

III. Implementation of Training in Helping Babies Breathe

A. Strategic planning

Who should read:

- Master trainers*
- Facilitators*
- Program managers*

Objectives of section II:

- Users will be able to plan, implement, monitor and evaluate the HBB training program*
- Users can identify the qualifications and responsibilities of planners and trainers in the program*

Tools in this section:

- Tool 1: Implementation matrix*
- Tool 2: Target audiences and curriculum*
- Tool 3: Translation and in-country printing*
- Tool 4: Suggested guidelines for adapting and pre-testing HBB materials*
- Tool 5: Sample course outline for master trainer and facilitator workshops*
- Tool 6: Sample course outline for provider workshop*
- Tool 7: Preparing the neonatal simulator*
- Tool 8: Understanding the educational design of HBB*
- Tool 9: Considering the health system, culture, and environment*
- Tool 10: Developing appropriate teaching methods*
- Tool 11: Deciding on supplemental content*
- Tool 12: Timeline for course preparation*
- Tool 13: Assembling the teaching materials*
- Tool 14: Reviewing the practice exercises*
- Tool 15: Practicing with the neonatal simulator or mannequin*
- Tool 16: HBB course evaluation*
- Tool 17: Monitoring numbers trained*
- Tool 18: Checklists for supervisory visits*
- Tool 19: Monitoring impact on practice and neonatal outcomes*

Helping Babies Breathe is an educational program in neonatal resuscitation for birth attendants in resource-limited settings. The goal of Helping Babies Breathe is to prepare birth attendants to care for healthy babies and babies who are not breathing at birth. Ideally, at every birth, there should be a person who is skilled and equipped to help babies breathe.

For a HBB skilled person to attend every birth requires:

- Strategic planning (refer to [Section II. D](#)).
- Training of master trainers and facilitators
- Facilitation of learning sessions for birth attendants
- Continuation of learning in the workplace

In addition to offering guidance for strategic planning at the national level, this guide for implementation provides a framework for those who will directly use the educational program Helping Babies Breathe. The roles of these direct users – program managers and mentors, master trainers (including national faculty and regional/district trainers), and facilitators – will be defined in the following sections.

User	Implementation Step
Program Managers and Mentors	<ul style="list-style-type: none"> • Strategic planning • Planning for training of master trainers • Adaptation and integration of materials, if necessary • Support for reporting of all training workshops on the Helping Babies Breathe website • Monitoring process and outcomes and using data to improve program
Master trainers (national faculty with competence in both HBB content and skills-based training and regional/district trainers)	<ul style="list-style-type: none"> • Training of other trainers and facilitators • Monitoring process and quality of training
Facilitators	<ul style="list-style-type: none"> • Training of birth attendants • Continuation of learning in the workplace

1. Planning context

Success in implementing a large-scale training program will be more likely if certain characteristics are met:

- Neonatal care is a political priority.
- Skilled attendance at birth is part of health policy.
- There are funding commitments to support the program.
- There is collaboration among interested organizations.
- There is coordination among interested organizations, the government, and the health system.
- Health authorities and birth attendants themselves are seeking training.
- Local authorities and birth attendants have ownership of the training process.
- Training and the necessary supplies/equipment to put the training into use are available simultaneously.
- Outcome measures are planned in advance, collected as training is conducted, and data are used to give feedback and guide management of implementation.
- Planning for sustainability occurs from the beginning.

2. Planning process

As outlined in Section I, developing a sustainable HBB program begins at the national level with building consensus, conducting a situation analysis of neonatal resuscitation, and developing a strategic plan among stakeholders. Program managers from stakeholder groups should take part in strategic planning as well as implementation. One or more mentors for HBB should be involved in strategic planning at the national level. A mentor has specific training as a master trainer in HBB and qualifications to serve as an advocate for neonatal health, a champion for training in neonatal resuscitation, and a leader of HBB implementation. Such a mentor may be designated as a national coordinator for HBB.

Role of Program Managers and Mentors in Planning and Training

Program Managers' and Mentors' Goal: develop a plan for implementation of the educational program and measurement of outcomes; oversee training of master trainers

Qualifications:

- Experienced leader in the field of neonatal care/maternal and child health
- Knowledge of stakeholders
- Ability to collaborate with health authorities and engage representatives of various groups of birth attendants receiving training in design of the program
- Training and/or experience in learner-focused, skills-based education

Responsibilities:

Work with relevant health authorities to:

- create a national/regional plan for training and monitoring of outcome measures
- Adapt and translate training materials, maintaining their technical integrity
- Identify and oversee training of master trainers and provide supportive supervision
- Oversee reporting of educational program data nationally
- Ensure monitoring and evaluation data is collected, analyzed, and used for program adjustment

Planning Step 1: Continue the strategic planning process by completing the linked planning tool:

Tool 1: [Implementation matrix.](#)

Program managers, HBB mentors and others tasked with implementation can complete this matrix for locations at the sub-national level by incorporating information from the national strategic plan together with local specifics. Tool 1 considers the context for planning training. The tools included in this guide build on each other, so once completed, they should be consulted as the planning process continues.

