/Tenth Plan 2002-2007 accepts that health service delivery is weak due to a lack of trained staff, drugs and medicines and misallocation of resources. To achieve health sector MDGs, in line with PRSP and 10th plan, the Health Sector Strategy (HSS) 2004 was formulated to provide an equitable, health care system of good quality. It envisages:

- Ensuring Essential Health Care Services (EHCS) to marginalised populations;
- Decentralizing service delivery;
- Improving sector management and provision, deployment and efficient use of resources; and
- Promoting public-private partnerships.

In the course of formulation of Health Sector Strategy, child health that includes prenatal, neonatal, infancy and under five child healths have been included as a priority in EHCS. To facilitate implementation of the HSS, MoHP developed the Nepal Health Sector Programme – Implementation Plan (NHSP-IP) 2004-2009¹¹. Unfortunately, despite the efforts made by MoHP so

⁹ Family Health Division/HMIS 2004-2005

¹⁰ Chhetri Devendra, *Poverty and Reproductive Health: Linkages and Consequences*, UNFPA 2005

¹¹ Nepal Health Sector Programme, *Implementation Plan 2004-2009*, MoH, GoN, Kathmandu, 2004

far, progress with implementation in several of the areas mentioned above has been slow¹². The linkage between NHSP-IP and safe motherhood programme also needs strengthening.

Situation Analysis: State of the World's Newborns: Nepal

The Situation Analysis Report was published as State of the World's Newborns: Nepal 2001 with the support from the Saving Newborn Lives Program, Save the Children Federation US (SNL/SC). It was a local situation analysis of newborn mortality, newborn health and health care in the country. It was produced by national researchers, and its presentation at a strategic planning workshop held jointly with Ministry of Health (MoH) and Saving Newborn Lives in October 2001, raised the need for a formalised National Neonatal Health Strategy (NNHS) in Nepal.

Nepal's National Neonatal Health Strategy

Following this ,in early 2002, a Newborn Working Group was created, to assist the development of neonatal health strategy with the technical assistance of Saving Newborn Lives (SNL). The group was diverse and brought together obstetrics and safe motherhood experts with child survival experts; neonatologists, public health, community mobilisation, research and opinion leaders from the MoHP. After several rounds of consultation with the stakeholders including other external development partners, on the initiation of and support from the SNL, SC/USA, MoHP developed National Neonatal Health Strategy in January 2004.

The goal of the National Neonatal Health Strategy is to improve the health and survival of newborn babies in Nepal, with the strategic objectives of promoting healthy newborn practices, discourage prevailing harmful practices and to strengthen promotive, preventive and curative neonatal services at all levels of the health system. The strategic interventions comprise of behaviour change and communication (BCC) interventions such as standardizing messages for neonatal health in local language, strengthening of health service delivery for essential neonatal care, strengthening program management for ENC such as coordination and collaboration with various governmental and non-governmental and private institutions, and promotion of research for evidence based programming.

The National Neonatal Health Strategy has ensured that policy makers, ministries, service providers, private and NGO sector organisations have a guideline for implementing programs to improve neonatal health and survival in Nepal.

This strategy has been prepared by considering the magnitude and gravity of neonatal problems in Nepal. Great attention has been focused on evidence based and proven interventions. Cost effectiveness of interventions, acceptability including innovativeness of approach and the capacity of the community, health and other systems in the country were other factors considered too.

The National Neonatal Strategy urges the MoHP to Prioritize its intervention under five main headings such as:-

- 1. Policy**
- 2. Behaviour change communication**
- 3. Strengthening health service delivery**
- 4. Strengthening program management**
- 5. Research**

National Neonatal Technical Advisory Committee

To facilitate the transformation of national policy into programmatic realities, the National Neonatal Technical Advisory Group was formed in March 2004. The terms of reference for this team are in

¹² Nepal: Health Sector Program. Joint Annual Review, Nov 23-Dec 04, 2005, Aide-Memoire, Kathmandu, 2005

annex 2. Since then, this committee has been integrated into the Safe Motherhood Sub-committee and the latter is now called the Safe Motherhood Neonatal Sub-committee.

National Policy on Skilled Birth Attendants

With the advancement in the understanding that the most critical intervention to reduce maternal and neonatal mortality is the care provided by a skilled birth attendant working within a supportive environment that provides an adequate system for referrals and emergency obstetric care, MoHP, GoN developed and endorsed the National Policy on Skilled Birth Attendants in 2005 as a supplementary to Safe Motherhood Policy of 1994. The SBA policy is linked to other national policies and strategies. It identifies the National Neonatal Health Strategy as an important guideline for developing the detailed strategic plan to address the needs of the newborn babies by ensuring availability, access and utilization of skilled care at every birth. Similarly, the National Information, Education and Communication (IEC) Strategy for Safe Motherhood was developed in 2003 by the DoHS for developing partnerships with communities.

WHO suggests that in countries where the MMR is very high, the goal should be at least 60% of births to be attended by skilled birth attendants (SBA) by 2015¹³. In Nepal, currently only 20.2%¹⁴ of women are attended by a health worker during delivery. Hence, to ensure skilled care at every birth, and to promote their availability for all families, the SBAs must be recognized and supported both by the communities and the health system. Thus the crucial issues of human resource development and management i.e. the socio-economic and cultural barriers to accessing skilled providers, the high unmet need for emergency obstetric and neonatal care, and weak referral back-up all need to be addressed.

National Neonatal Long Term Plan 2005-2017

Under the leadership of Family Health Division and Child Health Division, with wide participation of stakeholders and the NNTAC, National Neonatal Long Term Plan (NNLTP) 2005-2017 was developed in August 2005 for the implementation of Neonatal Health Strategy. The NNLTP provides guidance to the MoHP and interested development partners regarding the activities that could be implemented in Nepal to improve neonatal health and survival. Its objective was to increase utilization of effective promotive, preventive, & curative neonatal health services and achieve sustainable increase in adoption of healthy newborn care practices, reduction in common harmful practices at home, increase socio-political commitment & resources for newborn health at all levels and use results of research to improve policies & programs that improve newborn health. It was also anticipated that the key elements of this document will be integrated into the maternal and neonatal long term plan which was developed later.

