WHO/UNICEF JOINT STATEMENT

Home visits for the newborn child: a strategy to improve survival

World Health Organization

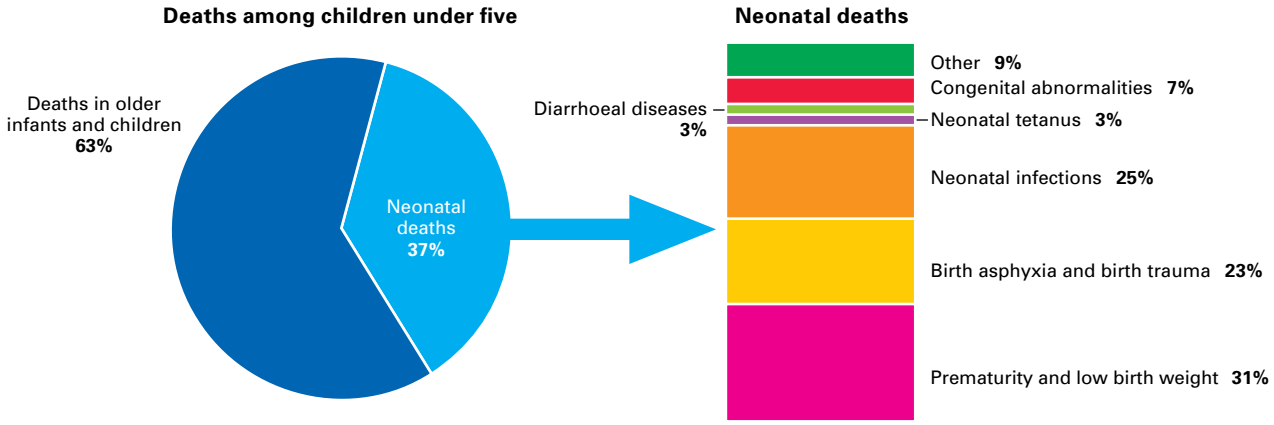
unicef

Every year, about 3.7 million babies die in the first four weeks of life (2004 estimates). Most of these newborns are born in developing countries and most die at home. Up to two-thirds of these deaths can be prevented if mothers and newborns receive known, effective interventions (*1*). A strategy that promotes universal access to antenatal care, skilled birth attendance and early postnatal care will contribute to sustained reduction in maternal and neonatal mortality.

While both mothers and newborns need care during the period after birth, this statement focuses on the care of the newborn child, and the evidence for the same (*2*).* Studies have shown that home-based newborn care interventions can prevent 30–60% of newborn deaths in high mortality settings under controlled conditions (*3–7*). Therefore, WHO and UNICEF now recommend home visits in the baby's first week of life to improve newborn survival.

FIGURE 1

Causes of neonatal deaths



Source: World Health Organization. *The Global Burden of Disease: 2004 update*. World Health Organization, Geneva, 2008.

Nearly 40% of all under-five child deaths occur in the first 28 days of life (the neonatal or newborn period). Just three causes – infections, asphyxia, and preterm birth – together account for nearly 80% of these deaths (*8*) (**Figure 1**). Additionally, a baby born with low birth weight, particularly if preterm, is at much greater risk of dying or getting sick than other newborns.

The core principle underlying maternal, newborn and child health programmes should be the "continuum of care". This term has two meanings – a continuum in the lifecycle from adolescence and before pregnancy, pregnancy, birth and during the newborn period (**Figure 2**), and a continuum of care from the home and community, to the health centre and hospital and back again. Skilled care during pregnancy, childbirth and in the postnatal period prevents complications for mother and newborn, and allows their early detection and appropriate management.

Three-quarters of all neonatal deaths occur during the first week of life, 25–45% in the first 24 hours (*9*) (**Figure 3**). This is also the period when most maternal deaths occur. Forty seven percent of all mothers and newborns in developing countries do not receive skilled care during birth (*10*), and 72% of all babies born outside the hospital do not receive any postnatal care (*11*). These are the critical gaps in the continuum of care.

