

# Closing the gap in child survival

## How supporting newborn health programs can reap great rewards for child health

While great progress has been made to improve child survival across the globe, newborn survival continues to lag behind. Today, newborn deaths make up a growing proportion of under-five mortality: 44 percent of all deaths among children less than five years old happen during the first 28 days of life. In addition, more than 2.6 million babies are delivered stillborn each year. The vast majority of these tragic deaths occur in low- and middle-income countries. And many are preventable. Two-thirds of newborn deaths could be prevented through low-cost, high-impact interventions that are available today across the reproductive, maternal, and newborn continuum of care.

Donors and policymakers can make a significant global health impact by funding and supporting maternal and child health programs that specifically address the leading causes of newborn mortality, as well as the development, introduction, and scale-up of new lifesaving innovations.

### MANY SOLUTIONS ARE WITHIN REACH

An estimated 85 percent of newborn deaths are caused by complications of prematurity, birth-related complications such as birth asphyxia, and neonatal infections. Low-cost, high-impact interventions exist that can prevent or treat these common causes of death.

The global community can dramatically improve all newborns' chance of survival by fully funding integrated health services that support healthy women and newborns, and by developing and delivering priority health innovations. By providing good-quality health care during childbirth—including the proper use maternal health medicines, antiseptics, and sterile tools—at a cost of less than \$1 per person in the general population, 1.4 million deaths among mothers and newborns could be prevented each year.

### HEALTHY MOMS HELP KEEP NEWBORNS SAFE

The majority of newborn deaths and many stillbirths can be prevented with existing interventions that begin before a woman becomes pregnant, continue throughout her pregnancy, and include care at birth and through the month



PATH/Evelyn Hockstein

A mother rests while a family member meets her newborn baby girl, who was delivered with a twin boy at a rural health clinic in northern Nigeria.

following delivery. For example, if all women who wanted to delay, avoid, or space the time between pregnancies had access to modern contraception, 30 percent of maternal deaths and 35 percent of newborn deaths could be averted.

Access to proper nutrition, family planning, quality prenatal care, and prevention and treatment of sexually transmitted infections and maternal infections during pregnancy will lower rates of prematurity, stillbirths, newborn, and maternal mortality. Some estimates suggest that at least 20 percent of maternal and newborn deaths could be prevented through integrated health care delivery that includes appropriate prenatal care, skilled care for mothers and babies during labor and at birth, and access to emergency obstetric care.

Innovative methods to distribute and administer lifesaving maternal health medicines and technologies are also needed to ensure the survival of mothers.

### PRIORITIZING COST-EFFECTIVE NEWBORN CARE

The majority of newborns can survive and grow strong through increased access to quality maternal health care, proper umbilical cord care, low-cost antibiotics for infections, neonatal resuscitation for newborns who struggle to breathe, and new lifesaving innovations on the horizon.

It is often assumed that premature babies need intensive care to survive. However, only 5 percent of babies require intensive care to live. Furthermore, most newborn deaths occur between the start of labor and two days after childbirth. Babies can be kept safe during this critical window with the assistance of skilled birth attendants, and prompt management of birth complications such as birth asphyxia, feeding support, and warmth.

Through early and exclusive breastfeeding, mothers can help prevent infections in newborns. Additionally, more than 450,000 newborn deaths could be prevented each year through kangaroo mother care, in which infants are swaddled directly against their mother's skin to regulate body temperature and promote breastfeeding.

The innovative use of chlorhexidine, a low-cost antiseptic, to clean newly cut umbilical cords, can prevent deadly newborn infections from entering a baby's body. At less than \$1 per dose, this high-impact medicine could help avert many of the hundreds of thousands of deaths caused by neonatal infections each year.

Only 6 percent of global aid for maternal and child health supports newborn-sensitive programs, and only 0.1 percent of global funding for maternal, newborn, and child health is exclusively allocated to newborn-centered programs and activities.

Source: Save the Children, *A Decade of Change for Newborn Survival*, 2012

## MAKING DONORS' DOLLARS COUNT

Investing in global maternal and newborn health can pay large dividends by benefiting women and newborns. With many low-cost, high-impact interventions already available and key gaps in health innovations already identified, supporting maternal, newborn, and child health truly is a best buy in foreign aid. For less than \$2.50 per person, these lifesaving interventions can be delivered where they are most needed.

By investing in research and development, new innovations can be created to help save the 960,000 newborns whose deaths are caused by conditions that are not fully

preventable or treatable in low- and middle-income countries today. Often, medical products that are commonly available in countries such as the United States aren't made to be used in low-resource settings. Through sustained support and funding, these life-saving interventions can be adapted for low-resource settings.

For example, researchers at PATH created a new version of a medical device commonly found in the United States to treat premature newborns whose lungs aren't fully mature. The innovative, low-cost Continuous Positive Airway Pressure device and oxygen blender is built with parts commonly found in neonatal intensive care units in developing countries so it can be properly used and maintained in low-resources settings across the globe.

## RECOMMENDATIONS

The US government can help reduce needless newborn deaths by taking the following actions.

**Sustain and grow funding for evidence-based health programming.** The US government has committed to end preventable maternal and child deaths. This commitment is possible through sustained investments in the Global Maternal and Child Health Account that includes support for high-impact, evidence-based approaches to address the leading causes of newborn deaths.

**Invest in research and development to advance and deliver priority health innovations.** The US government must continue investing in the research, development, introduction, and scale-up of new innovations to address newborn health challenges. Initiatives such as the US Agency for International Development's Grand Challenges—including Saving Lives at Birth—are an important way to help usher important medical tools through development and delivery to those most in need. In just three years, Saving Lives at Birth has supported more than 60 promising health innovations specifically tailored for maternal and newborn care in developing countries.

Newborn babies face a lifetime of potential alongside the risk of death and disability. With the US government targeted assistance to maternal and child health programs that address the leading killers of newborns, we can ensure that babies can survive and grow into healthy children, no matter where they are born.



PATH is an international organization that drives transformative innovation to save lives and improve health, especially among women and children. We accelerate innovation across five platforms—vaccines, drugs, diagnostics, devices, and system and service innovations—that harness our entrepreneurial insight, scientific and public health expertise, and passion for health equity. By mobilizing partners around the world, we take innovation to scale, working alongside countries primarily in Africa and Asia to tackle their greatest health needs. Together, we deliver measurable results that disrupt the cycle of poor health.

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