Two important parts of implementation planning are identifying the target audiences and deciding on the curriculum.

Helping Babies Breathe teaches the skills needed by health care workers throughout the health system who provide care to newborns. Several different types of training are possible:

- In-service training – improving the performance of birth attendants already at work in health posts, health

clinics, primary care centers, and district hospitals. Such attendants might include:

Physicians, medical officers
Midwives, nurses, auxiliary nurse midwives
Community health workers and community-based midwives

- Pre-service training – equipping students with knowledge and skills before entering the workplace
Medical students and residents in general medicine, pediatrics, and obstetrics
Medical graduates entering their year of government/community service
Nursing and midwifery students
Community health students
- Training new cadres of health workers and birth attendants – extending training in neonatal resuscitation to new groups to expand the workforce
Specialized maternal-child health workers
Technicians
Paramedics
Clinical associates

Helping Babies Breathe can be offered as an independent educational program, always in the national context of emergency obstetric and neonatal care, or together with other training. The HBB training package may vary from one group to another. HBB can function as:

- An expanded resuscitation module of [Essential Newborn Care](#)
- A complement to the neonatal module of [Integrated Management of Childhood Illness](#)
- Part of midwifery training for skilled birth attendants ([Integrated Management of Pregnancy and Childbirth](#))
- An element in a program highlighting maternal and neonatal topics of local importance

Planning Step 2: List the target audiences and other topics to be presented on the linked worksheet:

Tool 2: [Target audiences and curriculum.](#)

Program managers and HBB mentors should oversee the process of translating and adapting the training materials if necessary to meet local needs. Managers should review translations for accuracy and relevance and submit

them for approval by the copyright holder for HBB, the American Academy of Pediatrics (see **Tool 3:** [Translation and in-country printing](#)). Once approved, translated materials should be pre-tested with the intended target audience before use. Adaptations may also be necessary at the national or subnational level. **Tool 4:** [Suggested guidelines for adapting and pre-testing Helping Babies Breathe materials](#) provides guidance in these areas.

An example of adapted materials can be found in the Training section on www.hbb-community.org. The adapted checklists for OSCE A and B include more details on integration with active management of the third stage of labor (AMSTL) and ENC protocols.

Once the target audiences are known, program managers and HBB mentors should begin to build the training cascade by identifying candidates for the role of master trainer at the national faculty level. National faculty (the most highly qualified master trainers, competent in both HBB content and competency-based training skills) will be responsible for training regional/district trainers, who in turn will train facilitators and providers. The training

Role of Master Trainers in Preparing Other Trainers and Facilitators

Program Managers' and Mentors' Goal: train additional trainers and facilitators and monitor process and quality of training

Qualifications:

- Experienced in learner-centered, skills-based education and content expert in neonatal resuscitation
- Successful completion of training courses in HBB content and training skills
- Certified by an HBB master trainer after co-training at least once
- Knowledgeable of work circumstances of target group to be trained
- Proficient in reading English or translated materials

Responsibilities:

- Identify and train regional/district trainers and facilitators
- Explain scientific principles
- Equip facilitators to practice learner-centered techniques.
- Help structure continued learning in the workplace
- Provide supportive supervision and feedback to trainees
- Report training workshops on [Helping Babies Breathe](#) website

cascade will be customized in each country according to geography, density of delivery services, and target groups to receive training. Program managers and HBB mentors will serve as monitors of quality at each step in the training cascade, including supportive supervision and regular feedback to lead trainers. Trainers at all levels – national, regional, and district – must focus on achieving good learning results in order to attain the goal of birth attendants who can resuscitate a baby who is not breathing.

Master trainers are responsible for preparing other trainers in the cascade. Master trainers may be responsible for training regional/district trainers, who in turn train facilitators to use the educational methodology of Helping Babies Breathe with birth attendants. Limiting the levels in the training cascade may help preserve the fidelity of program implementation. Master trainers should be encouraged to participate in training of facilitators at the

local level and to serve directly as facilitators of learning for birth attendants in their own health facilities. In addition to thorough understanding of the content of Helping Babies Breathe, master trainers need skills in adult learning that include:

- Understanding the educational design of the course materials
- Emphasis on practice to integrate knowledge and skills into performance
- Promotion of active learning and continued learning and empowerment of learners
- Localization and adaptation of course content
- Methods for evaluation

Master trainers also monitor the process and quality of training throughout the training cascade and serve as the link between implementation at the local level, and program managers and HBB mentors at the national level.