* This statement focuses on the care of the newborn child. Newborn child is defined in this document as a child less than four weeks of age. Care of the mother is addressed in other WHO, UNICEF and UNFPA documents.

FIGURE 2

The lifecycle continuum of care

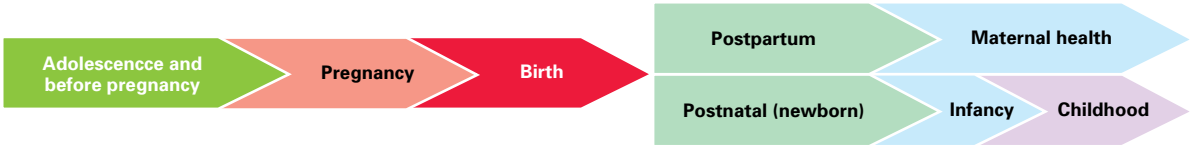
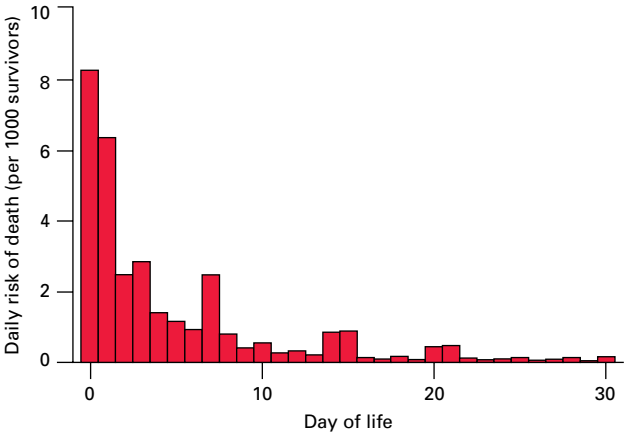


FIGURE 3

Daily risk of death during the first month of life



Source: Lawn JE, Cousens S, Zupan J. 4 million neonatal deaths: When? Where? Why? *Lancet* 2005; 365:891–900. (Based on 47 DHS surveys conducted from 1995–2003).

Even if birth occurs in a health facility, in many settings, mothers and newborns are discharged within a few hours, and have no further contact with a health provider until the 6 week postpartum and immunization visit. Births at home pose an even greater challenge for providing care to mothers and newborns during the critical hours and days after birth. This can be addressed by introducing home visits as a complementary strategy to facility-based postnatal care to increase coverage of care and improve newborn survival.

Home visits for care of the newborn

WHO and UNICEF recommend that care be provided by a skilled attendant during and immediately after birth irrespective of where the birth takes place. Women who give birth in a health facility and their newborns should be assessed for problems and given a specific date to return for further postnatal care, even if everything is going well, and advised to return immediately if they notice any danger signs (*12*). The recommendation for women who give birth at home without skilled care, and where continuous professional care cannot be assured, is that they should seek postnatal care as soon as possible after birth (*12*). Many mothers cannot comply with the above recommendations because of financial, social or other barriers. The coverage of postnatal care within 24 hours of birth among all women giving birth at home is only 13% (*11*).

Evidence: Studies conducted in Bangladesh, India and Pakistan have shown that home visits can reduce deaths of newborns in high-mortality, developing country settings by 30 to 61% (*3–7*). The visits have improved coverage of key newborn care practices such as early initiation of breastfeeding, exclusive breastfeeding, skin-to-skin contact, delayed bathing and attention to hygiene, such as hand washing with soap and water, and clean umbilical cord care. This evidence complements the experience from developed country settings which has shown that postnatal home visits are effective in improving breastfeeding rates and parenting skills (13–14).

Recommendation: Home visitations after birth is a strategy to deliver effective elements of care to newborns and increase newborn survival. This strategy has shown positive results in high mortality settings by reducing newborn mortality and improve key newborn care practices.

When should home visits be made?

