



THE LITTLEST LIVES

Bihar Technical Support Program
Innovation Brief No.5
Weak Newborn Tracking





THE CHALLENGE: ENSURING NEWBORNS SURVIVE AND THRIVE

Babies born too early or too small may not breastfeed well, have trouble staying warm, and are more at risk of infection.¹ These issues often lead to serious illness and death even though simple evidence-based practices exist to address them. In Bihar, India, these babies make up 35% of all neonatal mortality. Most of these deaths happen during the first week of life. For small and weak newborns to survive and thrive in any context, trained medical personnel and other caregivers must be ready to properly respond to their needs beginning immediately after birth.

Within Bihar's public health system, frontline health workers (FLWs), including Accredited Social Health Activists (ASHAs), Auxiliary Nurse Midwives (ANMs) and Aganwadi workers (AWWs) all provide basic health care for mothers and newborns.



THE INNOVATION: WEAK NEWBORN TRACKING

The Government of Bihar, in partnership with CARE, is innovating to identify, track and care for very low birth weight² newborns. A key part of this innovation is the use of a simple and affordable tool—a digital scale—that is increasing the ANM's accuracy in measuring the weight of newborns immediately after birth. These accurate weights help ANMs, ASHAs, and AWWs to give low birth weight babies the special care they need during the first critical weeks of their lives.

Prior to this joint government-CARE initiative, ANMs lacked the ability to identify small and weak babies and to manage their care. Now, ANMs are trained in actions that help babies survive: recognition of danger signs, optimal care practices, and correct referral processes. In the labor room, if the facility-based ANM identifies a small or weak baby through weighing, she immediately ensures the baby is warm, dry, and nursing well. She promotes immediate skin-to-skin contact between mother and baby. She counsels and trains the mother on actions she should take once home, such as delayed bathing, skin-to-skin contact, handwashing, breastfeeding, and umbilical cord care. In addition to immediate postpartum coaching of the mother and family, the ANM coordinates with all FLWs in the family's community to ensure they schedule follow-up visits and receive counsel on these life-saving topics.

A network for tracking

Upon discharge from facilities, families are supported by tracking at the community level. On the first, fifth, and seventh day after a newborn is discharged, a FLW (typically an ASHA) visits the mother and child at home and refers them to the facility for care if she notices any danger signs. The community ANM also visits the family during this week to physically examine the newborn. The FLW continues to follow up with weekly visits until the fourth week after delivery, with one final visit at six weeks postpartum.

A medical officer from Bihar's Gaya district describes the process: *"In our hospitals, about 200 deliveries are being conducted every month. About 5-10% are low birth weight. If babies are breastfeeding well and have no problems, then we follow up with the families by telephone. Usually, the doctors on duty follow up. As the medical officer, I follow up overall. By phone, I ask the mother or ASHA or any relative how the baby is doing, whether they are breastfeeding well or not, the temperature and cleanliness of baby, and progress of exclusive breastfeeding."*

In addition to the tracking and support by FLWs, reporting and record-keeping of low birth newborns is also improving. The state of Bihar is collecting, analyzing and learning from these records (which capture both institutional and home births) to continue to strengthen management of newborn complications and identify more innovations that can help these tiniest newborns survive.

"The ASHA (Accredited Social Health Activist) came to my home after I brought my baby home. My baby was 1.5 kg. The ASHA provided support for the baby to take breastmilk and nurse well. She came the first two days and day after day to check on the baby and provide support."

—MOTHER OF A LOW BIRTH WEIGHT BABY IN BIHAR, INDIA



RESULTS

Improved weighing, tracking and evidence-based care of babies have contributed to a dramatic decrease in death and suffering among weak newborns in Bihar.



Serious illness among very low birth weight babies during the first month in life decreased from **57%** in 2015 to **39%** in 2017.

Among the lowest birth weight categories (newborns weighing less than 1500 kg/ ~3lbs), mortality reduced from **63%** in 2015 to **30%** in 2017.

Most strikingly, mortality among very low birth weight babies declined from **22%** in 2015 to **12%** in 2017.

From its inception to 2017, the collective action of this innovation is estimated to have prevented 16,700 newborn deaths.

?? WHAT'S NEXT

The weak newborn tracking innovation has been scaled across all 38 districts in Bihar. CARE continues to support FLWs in providing quality care to communities throughout the state. The district resource units of CARE are continuously working to address challenges and systemic issues such as improving the availability of digital weighing machines in delivery points, strengthening newborn registers and reporting formats at facilities, and supporting recording and reporting of birth weights by nurses and ANMs.

Notes

1. Vinayak K. Patki et al. Maternal antenatal profile and immediate neonatal outcome in very low birth weight babies. *International Journal of Medical Pediatrics and Oncology*. 2017;3(2):64-70
2. Very low birth weight is defined as an infant weighing less than or equal to 2kg/~4lbs.



This brief is part of the Bihar Innovation Series, which highlights some of the innovations that make up the Bihar Technical Support Program. In partnership with the Government of Bihar, CARE has developed innovative solutions that are increasing access to high quality health services in Bihar.

The Bihar Technical Support Program is helping the Health and Social Welfare Departments of Bihar to achieve their goals of reducing rates of maternal, newborn, and child mortality and malnutrition, and of improving immunization rates and reproductive health services statewide.

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