Role of Facilitators in Training Birth Attendants and Promoting Continued Learning

Program Managers’ and Mentors’ Goal: to prepare and monitor birth attendants so that they can successfully resuscitate babies who are not breathing at birth

Qualifications:

- Experience in care of newborns
- Aptitude for teaching and facilitating small groups
- Ability to engage and confirm learning of participants with various ability levels
- Successful completion of HBB training course as provider
- Successful completion of HBB training course for facilitators
- Certified by an experienced HBB trainer after co-training at least once

Responsibilities:

- Plan courses and select participants and other session facilitators
- May serve as course leader
- Present the Facilitator Flip Chart material – lead discussion and moderate the experience of learners, provide cultural interpretation, localization
- Demonstrate and practice skills with small groups of learners
- Evaluate courses and learner performance
- Prepare participants for continued learning in the workplace
- Monitor trainee performance over time, as designated in national plans
- Report training workshops on [Helping Babies Breathe website](#)

Facilitators have direct responsibility for training birth attendants using Helping Babies Breathe, although master trainers may also train birth attendants. Facilitators need to have a thorough understanding of the content of HBB and skills in the techniques of adult learning, as outlined above for master trainers. The goal is to prepare birth attendants so that they can successfully resuscitate babies who are not breathing at birth.

Whether the course leader presents the flip chart material and demonstrates skills or all course facilitators do this in small groups will depend on the experience level of trainers and the national training plan. Some countries allow three days (or 24 hours) to train master trainers (who are experienced trainers) in HBB content and two days (16 hours) to train facilitators. If budget does not allow for this amount of time, planners may need to compensate with more intensive post-training mentorship.

Planning Step 3: Initiate the training cascade in Helping Babies Breathe.

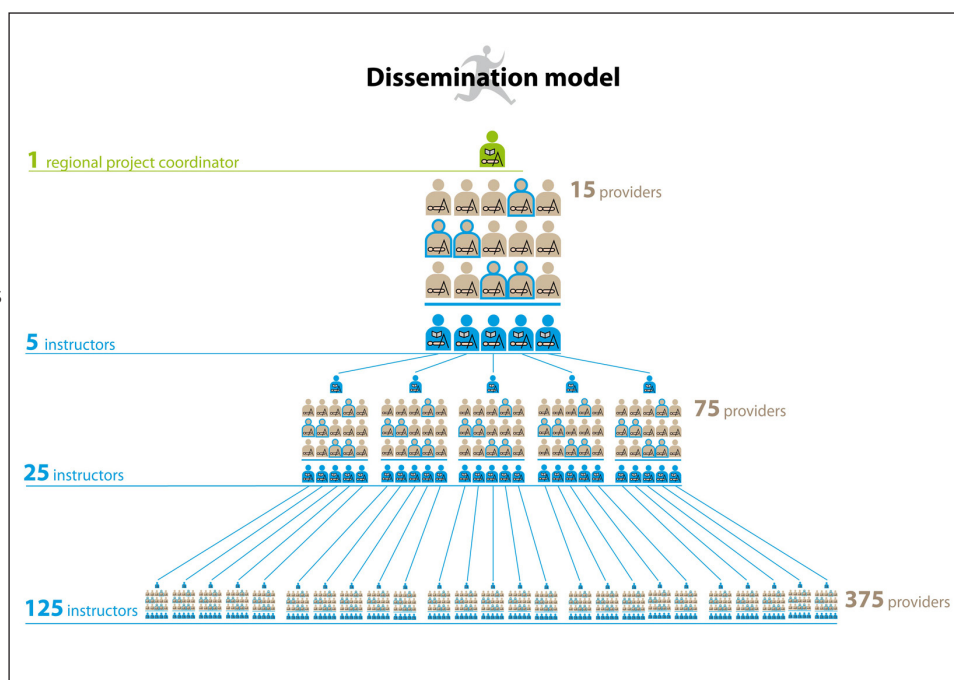
Tool 5: [Sample course outline for master trainer and facilitator workshops](#) summarizes the preparation of master trainers and facilitators. **Tool 6:** [Sample course outline](#) for provider workshop summarizes the preparation of birth attendants. Course outlines for a 1-day and 2-day provider workshop agenda are included. The outlines provided are suggestions that can be modified to fit local circumstances; however, they include the important elements for learning.

The graphic to the right illustrates a possible cascade for training facilitators and providers. As described in the section above, program managers and HBB mentors organize the overall training plan and prepare and supervise the master trainers. Master trainers lead training courses for regional/district trainers and facilitators and oversee training quality.