Evidence: No evidence-based recommendation has been established until now for the optimal timing and number of newborn care contacts. However, the first days of life are critical because most neonatal deaths occur in this period – 25–45% in the first 24 hours (*9*) and over 50% in the first 48 hours (*9*). Most neonatal deaths occurring after 48 hours can be prevented by appropriate newborn care starting immediately after delivery. All studies that support this statement included home visits on days 1 and 3 of life to ensure a postnatal contact and support

for improved care. Evidence from Bangladesh suggests that newborns who were visited within the first 48 hours after birth at home had lower subsequent mortality than those visited later. It is also widely acknowledged that breastfeeding support is crucial during the first days after birth.

Recommendation: For all home births a visit to a health facility for postnatal care as soon as possible after birth is recommended. In high mortality settings and where access to facility based care is limited, WHO and UNICEF recommend at least two home visits for all home births: the first visit should occur within 24 hours from birth and the second visit on day 3. If possible, a third visit should be made before the end of the first week of life (day 7).

For babies born in a health facility, the first home visit should be made as soon as possible after the mother and baby come home. The remaining visits should follow the same schedule as for home births.

What should be done at a home visit?

Evidence: Research has shown that families have difficulties in recognizing signs of severe neonatal illness, particularly in the first week of life, and in seeking appropriate care. Studies have found that home visits help families in identifying newborn problems early and in dealing with constraints to care seeking from appropriate providers. Home visits have also been shown useful to promote practices to keep the baby warm, promote exclusive breastfeeding and its early initiation, and to improve hygiene.

Recommendation: Basic care for all newborns should include promoting and supporting early and exclusive breastfeeding, keeping the baby warm, increasing hand washing and providing hygienic umbilical cord and skin care, identifying conditions requiring additional care and counselling on when to take a newborn to a health facility (**see Box**). Newborns and their mothers should be examined for danger signs at home visits. At the same time, families should be counselled on identification of these danger signs and the need for prompt care seeking if one or more of them are present.

Special conditions

Low birth weight (LBW) babies, particularly those who are born earlier than term, need additional care to survive and stay healthy. They need greater support for keeping them warm, initiating early and exclusive breastfeeding, and preventing infections. Clinically stable LBW babies born in hospitals who are provided exclusive breastfeeding and warmth through skin-to-skin contact with the mother have a lower incidence of infections, feed better, and gain weight more rapidly compared to babies provided care in incubators. In addition to the postnatal care interventions for all newborns, those with LBW should be given:

- Increased attention to keeping the newborn warm, including skin-to-skin contact with the mother;
- Assistance with initiation of breastfeeding within the first hour after birth. This may

Newborn care during home visits in the first week of life

- Promote and support early (within the first hour after birth) and exclusive breastfeeding;
- Help to keep the newborn warm – promote skin-to-skin care;
- Promote hygienic umbilical cord and skin care;
- Assess for danger signs and counsel on their prompt recognition and care seeking by the family (not feeding well, reduced activity, difficult breathing, fever or feels cold, fits or convulsions);
- Promote birth registration and timely vaccination according to national schedules;
- Identify and support newborns who need additional care (e.g. LBW, sick, mother HIV-infected).[a] If feasible, provide home treatment for local infections and some feeding problems.

Maternal care during home visits in the first week after birth [a]

- Ask about mother's well being
- Ask about excessive bleeding, headache, fits, fever, feeling very weak, breathing difficulties, foul smelling discharge, painful urination, severe abdominal or perineal pain. If she has any of these symptoms, refer her to a health facility for care
- Ask for swollen, red or tender breast or nipples, manage breastfeeding problems if possible, if not, refer her to a health facility for care
- Counsel about danger signs for mother and newborn and advise on where to seek early care when needed
- Provide birth spacing and nutrition counselling

[a] These interventions should be delivered by appropriately trained and supervised health workers. If home visits are done by a midwife or another skilled professional, care of the mother should include additional interventions as recommended in WHO IMPAC guideline, *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice.*

mean helping the mother to express breast milk and feed the newborn with a cup if the baby is not strong enough to suckle. If a baby is unable to accept cup feeds, he/she should be referred to a hospital;

- Extra attention to hygiene, especially hand washing;
- Extra attention to danger signs and the need for early care seeking and referral;
- Additional support for breastfeeding and monitoring growth.