The Maternal and Newborn Health Concept

Two recent developments, the Lancet Neonatal Survival Series and the new alliance Maternal and Neonatal Health Forum (Partnership for Safe Motherhood and Newborn Health) have both influenced the policy and program directives in Nepal). MNH Forum was established in February 2005, under the chairmanship of the Director General of Department of Health Services/MoHP. The purpose of MNH Forum was to improve access and utilization of services for maternal and neonatal health. The four papers of the Lancet series identify a major gap in knowledge and provide new evidence detailing the causes of the neonatal deaths and the simple, effective interventions that are available to prevent them; and the Partnership for Safe Motherhood and Newborn Health supports expanding the reach of essential interventions for reducing maternal, newborn and child mortality; promote the adoption and

¹³ National Safe Motherhood Action Plan 2001-2005: Western Pacific Region, WHO Skilled Care at Every Birth, Report and Documentation of the Technical Discussions held in conjunction with 42nd Meeting of Consultative Committee for Programme Development and Management (CCPDM), Dhaka, Bangladesh, 5-7 July 2005, World Health Organisation, Regional Office for South-East Asia, New Delhi

¹⁴ Family Health Division/HMIS 2004-2005

development of evidence based, cost effective approaches to reduce such mortality; and promote greater coordination and cooperation among all stakeholders.

The MNH Forum and continuum approach of care has guided a number of policy and strategy documents that have recently been developed. The SBA Policy, the Minimum Maternal & Neonatal Health Care Services Package, and the Nepal Safe Motherhood and Neonatal Long Term Health Plan to name a few.

Minimum Maternal & Neonatal Health Care Services Package

The Minimum Maternal & Neonatal Health Care Services Package was developed by FHD in early 2006. It outlines services that should be available at public health facilities for all pregnant women and their newborns. The guiding principles are equitable access to services, feasibility, cost effectiveness; evidence based with focus on the priority interventions to improve outcomes for the main causes of maternal and newborn morbidity and mortality. The package compliments the National Skilled Birth Attendants Policy, follows the MoHP's Essential Health Care Services Guidelines (2000), National Neonatal Health Strategy and the HIV/AIDS Policy; is in accordance with the Health Sector Programme Implementation Plan (NHSP-IP), and meets the WHO criteria for a minimum level of services for all women and children by including antenatal care, safe delivery, postnatal and newborn care, identification of complications, referral to emergency services and higher levels of care for those with special needs.

Nepal Safe Motherhood and Neonatal Long Term Health Plan

With the goal of improving maternal and neonatal health and survival especially of the poor and vulnerable, the Nepal Safe Motherhood and Neonatal Long Term Health Plan (2006-2017) was formulated with all stakeholders in March 2006. As intended, it incorporated the NNLTP and came up with a plan to increase healthy practices, and utilization of quality maternal and neonatal health services especially by the poor and vulnerable, delivered by a well managed health sector.

2. Current and Planned Program for Neonatal Health

In the SAARC region a few interesting intervention approaches that have taken place and are still continuing are the following:

A Home based neonatal care by village health workers (VHW) was developed, tested and demonstrated in Gadchiroli, Maharashtra by the organization, SEARCH. In this study VHWs provided home-based neonatal care (pregnancy surveillance, antenatal counseling, delivery care (with TBAs), post-natal visits [day 1, 2, 3, 5, 7, 14, 21, 28], diagnosis and treatment of infection. Neonatal mortality declined by **62%** from baseline in intervention area. In Shivgarh, Uttar Pradesh behavioral change communication (BCC) and Community Mobilization such as birth preparedness, clean delivery, immediate breastfeeding, skin to skin care, thermal care, clean cord and skin care and 2 antenatal home visits and 2 post natal visits on day 0/1, 3 has brought about a drastic change in neonatal mortality of around 50%. Similarly in Sylhet, Bangladesh community health workers provided community mobilization education, antenatal home visits, and 3 post-natal visits on days 0/1, 3, and 7. Emphasis was on key newborn health practices & care-seeking identifying sick newborn, referring, treating sepsis with antibiotics at home, if family refuses or is unable to go to the facility. Preliminary evidence shows large increases in many ENC practices eg, clean delivery, delayed bathing, nothing on umbilical cord. In Hala, Sindh, Pakistan lady health workers gave community and home education with 2 antenatal counseling visits. At the same time they assessed the newborns, gave basic care, made 5 post natal newborn assessments and referred to first level and referral facilities for curative care. The pilot study after one year has shown significant reduction in NMR. Another study of training TBAs and linking them to health system by Lady Health Workers in the same region of Pakistan has shown a 30% reduction in perinatal mortality rate, and 26% reduction in maternal mortality.

In Nepal, the interventions to reduce neonatal deaths belong to two Divisions of the Department of Health Services. Maternal-health programs covering pregnancy, child birth, and early neonatal care with Family Health Division; and child-health programs which move on through infancy and childhood with Child Health Division. Addressing neonatal mortality requires a continuity between these elements of care, warranting closer coordination between the two divisions to ensure that neonates received due attention in both maternal and child health programs.

Family Health Division

The Family Health Division under the DOHS, Ministry of Health and Population is the focal point for all reproductive Health activities carried out by GO/NGO/INGO.