In some countries, master trainers may do most or all of the program training. In others with larger programs, regional/district trainers may train facilitators. A facilitator may begin by serving as a small group facilitator during a provider training course and – with experience and mentorship – go on to become course leader, as shown in the graphic. The number of participants in a given course selected to become facilitators will depend on program need, the capacity of candidate participants to serve as trainers, and the program’s ability to supervise and mentor new facilitators. Ideally, each health facility or community/region should have a birth attendant trained as a facilitator for Helping Babies Breathe.

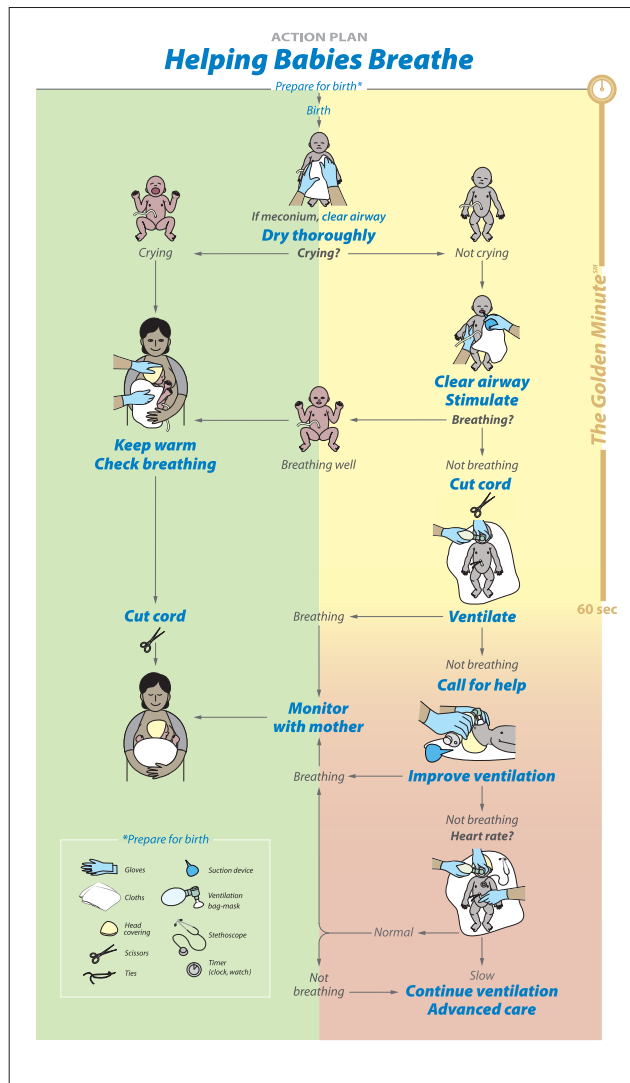
The planning process for workshops at every level of the training cascade (national or regional/district trainer, facilitator, provider) involves thorough understanding of the content and educational design of Helping Babies Breathe as well as application of adult learning techniques.

The proposed training scheme focuses on in-service training. For sustainability, planners and program managers should work with national authorities to integrate the same training content into pre-service training programs.



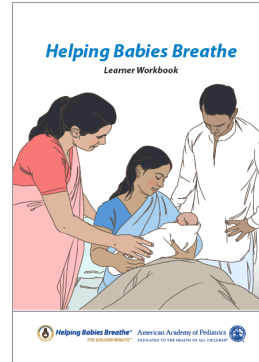
Understanding the educational design of the course materials

The educational tools used in Helping Babies Breathe include:



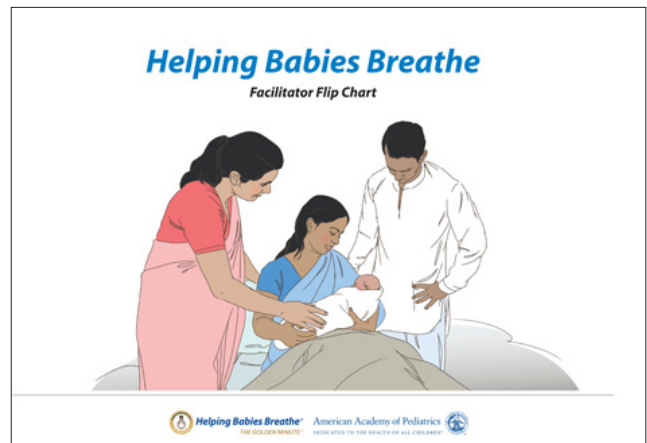
Action Plan

a simple, pictorial wall chart outlining the decision tree to follow when helping a newborn to breathe. A smaller version serves as a job aid.



Learner Workbook

training material that can serve as a guide for pre-learning and as a post-training resource for learners during a course; it also provides supplemental information.



