

Objectives

1. Encourage attention to increased international, regional, and national commitment and resources for newborn resuscitation as a part of essential newborn care
2. Improve the availability of high-quality, appropriate and affordable resuscitation devices and training materials
3. Improve the resuscitation capabilities of birth attendants with emphasis on skilled birth attendants
4. Strengthen the supply chain logistics system for resuscitation devices
5. Evaluate the impact of resuscitation programs at scale

Principles

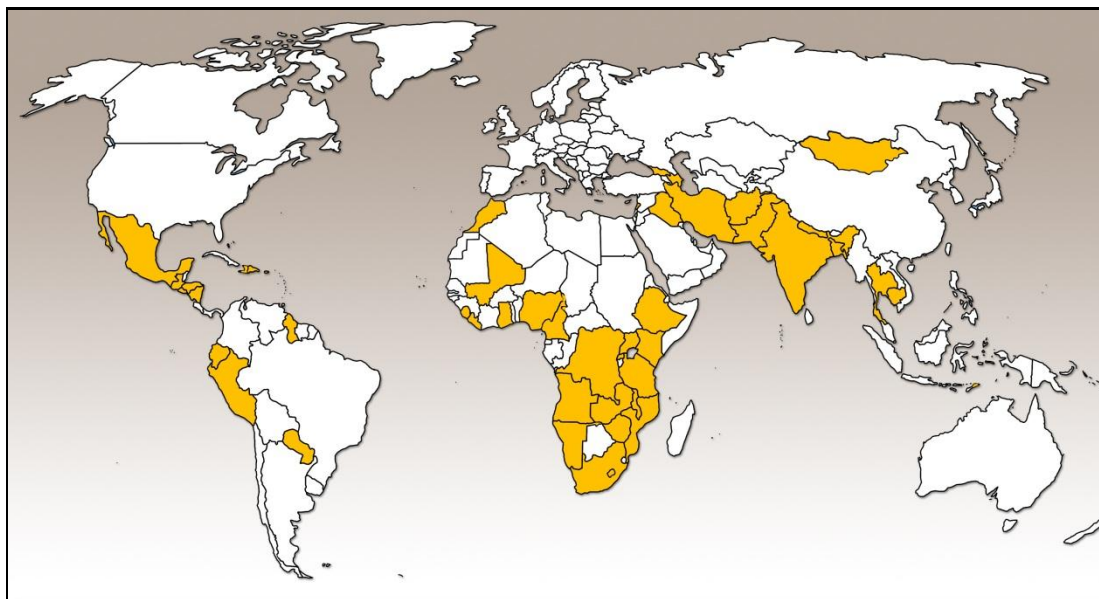
1. Inclusiveness & collaboration
2. Country owned, country led
3. Integration
4. Shared goal, results, and recognition
5. Brand non-exclusivity

GDA Partners

- US Agency for International Development
- National Institutes for Health
- American Academy of Pediatrics
- Laerdal Medical AS
- Save the Children
- Johnson and Johnson
- Latter Day Saint Charities
- Earth Institute

USAID’s Implementing Partners

- MCHIP
- URC/HCI
- PATH/HealthTech
- CORE
- MSH/African Health Strategies
- MAISHA, Tanzania
- ECSA-CON, Regional
- ECSA-HC, Regional
- RCQHC, Regional
- RHAC, Cambodia
- RACHA, Cambodia
- URC/BHS, Cambodia



Now in 48 countries

Country Implementation: HBB has been introduced in Afghanistan, Bangladesh, Cambodia, East Timor, India, Iran, Iraq, Lebanon, Mongolia, Pakistan, Thailand, Angola, Cameroon, DR Congo, Egypt, Ethiopia, Ghana, Kenya, Lesotho, Liberia, Mali, Malawi, Mozambique, Morocco, Namibia, Nigeria, Rwanda, Sierra Leone, South Africa, Tanzania, Uganda, Zambia, Zimbabwe, Georgia, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Jamaica, Mexico, Nicaragua, Paraguay, Peru, and Trinidad/Tobago. Of these, about 10 have developed national rollout plans.

Results: The GDA has increased global demand for and access to newborn resuscitation by strengthening provider skills and equipping them with supplies.