The priority and objectives regarding MNCH for this division is to contribute to the reduction of MMR by three fourths by 2015 , reduction of neonatal mortality ratio to 28/1000 live births by 2009 and also the reduction of fertility to replacement level by 2017.. Its mandate is to develop policy and management guidelines for reproductive Health Services and monitor its implementation. The Division also develops, establishes and promotes program regarding reproductive Health Services. A MNH activity carried out by this Division is to deliver Essential Health Care Services Package (EHCS) where family planning, safe motherhood and newborn care are included.

Child Health Division

The priority and objectives regarding MNCH for the Division of Child Health is to reduce the infant mortality from 64 to 45 deaths, and under five years of age mortality from 91 to 72 deaths per live births by the end of the 10th Five Year Plan (2007). Another priority is also the promotion of exclusive breastfeeding and management of sick neonates through CB-IMCI program. The Division also has a mandate of expanding the reach of immunization, implementation of Community Based Integrated Management of Childhood Illnesses and the achievement of nutritional well-being through its improved nutrition program implemented in collaboration with relevant sectors. National

Immunization Program, School based TT vaccination and its expansion to 16 more districts, Japanese Encephalitis vaccine to all age groups in endemics districts, the CB-IMCI program currently covering 41 districts and covering 66 % of the population currently and soon to be expanded to 75 districts within the next 3 years are some of the activities of this Division.

UNICEF

The main goal and objective of the UNICEF is to contribute to reduction in maternal and neonatal mortality and increase the utilization of quality MNH services, especially among Dalits, Janjatis. Realization of the rights of the children and women is the mandate of UNICEF. The organization is at present carrying out works with other partners in Safe Motherhood. As a component of the Support to the Safe Motherhood Program (DFID) it is also involved in activities to build capacity of the district health system in 8 districts to provide quality MNH services, increase access to these services as well as to improve home care of the newborn and referral

WHO

The main objective and priority of WHO is to improve health and reduce morbidity and mortality during key stages of life, including pregnancy, childbirth, the neonatal period, childhood and adolescence. The mandate of this Organization is attainment of the highest possible level of health by all people. One of the activities that this Organization is looking into is the adaptation and implementation of WHO/IMPAC, PCPNC (Pregnancy Childbirth and Post Natal Care) guide to be piloted in one selected district. It also plays a great role in Training of Master Trainers in Midwifery/SBA and development of Midwife Teacher's training program and piloting community based "Making Pregnancy Safer Program" in one district. Support implementation of the program for the anaemia prevention among pregnant women and procure EoC kit boxes for ANMs.

GTZ

The main objective of the Reproductive Health Component of GTZ-Health Sector Support Programme (HSSP) is to improve the quality of services provided by various health care facilities, in particular in the field of RH and to safeguard the access to these services of poor and disadvantaged population groups. Current activities, that are being carried out by the organization are:

- Establishing of quality EOC services in all HSSP supported districts and to increase access to these established services through community awareness.
- Strengthening of family planning services with emphasis on long term temporary methods of contraception
- Implementation of Comprehensive Abortion Care services in all HSSP supported districts.
- Establishing of VCT services for HIV/AIDS in all HSSP supported district hospitals and have also supported awareness creation activities on HIV/AIDS through NGO's.

Save the Children US Saving Newborn Lives Program

Mandate for SNL is to achieve neonatal mortality reduction through sustained high coverage of effective interventions.

During the first phase of SNL (2001 to 2005), the program supported the district wide implementation and evaluation of the Birth Preparedness Package (Siraha district), Behaviour Change and Communication package (Kailali district) and tested a postnatal care package for mothers and newborns in five village development committees of Kailali. It also supported the Department of Health Services in the development of the National Neonatal Health Strategy and provided secretarial support to the functioning of the National Neonatal Technical Advisory Committee. It also supported the Institute of Medicine to strengthen the neonatal curricula in the M.B., B.S. and staff nurse curricula. The program also worked with the Child Health Division in expansion of Maternal and Neonatal

Tetanus Elimination in 3 districts of Nepal. SNL also implemented the Morang Innovative Neonatal Initiative (MINI) study in 21 VDCs of Morang in partnership with JSI.

The second phase of the SNL program in Nepal started in October 2005. The mandate of the global SNL program is to scale up evidence based proven neonatal interventions to improve neonatal health and survival. In Nepal too, the program is going to support the Department of Health Services to develop an integrated community based neonatal package, which will thereafter be tested out for a couple of years before taking to scale. The SNL program will also work with the Institute of Medicine to take forward the strengthened neonatal curricula of doctors and nurses to other campuses. SNL will continue to support further testing of the MINI project in other VDCs of Morang in partnership with JSI, NFHP and USAID.

ACCESS

The main objective of this program is to increase use and coverage of maternal/neonatal and women's health & nutrition interventions through its CBMNC program. The mandate for this Program is to successfully run the Program for Maternal and Neonatal Health, implemented in partnership with JHPIEGO and the Community Based Maternal and Neonatal Care (CB-MNC) Program implemented in partnership with NFHP

Activities currently being carried out are developing and testing Generic Skilled Birth Attendant (SBA) Learning Resource Package and incorporating in curricula of various cadre of SBA at the national level. In Kanchnapur district it is also developing and testing Community Strategies to identify and manage Low Birth Weight (LBW). Developing guidelines for LBW infants and working with GoN for incorporation in the National Maternal and Neonatal standards and protocols at the national level

Nepal Family Health Program

The main objective of this Program is to provide continuum of services from the time a woman is pregnant to the post partum period to improve maternal and neonatal health. It also extends its services to provide family planning as and when needed to improve birth spacing. The main mandate of this program is to successfully run the Community Based Maternal and Neonatal Care (CB_MNC) program in order to significantly increase coverage of a minimum package of high-impact, cost-effective, largely community-based interventions. The activities being carried out are a pilot study on CB-MNC in Jhapa, Banke and Kanchanpur districts and health education on ANC, clean delivery and post-partum including neonatal care at community level using birth preparedness package (BPP).