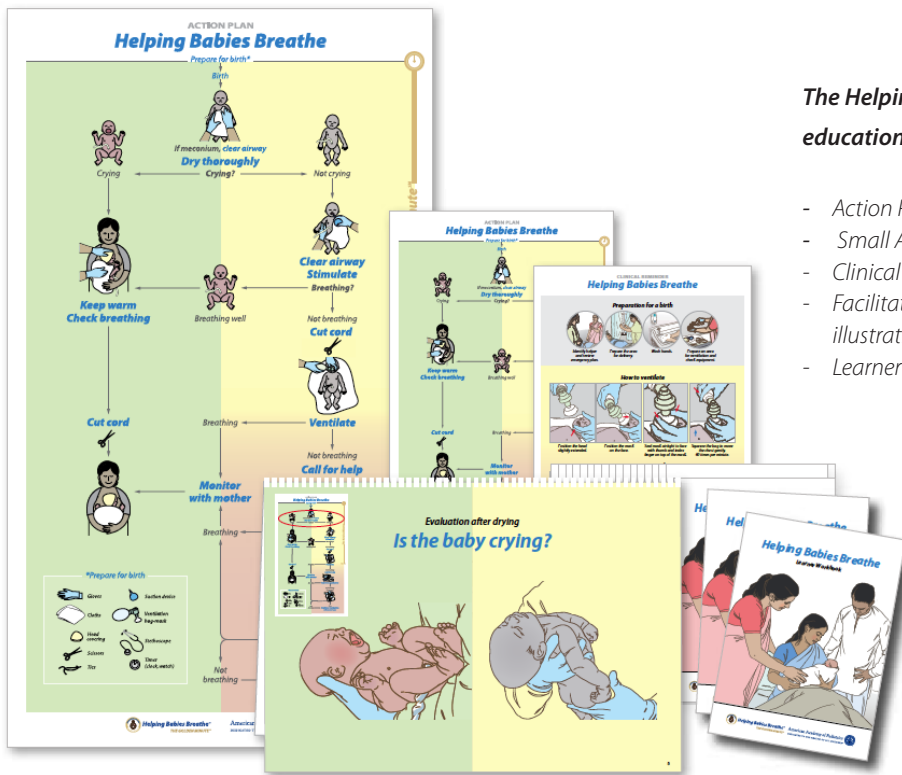
Facilitator Flipchart

pictorial material for discussion with learners that includes key messages at the back to guide trainers and facilitators

Now available from the American Academy of Pediatrics and Laerdal Global Health:

Helping Babies Breathe® Training Program

A neonatal resuscitation curriculum for resource limited circumstances



The Helping Babies Breathe educational material includes:

- Action Plan Wall Poster
- Small Action Plan
- Clinical Reminder
- Facilitator Flip Chart illustrations
- Learner Workbooks

See the [Helping Babies Breathe](http://www.helpingbabiesbreathe.org) website for ordering information.

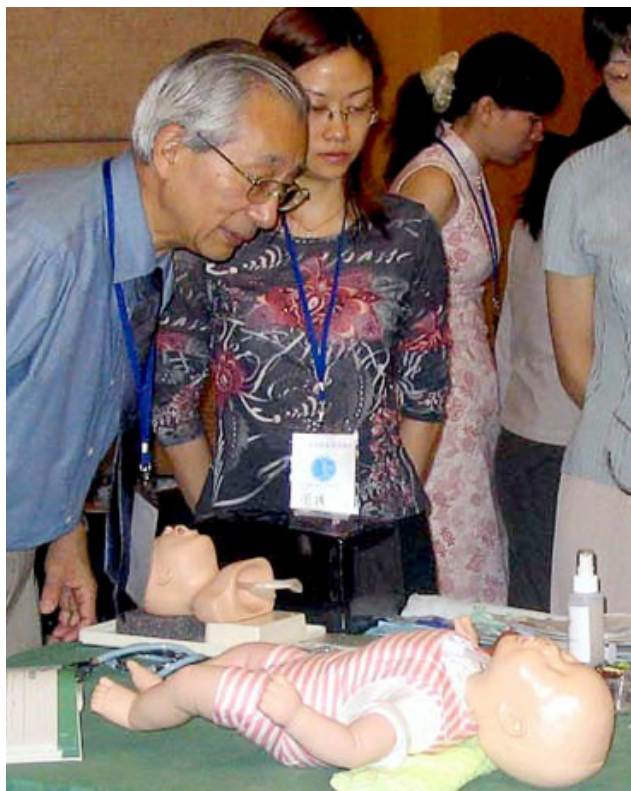
Evaluation Materials

skills-based assessment materials include written/verbal evaluation guides, bag/mask performance evaluation checklist, and Objective Structured Clinical Evaluations (OSCEs) in the Facilitator Flip Chart. The bag/mask skills check is also included in the Learner Workbook.