Outputs: During June 2010 and June 2012, the GDA trained about 80,000 health providers in 48 countries, 21 of which were supported by USAID. Over 70,000 HBB training workbooks and 5,000 flip chart sets were sold on a not-for-profit basis; and almost 34,000 workbooks and 3,000 flip chart sets were donated. Almost 82,000 bag/masks, 93,000 suction bulbs, and 23,000 NeoNatalie simulators were sold on a not-for-profit basis; and 4,000 simulators were donated.

Outcomes: The Tanzania pilot study indicated a 38 percent newborn mortality reduction among ~20,000 deliveries; final results are anticipated to be higher. Eight countries have introduced a new outcome indicator: asphyxiated babies resuscitated successfully. They have reported resuscitating about 800 newborns, with a range of 70 to 98 percent success rate.

Helping Babies Breathe®

A Global Public-Private Alliance



Center for Global Health and Economic Development
PARTH INSTITUTE FOR CAMBODIA UNIVERSITY

Global Advocacy and Policy

- At the Child Survival Call to Action forum convened by the Governments of the United States, India, and Ethiopia, and organized in close collaboration with UNICEF, a global roadmap advocated for five strategic shifts, including targeting neonatal conditions, to end preventable child deaths. The Roadmap can be viewed [here](#).
- In collaboration with the UN Commission on Life Saving Commodities for Women and Children, Global Development Alliance (GDA) partners analyzed the global landscape on status, needs, and constraints regarding resuscitation devices (bag and mask, suction bulbs), and submitted recommendations to increase access to them. Resuscitation devices are one of 13 commodities that have been identified by the UN Commission as essential but under-utilized. The report can be accessed [here](#).
- HBB was voted by Women Deliver as one of 50 most inspiring ideas and solutions. More than 6,000 people voted from around the world. Read more [here](#).
- Members of the GDA participated in an expert technical consultation convened by WHO to review and update the global guidelines for basic newborn resuscitation. The publication became available in May 2012 and may be viewed [here](#).
- In an interview with Forbes, the USAID Administrator, Dr. Rajiv Shah, cited the HBB GDA as one of the most effective partnerships that USAID has entered into. View [here](#).

Systems Strengthening

Quality improvement: Now in its second year of implementation, the GDA has begun to emphasize the importance of systems strengthening for impact and sustainability. As the program matures, initial focus on training has shifted towards greater attention to quality improvement approaches, mentoring, supportive supervision, and data-based monitoring.

Supplies: The GDA has facilitated the procurement of resuscitation equipment either through the UNICEF system or through direct orders from Laerdal Global Health (LGH) and other brands that are available locally. Laerdal and UNFPA have signed a long term agreement which will enable the purchase of the NeoNatalie newborn simulator and the MamaNatalie birthing simulator, for a fixed price for the next three years (click [here](#) for catalog). Laerdal has been able to negotiate up to 50 percent reductions in the shipping costs from China to Africa and 33 percent for shipments to the USA. Laerdal has also established a distribution center in Johannesburg for more timely and cost efficient deliveries to most African countries, and has established a Customer Service department in China.

Translation: AAP has processed translation agreements for 14 languages: Arabic, Bangla, Burmese, Cambodian, Dari, French, Laotian, Mongolian, Nepalese, Pashto, Portuguese, Spanish, Swahili, and Thai.

Innovation

The significantly more durable version of LGH's NeoNatalie newborn simulator with an extra simulation feature, facilitating auscultation of heart sounds by a stethoscope, became available in April 2012. LGH's new simplified bag and mask with fewer parts will be significantly easier to take apart and disinfect. It is in the process of getting CE marked and will be available from the third quarter of 2012. LGH continues to refine and simplify the resuscitator and is currently developing a new disruptive technology that will be field tested in two countries in collaboration with USAID, PATH, and Save the Children.

Research and Evaluation

Evaluation studies in Malawi, Bangladesh, Tanzania, Kenya, and India are ongoing.

