

Newborn Health

The first week after delivery is the most critical time for both newborns and mothers. Much progress has been made in improving child survival after one month of age, but death rates in the first 28 days of life (newborn deaths) are still too high. Basic interventions can reduce this risk.

The Truth About Newborn Deaths

9.3 million babies die every year during the last months of pregnancy or the first month of life

Approximately 3.4 million newborns die within the first week of life

Of those deaths, 66% occur during the first 24 hours

More than 98% of fetal and newborn deaths occur in developing countries; the risk of newborn death is almost 100 times higher in sub-Saharan Africa than in Northern Europe

Most newborn deaths occur at home, often after childbirth without a skilled provider. As the proportion of births with a skilled provider increases, fetal and newborn deaths decrease.

Information on the numbers and causes of fetal and newborn deaths is often unavailable or unreliable. The most important direct causes of late fetal and newborn deaths are infections, birth asphyxia and congenital abnormalities.

More than half of these occur in babies with low birth weight (LBW)—i.e., under 2.5 kg. The gestation and birth weight of the baby are, therefore, the strongest predictors of whether the baby will live or die. A full-term baby who is growth restricted during pregnancy (commonly due to poor maternal nutrition or infection) has about a three times greater chance of dying than a normal birth weight, full-term baby. A preterm baby (born before 37 weeks of gestation) has a 9 to 20 times greater chance of dying than a full-term baby.

It has been estimated that up to 70% of newborn deaths could be prevented by interventions for the mother during pregnancy and childbirth and by simple, low-technology newborn care such as cleanliness (following recommended infection prevention practices), breastfeeding and warmth. The SEARCH project in rural India, for example, was able to reduce neonatal mortality by over 60% by simply addressing neonatal infections in the community.

Interventions During Pregnancy

Several interventions need to be implemented during pregnancy to increase newborn survival, including high-quality antenatal care with standards for care and timely recognition and management of complications. Good nutrition during pregnancy is promoted, including macronutrition, the balancing of protein-energy nutrition and reduced physical workload. Micronutrition is also supported, including:

- iron and folate supplementation where anemia is common;
- vitamin A supplementation where vitamin A deficiency is prevalent; and
- iodization of salt and treatment of iodine deficiency with iodized oil.

Infections during pregnancy can have a serious effect on newborn survival. Newborn health requires the prevention and treatment of infections in pregnancy, including presumptive treatment of malaria and hookworm in endemic areas, identification and treatment of syphilis (ideally within one visit) and tetanus toxoid immunization (twice during pregnancy or a lifetime total of five). Another important intervention is the promotion of voluntary counseling and testing for HIV/AIDS for mothers, with locally feasible options to reduce the risk of mother-to-child transmission of HIV/AIDS. Proper eye care at birth protects the newborn from gonococcal eye infections.

Newborn care includes birth preparation and complication readiness planning. Expectant mothers receive support to learn about newborn care and are encouraged and prepared to breastfeed their newborns.

Interventions During Childbirth and the Immediate Postpartum Period

Every woman should have access to a skilled provider for the birth of her child and timely access to emergency obstetric care services, with standards of care, competent staff, safe blood and sustainable provisions of supplies.

All newborns should be provided essential basic care, including the following:

- Clean chain—ensuring a clean birthing area, especially the surface, the provider's hands, the blade for cutting the umbilical cord and the cord tie
- Warm chain—immediately drying and wrapping the newborn in a clean cloth and keeping the newborn with the mother in a warm room
- Breastfeeding—promoting early initiation of breastfeeding (within 30 minutes after birth) and exclusive breastfeeding (only breastmilk) for the first 4 to 6 months

Newborns with low birth weights require special care and support. Low birth weight newborns need extra support for warmth, including the use of kangaroo care for stable LBW newborns. Providers are encouraged to pay particular attention to timely identification and management of complications such as jaundice and infections. Mothers receive extra support for breastfeeding, including counseling for expression of milk and feeding by cup or spoon.

Sick newborns require prompt emergency care. The parents of newborns are counseled on complication readiness, including knowledge of newborn danger signs and plans for how to respond (funds, transport).

MNH Program interventions include mobilizing facilities, providers, communities and families around birth preparedness and complication readiness for both the mother and the newborn. The Program also works to ensure access to high-quality emergency care services for the newborn, including standards for care of the sick newborn, competent staff and sustainable supplies and drugs.

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