Neonatal simulator/mannequin

life-like model of a newborn for practice of resuscitation and other neonatal care skills (jump to [Tool 7: Preparing the neonatal simulator for use](#)). A number of neonatal mannequins and simulators can be used with Helping Babies Breathe. Instructions included here apply to the mannequin distributed in the current HBB training kit.



Because they emphasize different learning approaches, (e.g., reading, listening, visualizing, practicing, reviewing) these educational materials reinforce learning through multiple modalities. They are linked by their graphic design which helps guide facilitators and learners through the process of acquiring knowledge and skills and integrating them into successful performance of neonatal resuscitations.

Planning Step 4: Analyze all the educational tools using Tool 8: [Understanding the educational design of Helping Babies Breathe](#). Tool 8 explains the educational package in more detail and how it contributes to adult learning.

Emphasis on practice to integrate knowledge and skills into performance

In keeping with adult learning theory, the focus of a Helping Babies Breathe course should be learning of skills, practice, and integration of skills and decisionmaking.

- Learners can gain knowledge in advance of a course by reading the Learner Workbook and completing the Check yourself questions. Small groups of learners can prepare in their workplaces 1–2 weeks before a

classroom skills session. Learners can reflect and think of their questions.

- Learners should practice individual skills as they are introduced in the Facilitator Flipchart pages.
- Learners practice sequences of skills in the exercises that summarize each section of the Action Plan and Learner Workbook.
- Learners integrate knowledge and skills with decision making in the practice of case scenarios.

Promotion of active learning and continued learning among peers

Experience in the classroom should encourage participants to be active as both learners and teachers, so that they learn from each other as well as the facilitator.

Developing a Sustainable Master Trainer Corps in Kenya

As one of two countries to conduct formative evaluations of the HBB training package, Kenya has participated in the global initiative since its first planning days. The Kenyan HBB training program is well respected and master trainers recently discussed elements that contributed to the success of the program:

- Trainers think and act as a group, typically conducting trainings together to avoid burnout, assessing and reinforcing training skills, and supporting each other
- HBB planners agreed with government officials from the outset that, as salaried government employees, master trainers would not get paid beyond their costs and a small stipend for their HBB training role, making the program sustainable.
- Small incentives motivating the trainers in their work include paying transport and lodging costs in advance, so trainers do not have out-of-pocket expenses, providing minimal cell phone credit per training to deal with the unexpected, supplying local contact information and support for logistics
- Masters trainers have full ownership of the process for identifying, mentoring, and evaluating new trainers and facilitators for program expansion

The Kenya HBB program has also invested in a supportive training system as follows:

Master Trainers	3 days training
Facilitators	2 days
Learners	1 day
Refreshers	1 day

Countries that cannot afford trainings of this length should consider other ways to support learning, such as more intensified clinical mentoring post-training.

The classroom experience should form a basis for continued learning and problem-solving in the workplace after the course.

Trainers and facilitators serve as important role models for active learning when they:

- Spend most classroom time on practice
- Use discussion instead of lectures
- Always emphasize positive performance first, then suggest ways to improve, and finally end with encouragement or a positive comment
- Review the written/verbal evaluation with learners, as well as the performance evaluations
- Encourage learners to develop self-evaluation abilities so they can constructively critique their own performance and become peer teachers
- Encourage learners to support each other in the workplace through skills reinforcement exercises and mutual assessment of actual performance

Localization (and adaptation) of course content

Trainers and facilitators have the responsibility to tailor Helping Babies Breathe to the local culture, environment, and health system. The basic steps of the Action Plan will remain unchanged, because they are based on evaluation of scientific research and physiology. The equipment and supplies used to carry out the basic clinical steps and the methods and content used in teaching will vary from one place to another.

Planning Step 5: Use the following worksheets to analyze regional and local differences as you read the Learners Workbook and the Facilitator Flipchart. Then make an individualized course plan that will meet the needs of learners.

- **Tool 9:** [Considering the health system, culture, and environment](#)
- **Tool 10:** [Developing appropriate teaching methods](#)
- **Tool 11:** [Deciding on supplemental content](#)

Methods of evaluation

Helping Babies Breathe includes three different and complementary evaluations with different criteria for successful completion:

- Written/verbal evaluation – 80 percent of questions correct
- Bag/mask performance evaluation – 100 percent performance of required steps
- Objective structured clinical evaluations – 80 percent overall performance, including all required steps

Details of these evaluations are available in

Tool 8: [Understanding the educational design of Helping Babies Breathe](#). The evaluations themselves are at the back of the Facilitator Flip Chart. The written/verbal evaluation is administered first. Learners may be unfamiliar with performance evaluation. Facilitators need to explain why and how the tools are used and practice with performance checklists and case scenarios before carrying out formal evaluation of learners. Learners should be encouraged to work individually or with peers once they return to the workplace to practice, and objectively evaluate how well they are maintaining the skills they have learned.