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HBB in Action

Tanzania: HBB Reduces Early Neonatal Death and Rates of Stillbirth

The NMR in Tanzania is 43/1000 live births, with 25-30% attributed to birth asphyxia, a leading cause of neonatal mortality accounting for approximately 40,000 annual deaths in the country. In 2009, the Health Ministry declared birth asphyxia to be a priority area and committed to train all birth attendants using Helping Babies Breathe (HBB). An impact evaluation study was designed with the goals of reducing neonatal mortality due to birth asphyxia by 50 percent and fresh stillbirths by 25 percent. Over the next 6-9 months, the Government of Tanzania, with the support of Weill Cornell Medical College, American Academy of Pediatrics, and Laerdal Global Health, implemented HBB at eight hospitals with an emphasis on training midwives. Baseline data were collected on 8,124 deliveries pre-HBB implementation and on 78,500 deliveries over 30 months post-implementation. The goal is to train a total of about 12,000 birth attendants; to date, over 3,000 birth attendants (28% of target), primarily midwives, have been trained. Program strengths include the commitment of the Ministry to support the training and ensure the availability of appropriate equipment, focusing on the midwife who has the dual task of managing the mother and the baby; identifying a midwife at each site to oversee the program and involving them at the national level; placing a simulator in labor and delivery for daily practice; and implementing simple evaluation and data collection processes.

The study found that HBB training is associated with a significant increase in the use of stimulation and suctioning as part of initial infant stabilization, while the use of face mask ventilation decreased. HBB implementation has been associated with a significant reduction in both early neonatal mortality (within 24 hours) and fresh stillbirth rates. Preliminary 2011 results indicated a 38 percent newborn mortality reduction among 20,000 deliveries. Results from further analysis are under review.

This study has catalyzed further rollout in other parts of the country. The USAID project, MAISHA, is also assisting the Government of Tanzania to integrate HBB and essential newborn care within basic emergency obstetric and neonatal care services and to include it in the preservice nursing/midwifery training. As the program rolls out, the Government is especially interested in instituting quality improvement approaches to ensure retention of skills and sustainability.

Bangladesh: Scaling-up HBB Nationwide, Six Districts at a Time

At a mortality rate of 32/1000 live births, newborn death accounts for 60% of under-five mortality. In 2010, an estimated 19,172, newborns died due to intra-partum related events. The 2009 national neonatal health strategy and guidelines emphasized the need for implementation of key actions to manage birth asphyxia. After successfully piloting the HBB initiative in 2010, a national scale-up plan was developed to train all (~20,000) skilled birth attendants (including community SBAs), equip all public health facilities and community skilled birth attendants, establish a supervision and monitoring system, integrate key indicators in the national health information system, incorporate HBB in all pre-service and in-service curricula, and ensure a system for routine refresher training for retention of skills. The completed scale-up will occur in 11 steps, each step taking 8-10 weeks and implemented in phases, six districts in each phase. In addition, the effort includes a rigorous evaluation to be completed by 2013.

The Government of Bangladesh has incorporated HBB scale-up activities in its Health Population Nutrition Sector Development program and operational plan. AAP, USAID, MCHIP, Save the Children, UNICEF, Lærdal Foundation, Bangabandhu Sheikh Mujib Medical University and the International Center for Diarrheal Disease Research, Bangladesh are working with the Government to scale-up HBB.

As of June 30, 2012, HBB scale-up activities have been completed in 24 of the country's 64 districts, with training ongoing in six additional districts. To date, 9,393 providers (48% of target) have been trained and 1,684 facilities have been equipped with a bag/mask resuscitator along with a suction device. Of these, 2,599 community skilled birth attendants received training and equipment. Seventy-seven percent of all training sessions have been supervised and/or monitored by district, division or national level supervisors. The Government is currently testing the feasibility of integrating two outcome indicators in to the national HMIS: newborns resuscitated successfully by stimulation and by bag and mask.

Cambodia: Institutionalizing HBB in the National Program.

Cambodia has experienced dramatic declines in maternal and under-five mortality in the past five years. However, neonatal mortality, at 27/1000 live births, declined only by 5 percent compared to a post-neonatal mortality reduction of 50 percent during 2005 and 2010.