Support to Safer Motherhood Program

The goal of this program is to improve maternal and neonatal health and survival through support to GoN in scaling up successful interventions in order to have a positive impact on maternal and neonatal mortality at national level. The main activities being carried out currently is to support GoN in planning, managing, monitoring and evaluating & scaling up SMNH program, focusing on poor & excluded population, in line with NHSP-IP and supporting Safe motherhood and Newborn Health partners for strengthening capacity of district SMNH services including increased access to delivery by SBA & EONC and supporting implementing partners to empower communities in order to demand for their rights to safe maternal and neonatal health services.

ADRA

Adventist Development and Relief Agency (ADRA) is an independent humanitarian organization, which is established in 1987 in Nepal. It makes a priority to support the development of efficient and

effective local capacity through the learning and partnerships with government and civil society at all level. It mainly focuses for reproductive health, economic development, basic education, women empowerment and disaster relief. ADRA Nepal implements various health projects in Nepal like Safe Motherhood Innovation Project that aims to reduce maternal mortality and morbidity due to pregnancy-related complications in the six targeted districts of Eastern Nepal Dhankuta, Terathum, Taplejung, Ilam, Sankhuwasabha and Khotang, and its mandate is to implement the Safe Motherhood Innovation Project, funded by the European Union, 2004-2007. To build capacity of the district health system and train in Obstetric First Aid, BEOC and CEOC at all levels. To establish referral system, raise awareness and community level IEC and BCC regarding Safe Motherhood. Mobilize community resources to facilitate behaviour change in care seeking and establish Safe Motherhood Teams at VDC level and Safe maternal health network.

CARE NEPAL

Care Nepal is working in Nepal since 1978 in health and community development sector. The organization works to improve the livelihoods of poor, vulnerable and socially excluded people by empowering them to fulfil their rights to healthy life. CARE Nepal's health program focuses on strengthening program management systems: establishes and strengthens partnership, alliances and networks (within the public health community and with the government) at different level; strengthens local capacity; advocate with increased dynamism for rights to health care and governance in favour of poor, vulnerable and socially excluded.

CARE Nepal's health programs are focused on maternal and child health (CB-IMCI, neonatal health, safer motherhood); HIV AIDS (behaviour change, cross boarder migration, care and support).Health education (adolescent health education, school health); disease control (hygiene and sanitation, polio eradication, vector borne disease control, epidemic response); Strengthening health and management systems (decentralization and emergency response), especially in remote districts.

Current and planned research activities for neonatal health in Nepal

Newborn health is an important and vital component of health service and although not much research has been going on in this field it is indeed encouraging to know that there has been a beginning and some of the pioneers in this field are MIRA (Mother and Infant Research Activities), NNIPS and (SNL) Saving Newborn Lives. (Please refer to annex 1 for detail)

3. Gaps in Neonatal Health, Recommendations for Bridging the Gaps:

These were gaps identified and recommendations made by the stakeholders of Child Health Division and Family Health Division and were endorsed by a joint meeting of Child Health Sub-committee and National Neonatal Health sub Committee on May 05 2006

1. Gaps in Policy and Strategic Issues

- Gaps exist between policies and operationalization efforts, especially at peripheral sites
- While services are more fully integrated at the district level, the central level is operating in a more technically vertical fashion.
- Insufficient resources allocated for neonatal health
- Neonatal issues not sufficiently targeted as part of the SM, CH, FCHV and other program portfolios

Recommendations

- Ensure that neonatal health is more emphasized in all SM, CH programs and sufficient resources are allocated for implementation
- Central level need to operate in an integrated manner
- Work towards better integration on neonatal health between FHD and CHD

2. Gaps in Training/ HR Issues

- Chronic and worsening shortage of health personnel at rural health facilities, frequent transfer of staff, vacant posts, problem retaining staff
- Not all pre-service and in-service training have updated neonatal health training component
- Lack of standardization of training by numerous private medical and nursing colleges

Recommendations

- Include updated Neonatal Health Training Component in all pre-service and in-service Training.
- The HR unit needs to be further supported in resolving the training and HR issues
- Work to disseminate existing neonatal training courses to more training sites and institutions, both public and private

3. Gaps in Increasing SBA coverage

- SBA registration, accreditation systems and job descriptions not clear
- It is unclear how existing service providers will become accredited as SBAs
- While a long term SBA plan is being discussed, there is no short term strategy
- Enabling environment needs to be strengthened to improve SBA retention at the community level
- Unclear who / how the generic SBA learning resource package (ACCESS program) will be adapted for different cadres
- No clear plan for increasing SBA coverage for home deliveries or increasing service delivery sites

Recommendations

- Develop a strategic implementation plan for increasing SBA coverage and support the roll out

4. Gaps in Programmatic & Service Delivery Issues

- Despite various community based packages focusing on specific issues/ interventions, no single integrated package currently exists for community based neonatal health programming
- There is not a single streamlined system which adequately addresses the in-service refresher needs
- Newborn programs are currently covered under Family Health Division and Child Health Division and there is no clear demarcation of responsibilities
- National Neonatal Health Strategy has not been fully implemented.