Sick newborns need urgent treatment to prevent death. Treatment for local infections and some feeding problems can be provided at a health facility or at home. The families of newborns identified as having severe illness at home visits should be assisted to seek hospital or facility-based care. In situations where referral to a hospital is not possible, treatment with antibiotic injections should be provided in first-level health facilities on an outpatient basis. In a setting in Nepal where referral to hospital was not possible for most families, a study showed that recognition of severe illness and administration of oral antibiotics by community health workers and referral to facility-based health workers for provision of daily antibiotic injections substantially improved access to treatment. Research studies conducted in Bangladesh and India in areas with poor access to health facilities have successfully used appropriately trained and well-supervised community health workers to give antibiotic injections at home. This, together with other interventions, has been shown to reduce significantly mortality in controlled settings. Before they can be recommended by WHO and UNICEF for inclusion in programmes, however, the safety and long-term sustainability of these approaches need to be further evaluated in studies in routine settings.

Newborns of HIV-infected mothers need special care. To prevent mother-to-child transmission of HIV and strengthen the continuum of care, mothers should be provided with information and support to enable HIV-infected women and their newborn to access additional care and services available at the health facility, such as antiretroviral prophylaxis to mothers and newborn infants, lifelong antiretroviral treatment for mothers when indicated, infant feeding counselling and support, HIV-testing and care of exposed infants, including prophylaxis for opportunistic infections, and antiretroviral treatment when indicated. Community health workers particularly need to be aware of the issues around infant feeding so that they can promote and support appropriate feeding practices, and understand that many HIV-infected newborns are born premature and are more susceptible to infections.

Who can make the home visits?

Postnatal care should be provided by skilled health workers. These are also best suited to make home visits for newborn care. They can perform all the essential tasks for providing preventive and curative care. In many settings, this option is not feasible due, for example, to shortages of skilled health workers, lack of transportation, or a workload that does not allow them to make timely and repeated home visits. In such settings, many of the essential tasks for basic newborn care can be carried out by trained auxiliary health workers or trained community health workers who are either part of the health care delivery system or are linked to it. Examples of workers in existing government programmes who have been given the responsibility of making home visits for newborn care include:

- **Community midwives in Indonesia:** Over two-thirds of births in Indonesia are assisted by skilled birth attendants, a substantial proportion by community midwives (*Bidan di Desas*). These midwives are mandated to provide maternal and newborn care through follow-up home visits.
- **Community workers in Integrated Management of Neonatal and Childhood Illness (IMNCI) programme in India:** India has adapted the Integrated Management of Childhood Illness (IMCI) strategy to include an additional focus on newborn health, renaming it IMNCI. The IMNCI strategy includes postnatal home visits by village level workers (*Anganwadi* workers and, in some sites, by the newly created cadre of *ASHAs*).
- **Female community health volunteers in Nepal:** Female community health volunteers (FCHVs) in Nepal have been used in pilot programmes to deliver home-based maternal and newborn care. FCHVs are members of the communities they serve and are already providing support for immunization, vitamin

A distribution and treatment of diarrhoea and pneumonia. A national strategy to scale up home-based newborn care has been developed. The newborn care programme will have FCHVs present at the birth and visiting on days 3 and 7 after birth to promote healthy practices and to recognize illness and arrange treatment.

- **Health Surveillance Assistants (HSAs) in Malawi:** In six districts, as part of a phase-in approach for scaling up, HSAs are being trained to carry out home visits during pregnancy and immediately after delivery to improve maternal and newborn care practices, awareness of danger signs and early care seeking.
- **Health extension workers in Ethiopia:** These workers, who deliver a basic package of care, are supported by community volunteers for many health promotion activities. Again, these front line health workers and volunteers are being used to provide home-based maternal and newborn care after appropriate training.