India has used pre-training skills tests very effectively in its Navjat Shishu Suraksha Karyakram (NSSK) program in basic newborn care and resuscitation. Such pretests can serve as a baseline for training and to tailor training programs to the needs of specific participants.

B. Training implementation

Program managers, HBB mentors, trainer, and facilitators who are preparing to implement a *Helping Babies Breathe* course need to complete the following steps:

1. Following a timeline for course preparation and delivery
2. Assembling the teaching materials
3. Delivering the course
4. Continuation of learning in the clinical setting

1. Following a timeline for course preparation and delivery

Implementation Step 1:

Follow [Tool 12: Timeline for course preparation](#) as a guide to the entire process.

2. Assembling the teaching materials

Implementation Step 2:

Use [Tool 13: Assembling the teaching materials](#) well in advance of the course.

Some of the teaching materials will be ordered from distant suppliers, so time will need to be calculated for shipping and clearing customs. Other materials may be fabricated locally (such as blankets) or readily available from local suppliers.

The format of a course for *Helping Babies Breathe* can be tailored to the local circumstances. The entire course can be completed in as little as 6–8 hours. Consider presenting the course over two days if learners are traveling on the same day as the course, or if new facilitators or learners are unfamiliar with the material. Introduce the course material on the first day and allow free time to practice skills and case scenarios. After additional practice and answering questions, complete the evaluations on the second day.

3. Delivering the course

Conducting a *Helping Babies Breathe* course includes the following steps:

- Distribute Learner Workbooks in advance (when possible)
- Prepare content and teaching methods for each learning group
- Prepare the classroom space
- Engage the learners
- Evaluate the learners and the course

Distribute Learner Workbooks in advance when possible. Learners who have read the text and answered the “Check yourself” questions will be prepared to ask questions, learn skills, and begin integrating knowledge and skills. Preparing in small groups increases the motivation to complete advanced study.

Prepare content and teaching methods for each learning group

- Review local statistics on neonatal mortality and causes of death.
- Review considerations in [Tool 9: Consider the Health System, Environment, and Culture](#) to adapt training, as needed to the context.
- Review the Learner Workbook and Facilitator Flip Chart before a course.
- **Use [Tool 14: Reviewing the practice exercises](#)**
- Prepare case scenarios for practice with integrating skills and decisionmaking.
- Prepare any supplemental content.

Prepare the classroom space

- Prepare a table or similar platform for presentation of the Action Plan, the Facilitator Flip Chart pages, and demonstration using the neonatal simulator or mannequin. Each group of six learners should work with a facilitator, an Action Plan, and Facilitator Flip Chart. The course leader may choose to do the verbal presentation of the Facilitator Flip Chart for the entire class, but the small group facilitators can answer questions and assist with practice. Every participant should use the Learner Workbook to make notes.
- For each pair of learners, prepare an area for practice with the neonatal simulator or mannequin and a

complete set of equipment and supplies.

- Learners will complete the discussion questions in their small group after each exercise. Decide how to seat the learners so that there is maximum participation. This often means seating small groups around separate tables rather than in rows. Everyone should be able to see the facilitator and demonstration materials easily.

Engage the learners

Following minimal, explicit explanation and demonstration, most of the time in the classroom – whether in a pre- or in-service training setting – should be spent on hands-on skill building as well as problem-solving discussions. (Refer to Tool 15: Practicing with the neonatal simulator or mannequin.)

- Encourage learners to explore equipment and practice techniques as they are introduced. Facilitators should supervise this practice and provide feedback (reinforcement/correction) as necessary.
- Invite learners to point out steps on the Action Plan and make notes in the Learner Workbook.
- Ask the learners to summarize the key learning points, then reinforce or correct their responses as necessary.
- Ask learners to provide answers to the “Check yourself” questions.
- Invite learners to ask questions and share their experiences during group discussions. Help learners identify useful, neutral, and potentially harmful traditional practices and plan sensitive ways they can address harmful practices.
- Help draw out the important lessons from experiences. Learning from one another can create a pattern for continued learning outside the classroom, especially when encouraged to do so.

Evaluate the learners and the course.

The evaluation of learners is described under preparation of facilitators, in [Section III.A.2](#) above. Evaluation of the course itself can take the form of a written evaluation or a feedback session (**Tool 16**). Facilitators should note points which worked well and parts that need improvement. They should address these points before their next course and seek help from a master trainer or other mentor if they feel assistance is needed or major changes should be made.