Recommendations

- Develop one integrated community based package for improving neonatal health – perhaps integrating it with existing SM and CBIMCI packages
- Clear demarcation of responsibilities of FHD and CHD regarding Newborn Programs.
- Neonatal Health Strategy needs to be reviewed and priority interventions selected for fast tracking implementation

5. Gaps in Research

- There is a need for a more thorough assessment of the extent and cause of maternal and neonatal deaths at the community level

Recommendations

- Conduct a more thorough assessment of the extent and cause of maternal and neonatal deaths at the community level

6. Gap in Advocacy

- There is lack of dissemination of central level information on neonatal health to the regional and district levels

Recommendations

- Disseminate from the central level all relevant neonatal policies, strategies, training documents, IEC materials to the districts and below

ANNEX

Current and planned programmatic responses for newborn health from stakeholders

Partner	Mandate	Priority and Objectives for MNCH	MNH Activities and Scale of Activities	Resource Committed/ Anticipated for MNH
Governmental Agencies				
Family Health Division, Department of Health Services, Ministry of Health and Population	<ul style="list-style-type: none"> • Develop Policy and Management Guidelines for Reproductive Health Services, monitor implementation • Facilitate implementation of Policy and Management Guidelines • Develop, establish and promote programs that improve the quality of RH services • Support districts in carrying out their activities • Facilitate expansion of RH Programs • Facilitate and support programs that enhance community awareness, empowerment and participation in RH issues • Family Health Division is the Focal point for all RH activities carried out by GO/NGO/INGO 	<ul style="list-style-type: none"> • To contribute to the reduction of MMR by three fourths by 2015 • To contribute to the reduction of neonatal mortality ratio to 28/1000 live births by 2009 • To contribute to the reduction of fertility to replacement level by 2017 	Output 1 of the Nepal Health Sector Plan is related to delivery of the Essential Health Care Services Package (EHCS). Family planning, safe motherhood and newborn care are included in the EHCS package	Resources committed since it is a priority program.
Child Health Division, Department of Health Services,	<ul style="list-style-type: none"> • To protect children against diseases by expanding the reach of immunization to every eligible (person)Child including those in 	To reduce infant mortality from 64 to 45 deaths per 1000 live births by the end of the 10th Five Year Plan (2007).	BCG vaccination of neonates and TT vaccination in women of reproductive age throughout the country as part of the National Immunization Program.	The Government of Nepal is committed to provide its health

Ministry of Health and Population	<p>the age group beyond infancy</p> <ul style="list-style-type: none"> To effectively implement Community Based – Integrated Management of Childhood Illnesses program to reduce the morbidity and mortality among under-five children due to pneumonia, 	<p>To reduce under-five mortality from 91 to 72 deaths per 1000 live births by the end of the 10th Five Year Plan (2007).</p>		<p>care budget for TT and BCG vaccination, which affects neonates.</p> <p>Other areas in which</p>
	<ul style="list-style-type: none"> diarrhoea, malnutrition, measles and malaria to the maximum possible extent To achieve nutritional well-being of all people in Nepal (especially children, pregnant and lactating women) so that they can maintain a healthy life and contribute to the socio-economic development of the country through improved nutrition program, implemented in collaboration with relevant sectors 	<p>With regard to neonates, CHD focuses on BCG vaccination, TT vaccination in mothers to sustain elimination of MNT status, promotion of exclusive breastfeeding and management of sick neonates through CB-IMCI program.</p>	<p>School based TT vaccination of children in 8 districts (to provide future protection against TT in women of reproductive age), will expand to 16 more districts.</p> <p>Japanese Encephalitis vaccine introduction to all age groups in a few endemic districts in the upcoming fiscal year, which also affects the health of women of reproductive age.</p> <p>The CB-IMCI program focuses on management of sick children under 5 years with most common illnesses such as pneumonia, diarrhoea, malnutrition, measles and malaria. CB-IMCI also has a special focus on infants less than 2 months, which include neonates. This program currently covers 41 districts, 66% of the population, and will be expanded to all 75 districts within the next 3 years.</p> <p>The Nutrition program is involved in promotion of exclusive breastfeeding.</p> <p>The Nutrition program also includes iron distribution throughout the country and iron intensification in 21 districts to expand to 16 more districts this fiscal year. Other national scale activities include promotion of iodized salt, which also affects the health of women of reproductive age.</p>	<p>The CHD works for neonates such as CB-IMCI program, promotion of exclusive breastfeeding, and provision of iron to women of reproductive age could use additional donor/partner funds.</p>

Partner	Mandate	Priority and Objectives for MNCH	MNH Activities and Scale of Activities	Resource Committed/ Anticipated for MNH
External Development Partners				
UNICEF	Mandate: Realization of the rights of children and women	<p>Goal: Contribute to reduction in maternal and neonatal mortality</p> <p>Objectives: Increased utilization of quality MNH services, especially among Dalits, Janajatis</p>	Work with other partners in Safe Motherhood. As a component of the Support to the Safe Motherhood Program (DFID) to build capacity of the district health system in 8 districts to provide quality MNH services, increase access to these services as well as improve home care of the newborn and referral.	1.8 million US \$
WHO	Attainment by all peoples of the highest possible level of health.	To improve health and reduce morbidity and mortality during key stages of life, including pregnancy, childbirth, the neonatal period, childhood, and adolescence, promote sexual and reproductive health, and promote active and healthy ageing for all individuals, using a life course approach and addressing equity gaps.	Adaptation and implementation of WHO / IMPAC, and Pregnancy Childbirth and Post partum care guide. Training of Master Trainers in Midwifery/SBA. Strengthening and expanding facility based maternal and prenatal death reviews. Piloting “Making Pregnancy Safer Program” in one district. Procurement of Iron foliate tablets and EoC kit boxes	
GTZ – Health Sector Support Program	To support the Reproductive Health Programme of Nepal	Main objective of program is to improve the quality of RH services provided by various health care facilities, and safeguard the access to these services.	<p>Establish quality EOC services</p> <p>Hardware support to health facility</p> <p>Improved EOC and CEOC services / FP / and other RH services</p> <p>Increase access to FP and other RH services</p>	
USAID	All neonatal programs implemented through the Nepal Family Health Program			