Programme components required for implementation of home visits for newborn care strategy

- Adopting the policy of providing home visits for newborn care in the first week of life;
- Identifying the best channel of delivering postnatal home care based on cost effectiveness and sustainability;
- Assessing the current level and distribution of staff and their competencies to deliver the required services and care for newborn survival;
- Where appropriate, adopting the strategy of providing home visits for newborn care in the first week of life by community health workers as a complementary strategy to facility-based and home-based care by skilled health workers. If necessary, adjust regulatory and legal framework for community health workers to provide postnatal care.
- Recruiting, training and deploying health workers, including community level workers, to provide newborn care through postnatal home visits;
- Ensuring continued professional development and motivation of health workers, including community health workers;
- Strengthening the health system to support health workers to deliver postnatal newborn services and care, including regular supplies, supervision and referral links;
- Supporting communication efforts for community awareness and involvement in postnatal care.

Recommendations for countries

1. All newborns should receive appropriate care especially in the first hours and week of life when they are most vulnerable. Additional services and care should be provided for special conditions such as low birth weight, HIV infection in mothers and newborn illnesses.
2. Each country should analyse the current policies and practices related to pregnancy, childbirth and postnatal care, including facility-based delivery, discharge from facilities after birth, care for mother giving birth at home, and the potential role of home visits to improve newborn survival.
3. A home visitation program is recommended where access to facility-based skilled care is limited. The assignment of health workers to such programs will depend on the current level of distribution of staff, their competencies to deliver this service and the availability of supplies and supervision. Whenever skilled health workers are not available, countries should explore the potential involvement of community health workers in the care for mothers and newborns in the days and hours after birth.
4. The content of a home visit program will depend upon the skilled care in pregnancy, childbirth and postnatal care available in the specific context.
    a. For births in health facilities, repeated check-ups and counselling (care practices, danger signs) for the mother and baby before discharge and ageeing to a return date for follow-up or a home visit.
    b. For home births, repeated check-ups and counselling (care practices, danger signs) for the mother and baby should be part of the routine care.

5. Home visits should be initiated as soon as possible after birth or after returning home from the facility. A visit within the first 24 hours after birth is likely to be most effective in reducing newborn mortality. Additional visits on day 3 and, if possible, on day 7 can improve home care practices and identify danger signs or illness. Home visits can be done by health professionals or by appropriately-trained community health workers.
6. Programmes should emphasize the importance of increasing community awareness and knowledge of home-based care practices to improve newborn survival.
7. Postnatal home care by community health workers should be linked to the health system and the full continuum of care. Health services should try to bring postnatal care as close as possible to the home and the family. Gaps in services including skilled attendance at birth and treatment of newborn illness need to be addressed as part of a programmatic approach. This will often include increasing and strengthening human resources for health, increasing financial resources allocated to postnatal care, ensuring availability of medicines and other supplies, monitoring and supervision, improving the referral system and removing barriers to access srvices.

UNICEF, WHO and partners will support these actions by:

1. Advocating, assisting and investing resources for country adoption of these recommendations and adaptation to local health systems contexts and cadres;
2. Working with governments and non-government organizations to rapidly disseminate these recommendations and encourage governments, NGOs and communities to adopt these recommendations;
3. Assisting capacity building and functioning of health care providers and community health workers to provide home-based newborn care through development and use of guidelines and training materials and other activities as needed;
4. Helping with communication efforts aimed at promoting antenatal care, skilled care at birth and postnatal care for mothers and newborns.

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This WHO-UNICEF Joint Statement is supported by the following agencies:

Process of development of this statement

A technical consultation on community-based newborn care and treatment of neonatal sepsis was jointly organized by WHO, Save the Children (SC) and USAID in London, in September 2007. All published and unpublished research studies evaluating home-based newborn care interventions in high-mortality settings were presented and reviewed by an independent panel of experts. The experts declared not to have any conflicts of interest. The key conclusions of the expert panel were that community-based interventions reduced neonatal mortality, including early neonatal mortality, and that home visits by community health workers were common to almost all studies. Following the technical consultation, WHO's Department of Child and Adolescent Health and Development commissioned a systematic review of literature on this issue, which confirmed the conclusions of the consultation. Based on the above, this Joint Statement was drafted by WHO and UNICEF staff, and was reviewed by SC and USAID staff. The draft was reviewed by the expert panel and their comments were incorporated into the final version. This statement will be reviewed and updated two years after publication.

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WHO/FCH/CAH/09.02

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