In September 2010, the Latter Day Saint Charities provided catalytic support to introduce HBB in Cambodia. With additional support from USAID through its implementing partners, RACHA, RHAC, and URC and the UN Agencies WHO, UNICEF, and UNFPA, the inter-agency team began a program to support the Government's National Maternal and Child Health Center to scale up HBB in the country. There are a total of ~11,000 health providers in Cambodia but the majority of obstetric and newborn care is provided by the country's ~4,000 midwives. As of June 2012, the team had trained 3,800 master trainers and health providers (primarily midwives). RACHA is the lead partner responsible for coordination of national roll out of HBB. In an effort to scale up and institutionalize the program, HBB has been integrated into the national safe motherhood protocols for referral hospitals and health centers. It is also integrated in the continuing education curriculum and pediatric clinical guidelines, and there are plans of integrating it into the midwifery pre-service training curriculum of the five regional training centers. Quality improvement approaches include Midwifery Coordination Alliance Team (MCAT) meetings which function as a continuing education forum for midwives, and on-the-job training and coaching. Integrated supervision is conducted by teams of government partners representing the province, district, and maternity wards. Funding constraints have been a major challenge to implement an ongoing quality improvement program. HBB has garnered several lessons, key ones include the need for more interactive, participatory training methods, repetition of clinical skills practice, group feedback, and individual and group problem-solving.

Ethiopia: Scaling Up by Integrating HBB within Multiple Platforms

The Minister of Health made a commitment to scale up HBB nationally in September 2010. A key strategy to roll out HBB in Ethiopia is to integrate it within relevant programs - Integrated Community Case Management, Basic Emergency Obstetric and Newborn Care, PMTCT & newborn corner training. The roll out is well underway as part of the national essential newborn care program, and establishing Newborn Care Corners in 100 health facilities, and Neonatal Intensive Care Units at university and regional referral hospitals. With support from the Ethiopian Pediatric Society, UNICEF, USAID partners, and Laerdal, the MOH has trained 27,345 health personnel. These include health providers who work in the 100 newborn care corners, NICU nurses, and health extension workers. Financing challenges have largely been resolved by integrating HBB into the already financed programs of Integrated Community Case Management, Basic Emergency Obstetric and Newborn Care, PMTCT & newborn corner training. A rapid assessment has shown an improvement in implementing components of newborn care, both in knowledge and skill, which has resulted in improvement of neonatal outcomes at facility level.

Uganda: Planning an Approach for Quality Improvement

Led by the Government and the Newborn Steering Committee, the HBB rollout in Uganda has multiple partners including AAP, USAID, Save the Children, URC, LDSC, CIDA, UNICEF, etc. An important feature of HBB in Uganda is its integration with essential newborn care and its adapted name "HBB Plus." Since multiple partners tend to focus on their own selected priority districts, the coordination role of the Ministry and the steering committee is very important to standardize the training content and approach. The Ministry has recently begun to focus on the issue of quality improvement. At a recent meeting of the steering committee, the Ministry presented a plan for quality improvement at a stakeholder meeting in June 2012. This is summarized below.

Mentorship is a key quality improvement approach that the Ministry wishes to implement. In the context of HBB+, mentorship is the relationship between experienced HBB+ obstetricians, paediatricians, midwives, specialists, and other health workers at national/regional/referral/facility levels linked with lower health care delivery levels. The aim of mentorship would be to support decentralized delivery of high quality NB services at all levels; build capacity of primary-care providers to manage asphyxiated, low birth weight, and sick newborns, examine healthy newborns; and to facilitate on-going learning, skills development and quality promotion. Clinical mentoring would include supportive supervision by national/regional/district teams, on-site mentoring, on-site preceptorships, sustained newborn resuscitation specialty support for complex cases, and web-based learning. Each mentor will report to one main 'supervisor' who will, in turn, report to the newborn steering committee secretariat. The mentor and mentee will have a clear understanding of each other's roles, would meet at least once a month, and reassess the situation once a quarter taking into consideration the uniqueness of each mentor-mentee relationship.

As part of the collaborative improvement approach that URC is supporting in two districts, quality improvement teams at each facility tested changes to fill the gaps they identified between what they had learned and what was practiced at their facility. These changes were shared at learning sessions with providers from other facilities. Monthly coaching visits provided the needed follow-up support, particularly with the analysis, reporting, and utilization of the data collected.