International NGOs/PVOs				
<p>Save the Children US – Saving Newborn Lives Program phase 1 (2000 – 2005) & 2 (2006 – 2011) Global grant from the Bill & Melinda Gates Foundation for improving neonatal health and survival</p>	<p>Mandate for SNL is to achieve neonatal mortality reduction through sustained high coverage of effective interventions.</p>	<p>Test and demonstrate integrated packages of newborn health interventions demonstrating their cost effectiveness in reducing mortality in representative low resource settings</p>	<p>Conducted a Situation Analysis of Neonatal health. Report published as the “State of the World’s Newborns Nepal” in October 2001. Implemented and evaluated Behaviour Change and Communication program in Kailali district. Pilot tested postnatal care package for mothers and newborns in 5 VDCs of Kailali district. Supported the Family Health Division in the district wide testing of the Birth Preparedness Package. Strengthened neonatal component of pre-service curricula for physicians and staff nurses in Institute of Medicine. Supported Family Health Division in the development of the National Neonatal Health Strategy, endorsed in January 2004 and the establishment of a National Neonatal Technical Advisory Committee, now merged as the Safe Motherhood Neonatal Health Subcommittee. Support Child Health Division in the implementation of Maternal and Neonatal Tetanus Elimination program in Siraha, Kailali and Kanchanpur districts. Test community based management of neonatal infection in Morang district in partnership with JSI and Morang DPHO.</p> <p>Support the DoHS and work with partners for the development and testing of integrated community based neonatal health package</p> <p>Scale up pre-service strengthened neonatal curricula in MBBS and staff nurse campuses affiliated with the Institute of Medicine</p>	<p>Anticipated for MNH</p>

ACCESS	<p>The mandate is to successfully run the Programme for Maternal and Neonatal Health.</p> <p>Global USAID grant for improving Maternal and Neonatal Health.</p> <p>Implemented in partnership by SC US and JHPIEGO.</p>	<p>The objective of this programme is to Increase use and coverage of maternal/neonatal and women's health & nutrition interventions through its CBMNC programme</p>	<p>Develop and test Generic Skilled Birth Attendant (SBA) Learning Resource Package and incorporate in curricula of various cadre of SBA at the national level</p> <p>Develop and test Community Strategies to identify and manage Low Birth Weight (LBW) Infants in Kanchanpur district</p> <p>Develop guidelines for LBW infants and work with GoN for incorporation in the National Maternal and Neonatal standards and protocols at the national level</p> <p>Conduct study to assess factors affecting skilled birth attendance and provide recommendations to GoN and other key stakeholders at the national level</p>	
Nepal Family Health Program	<p>The main emphasis of Community Based- Maternal and Neonatal Care (CB-MNC) is to significantly increase coverage of a minimum package of high-impact, cost-effective, largely community-based interventions. This pilot is being implemented in Jhapa, Banke and Kanchanpur districts.</p>	<p>To provide a continuum of services from the time women is pregnant through the post-partum period to improve maternal and neonatal health, with extended services to provide family planning as needed to improve birth spacing.</p>	<p>Health education on ANC, clean delivery and post-partum including neonatal care at community level using birth preparedness package (BPP).</p>	Committed resources
Support to Safe Motherhood Program	<p>Support to Safe Motherhood Program</p>	<p>Support GoN in scaling up successful interventions in order to have an impact on maternal and neonatal mortality at national level</p>	<p>Support (to) GoN in planning, managing, monitoring and evaluating & scaling up SM program, focusing on poor & excluded population, in line with NHSP-IP</p> <p>Support Safe motherhood partners for strengthening capacity of district SM services including increased access to delivery by SBA & EONC</p>	20 million pounds
ADRA	<p>Implement the Safe Motherhood Innovation Project, funded by the European Union, 2004-2007</p>	<p>Reduce maternal mortality and morbidity due to pregnancy-related complications in the six targeted districts of Eastern Nepal Dhankuta, Terathum, Taplejung, Ilam, Sankhuwasabha and Khotang</p>	<p>Equipment and staff support to health facilities, training in Obstetric First Aid, BEOC and CEOC.</p> <p>Behaviour Change and Communication and advocacy activities for safe motherhood</p>	

CARE Nepal	To improve the livelihoods of poor, vulnerable and socially excluded people by empowering them about their right to healthy life	Develop, implement, and evaluate public health initiatives based on social analysis and within new and emerging key technical areas	Child Survival Project Birth preparedness plan	Not specified, as the program is inbuilt and integrated with other program components e.g. child survival, IMCI, general BCC program etc
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3. Description of relevant current and planned research on newborn health.

3.1 Completed Research

Title	PIs/Partners involved	Funded By	Field area	Duration	Main Results/Findings/ Implications for Policy and programs
MIRA (Mother and Infant Research Activities)					
The effects of postnatal health education for mothers on infant care and family planning practices in Nepal: a randomized controlled trial	MIRA and Institute of Child Health, London (ICH)	ODA, UK through ICH	Health education in prenatal period	2 years	Providing 2 setting of one to one health education was not very effective in improving selected indicators in the baby except for a slight improvement in family planning uptake by the mother
Incidence and factors related to birth asphyxia and hypoxic ischemic encephalopathy (Case control study)	MIRA and Institute of Child Health, London	Welcome Trust, UK through ICH, London	Clinical research on birth asphyxia	2 years	High incidence of birth asphyxia and its consequences in Nepal was found; among important factors related to birth asphyxia are poor monitoring and delayed or untimely intervention, use of syntocinon drip
Multiple micronutrient supplementation in the antenatal period and its effects on birth weight and duration of gestation (Double blind randomized controlled trial)	MIRA and Institute of Child Health, London	Welcome Trust, UK through ICH, London	Clinical research on effect of antenatal supplementation on birth weight and gestation	2 years	Significant increase in birth weight but no significant increase in gestational period. However, slight increase in neonatal mortality was observed as well

Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial	MIRA and ICH, London	DFID, UK, WHO, Geneva, UNICEF, Nepal and UNFPA, Nepal	Effective health education for improving prenatal health & strengthening health services	5 years	30% reduction in neonatal mortality and significant reduction in maternal mortality with significant increase in process indicators
NNIPS (Nepal Nutrition Intervention Project Sarlahi)					
Effect of maternal Vitamin A Supplementation on foetal and infant survival and growth in Nepal	Dr Keith P. West, Dr Joanne Katz, Dr. Subarna K Khatri, Mr Steven C. LeClerq, Mr. S R. Shrestha and Ms Lisa Pradhan	USAID	30 VDCs in Sarlahi	1992-1996	Reduction in pregnancy related mortality by 44%. No effect on foetal and infant survival and growth. National policy to dose women within 6weeks after delivery with 200,000 IU of Vitamin A
Maternal Micronutrient Supplementation to Reduce Low birth Weight and Maternal and Infant Morbidity in Rural Nepal	Dr. Parul Christian Dr Keith P. West, Dr Joanne Katz, Dr. Subarna K Khatri, Mr Steven C. LeClerq, Mr. S R. Shrestha and Ms Lisa Pradhan	USAID AND NIH	30 VDCs in Sarlahi	1997-2001	No significant findings
Impact of New Born and Umbilical Cord Cleansing with Chlorhexidine on Neonatal Mortality and Morbidity in Southern Nepal	Dr Luke Mullany, Dr James M. Tielasch, Dr Gary Darmstadt, Dr Ramesh Adhikari. Dr Joanne Katz, Dr. Subarna K Khatri, Mr Steven C. LeClerq, Mr. S R. Shrestha	USAID, NIH and Bill Gates Foundation	30 VDCs in Sarlahi	2001-2005	Reduction in mortality in New Born weighing less than 2500grams by 20%
Valley Research Group					
Baseline Survey for Community Based Maternal and Neonatal Care (CB-MNC) Program in Banke	Shailes Neupane	Nepal Family Health Program (NFHP)	Banke District	6 months (conducted in 2005)	

Baseline Survey for Community Based Maternal and Neonatal Care (CB-MNC) Program in Jhapa	Shailes Neupane	Nepal Family Health Program (NFHP)	Jhapa District	6 months (conducted in 2005)	
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SC US in partnership with JSI

Morang Innovative Neonatal Intervention (MINI) Program	Dr Neena Khadka Dr Penny Dawson Dr B D Chataut Dr Robin Houston	SC/USA Saving Newborn Lives	Morang District	September 2006 Plan Plan being developed to extend to the other VDCs of Morang	To determine whether Community based FCHVs and the most peripheral Government health workers (MCHW/VHW/AHW) and the extension health volunteers (FCHVs) can perform a set of activities that result in improvement in the early identification and correct management of neonatal infections. Policy Implications: If this approach proves to be an effective strategy to increase the identification and appropriate management of newborn infections through the existing health infrastructure, the policy implications from this program will be huge, not only for Nepal, but possibly in other countries where access to care for sick newborns is limited. In Nepal, the MINI program has been designed and implemented in a manner which would allow it to be readily incorporated into the MoH's successful CB-IMCI program.
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3.2 Ongoing Research

Title	PIs/Partners involved	Funded by	Field area	Completion Date (expected)	What will we know? What is being measured? Describe any preliminary results
MIRA					
Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised	MIRA and ICH, London	DFID, UK	Effective health education for improving prenatal health and strengthening of health services	2 years	Replication of the previous study in other areas of Makwanpur and another district to confirm the efficacy of the trial in another geographical area
Community interventions to improve child survival in rural Nepal: a cluster randomized controlled trial of the impact of women's groups on prenatal and neonatal mortality and maternal and infant nutrition, augmented by treatment of neonatal sepsis by community volunteers	MIRA and ICH, London	ICH	Effective health education to improve prenatal health, women's nutrition and use of female community health volunteers in treating neonatal sepsis at home	2 years	Effectiveness of participatory women's groups in improving prenatal health including nutrition of pregnant women and use of community health volunteers in managing neonatal sepsis at home.
NNIPS					
Effect of Chlorhexidine skin cleansing on skin flora of new-borns in Nepal	Dr Luke Mullany, Dr James M. Tielasch, Dr Gary Darmstadt, Dr Ramesh Adhikari, Dr Joanne Katz, Dr. Subarna K Khatri, Mr Steven C. LeClerq, Mr. S R. Shrestha	USAID, NIH AND GATES FOUNDATION	Dept of Obs and Gyn at the Institute of Medicine	May 2006	Efficacy in reducing the skin flora in new born.

National Neonatal Technical Advisory Committee (NNTAC)

Terms of Reference

1.1 Introduction:

In order to address the high neonatal mortality in the country and the needs to reach the Millennium Development goals for reducing child mortality, the Ministry of Health has taken giant steps towards improving "Neonatal Health and Survival" in the country by endorsing a National Neonatal Health Strategy (NNHS) in January 2004. This policy document is the guiding force for the introduction of newborn care in communities and facilities of the country.

The strategy has institutionalized the Family Health Division in the Department of Health Services as the focal point for all neonatal health activities in the country. The Reproductive Health and Safe Motherhood Coordinator in Family Health Division will function as the point person responsible for activities related to neonatal health.

As directed by the strategy, the Family Health Division took the first step towards improving policy interventions for neonatal health in the country by establishing within the present Safe Motherhood Sub Committee a neonatal group which will be called the "*National Neonatal Technical Advisory Committee (NNTAC)*".

1.2 Rationale for the establishment of the NNTAC

The NNTAC will function as a forum of technical experts working under the Safe Motherhood Sub-committee to create a collaborative, cooperative and concerted effort for meeting the strategic objectives outlined by the NNHS. This group will have the mandate to provide critical review and input to the MoH for policies, programs and activities related to newborn health in the country. The group will be informed and tied in with country program priorities, strategies and initiatives and will also influence the same. The major focus of the group will be to streamline all neonatal health programs in the country in line with the National Neonatal Health Strategy and to provide technical advice wherever necessary. The focus of all efforts of the group will be to achieve improvement in newborn health and survival in Nepal.

1.3 Implications

The role of the NNTAG will be a supportive one. This group once it is established will support HMG, MoH through Family Health Division on all matters pertaining to neonatal health. It will especially strategically influence decision making and the ability to motivate and involve the other reproductive and child health programs to focus on newborn survival.

2. The specific terms of reference of the committee are:

- Provide a forum to address issues related to neonatal health and survival that require government attention and policy level input.
- Support and make recommendations to the MoH and other relevant stakeholders in the implementation of the National Neonatal Health Strategy and thereby ensuring all programs related to neonatal health are guided by it
- Enhance national commitment to neonatal health programs by advocacy through various mechanisms.
- Provide a forum for sharing, exchange and dissemination of information, experiences, best practices and lessons learned and thereby ensure consistencies in programming efforts for neonatal health.
- Assist and support as a technical resource to the government and other relevant partners.
- Support the MoH to determine various needs / issues within neonatal programs viz., implementation of proven, cost effective interventions, measures for effecting implementation in

the field, review and revision of pre-service / in-service curricula and protocols, and training.

- Liase with existing committees, task forces, networks working in safe motherhood, child health and other related areas, with a view to mobilize them for neonatal programs.
- Review the function of NNTAC periodically to both asses the effectiveness of the committee as well as to add / delete any function as appropriate in the changing context.

3. Administrative processing of NNTAC

3.1 Convening of Meetings

Director, Family Health Division in the Department of Health Services will convene the meeting. Save the Children USA (SC/USA) will function as the Secretariat and will assist the FHD in organizing and coordinating all activities of the NNTAC including preparation of agenda, coordination of dates of members and organization of meetings. SC/USA will also coordinate with the Secretariat of the Safe Motherhood Sub committee in organizing all above mentioned activities for NNTAC.

3.2 Frequency of meeting

The group will meet quarterly on a regular basis. Meetings may also be called on an ad hoc basis as per need. Dates will be decided in advance in consultation with the Chair and other members.

3.3 Invitees

Members of the Safe Motherhood Sub Committee, Child Health Sub Committee and relevant partners or guests could be invited to join in as deemed necessary by the topic of discussion.

3.4 Logistical support for the functioning of the NNTAC:

- Secretarial and logistic support for regular meetings will be provided by SC/USA

Composition of National Neonatal Technical Advisory Committee:

Reproductive Health and Safe Motherhood Coordinator	Family Health Division	Coordinator
Representative:	1.Child Health Sub-committee	Member
	2.Nursing Section Chief, Nursing Section, Ministry of Health	
Dr. Ranendra Prakash Bahadur Shrestha	Senior Neonatologist	Member
Dr. D. S. Manandhar	Senior Neonatologist, Mother & Infant Research Activities	Member
Dr. Madhu Dixit Devkota	Department of Community Medicine and Family Health, Institute of Medicine	Member
Dr. Dhan Raj Aryal	Neonatologist, Maternity Hospital, Thapathali	Member
Dr. Neena Khadka	Saving Newborn Lives, SC US	Member

Safe Motherhood and Neonatal Subcommittee

The director of Family Health Division is the Chairperson of the Safe Motherhood and Neonatal Subcommittee. Some of the major activities that this working group is involved with are to develop joint work plan of safe motherhood. And to provide a forum to address issues that need government attention and policy level input. It also is involved with enhancing of national commitment to SM program through advocacy by various mechanisms.

Some other activities that this working group is involved with are to provide a forum for sharing, exchange and dissemination of information, experiences, best practices and lesson learned. Assist and support as a technical resource to the government and SM partners. Liaise with existing coordination council, task force, networks working in SM (e.g. RHCC as well as Nepal Youth coordination council (NYCC), NGOCC, SM Network), with a view to mobilize these organizations for SM program. To advocate for Human Resource development for subsequent scale up. Determine various needs/issues within the program jointly based on evidence and operational research for scaling up. The major organizations that are actively involved with this working group are the following: Family Health Division, Child Health Division, Nepal Family Health Program, GTZ, SMNF, SC/USA, UMN, UNFPA, UNICEF, US AID, ADRA, BNMT, NHEICC, UNFPA, WHO, SSMP, TUTH, MIRA, and the Maternity Hospital.

Rapid Assessment Team

Advisors:

- Dr Peeyoosh Kumar "Rajendra", Director of Family Health Division
- Dr Yasho Vardhan Pradhan, Director of Child Health Division

Focal Persons:

- Dr Sun Lal Thapa, CHD
- Dr Naresh Pratap KC, FHD

Members:

- Ms Sharada Pandey, Chief Nutrition Section, CHD
- Dr. Shilu Aryal, FHD
- Mr. Bhogendra Dotel, FHD
- Ms. Sita Gurung
- Dr. Bhim Acharya, Nutrition Section, CHD
- Dr. Madhu Dixit Devkota
- Dr. Kusum Thapa
- Dr. Rajshree Jha
- Dr. Neena Khadka

Process for the development of the Rapid Assessment

1. Planning meetings of Rapid Assessment Team
2. Desk Review of relevant documents
3. Finalization of tools to collect information
4. Circulation of tools to as many stakeholders as possible to collect information
5. Compilation of information on program activities of stakeholders who sent in responses
6. Compilation of gaps, recommendations made by stakeholders who sent in responses
7. Sharing of progress, gaps and recommendations in a joint sub-committee meeting of
8. Child Health & SM Neonatal Health

Rapid Assessment Document Review Team:

Dr. Chhatra Amatya
Dr. Kulesh Bahadur Thapa