4. Continuation of learning in the clinical setting

Facilitators should also prepare participants for continued learning in the workplace. Facilitators can support these activities in the following ways:

- Observe and provide feedback on peer learning/teaching: Facilitators can observe and provide feedback on practice or actual performance during a resuscitation.
- Structure regular practice by pairs of HBB providers with the neonatal simulator or mannequin: In some health centers, birth attendants complete an exercise when they report for work. Regular practice is essential to retain skills in areas where there are relatively few deliveries.
- Lead debriefing after a simulated or actual resuscitation: Debriefing involves a participant-directed examination of an event for the purpose of improving performance. Debriefing may involve clinical directors, ancillary services, and even families, as well as birth attendants.
- Video recording and review can be incorporated into debriefing on simulated resuscitations.

C. Monitoring the process and quality of training

1. Process indicators

(**Tool 17:** [Monitoring the numbers trained](#))

Periodic evaluation of the progress of training helps make sure that timelines and goals for dissemination are met.

Some recommended process indicators include:

- Master trainers – number of trainers and facilitators trained (vs. projected) by cadre and region, number of provider trainings supported/supervised (vs. projected), number of site visits to support continued learning (vs. projected)
- Facilitators – number and proportion (vs. projected) of birth attendants trained by cadre and region; number and proportion (vs. projected) of sites with activities to promote continued learning and supervise clinical experience in the workplace
- Health facilities – proportion of districts in country with > 20% of all health facilities with at least one trained and appropriately equipped provider of resuscitation; proportion of districts with > 80% of all facilities with > 95% of providers trained and equipped for neonatal resuscitation.

2. Quality indicators

(**Tool 18:** [Checklists for Supervisory Visits](#))

Quality indicators help monitor progress toward the goal of training birth attendants who can resuscitate a baby who is not breathing. Some of these quality indicators can also be used to monitor maintenance of skills over time and the fidelity of successive generations of trainers in the cascade.

- Ratio of facilitators to learners; ratio of neonatal simulators/mannequins to learners; total number of learners per workshop
- Proportion of total course time spent in practice
- Total length of workshop (in hours) and number of days over which training or evaluation occurred
- Quantitative and qualitative data from workshop evaluations
- Pre-/post-training change in scores on written/verbal

knowledge check and bag and mask ventilation skills check

- Proportion of learners meeting criteria for successful course completion
- Proportion of learners demonstrating successful performance on re-measure in the workplace
- Number of neonatal simulators available/number of health facilities providing delivery care by region or district (available from purchase and distribution data)

3. Course completion and certification

HBB mentors working with stakeholders at the national level should consider establishing criteria for successful course completion. These criteria may differ for different groups of birth attendants. At a minimum, all participants should pass the written/verbal knowledge check with a score of 80 percent and demonstrate mastery of bag and mask ventilation skills. [OSCE A](#) and [B](#) can be administered as formative or summative evaluations of performance, with 80 percent successful completion, including all required steps. National programs may choose to create and maintain a system of certification in neonatal resuscitation. National programs control certification; the American Academy of Pediatrics does not offer certification in HBB. In some settings, certification in life-saving skills may be linked to licensure.

D. Scale-up and sustainability of training

1. Amplifying the training cascade

Sufficient master trainers should be trained to provide coverage of all targeted geographic areas and professional groups. Master trainers should commit to conducting a specified number of train-the-trainer workshops and facilitator workshops (or training a certain number of trainers and facilitators) within a defined time period. Similarly, facilitators should commit to conducting a specified number of provider workshops (or training a certain number of birth attendants). National planning should establish an overall timeline and training objectives that achieve the national training goals.

2. Maintaining training coverage

After initial training in HBB has taken place, changes in personnel may require that facilitators train new or relocating birth attendants as they enter a workplace.

3. Revision and renewal cycle for HBB materials

HBB educational materials are revised on a five-year cycle (next in 2015) following the cycle of revision of neonatal resuscitation guidelines by ILCOR (International Liaison Committee on Resuscitation). Planning and budgets at the national, regional, and local level should incorporate time for training updates and funds for distribution of revised materials. Revisions assure that the latest scientific evidence in neonatal resuscitation can rapidly reach birth attendants and benefit babies. Updated information – including the most recent versions of this manual – is regularly posted on the Helping Babies Breathe website: www.helpingbabiesbreathe.org.

4. Maintaining trainer, facilitator, and provider (birth attendant) credentials

National-level stakeholders, HBB mentors, and program managers are charged with establishing criteria for maintenance of credentials in neonatal resuscitation. Trainers at all levels and facilitators generally maintain their credentials by actively facilitating courses in HBB.

Some national programs may require documentation of a supervised training or recertification every few years. Birth attendants may be required to participate in a renewal course or submit evidence of continued self-learning at a pre-specified interval to maintain their credentials. Birth attendants should also be encouraged to seek out supervision by peers or facilitators if they note a deficiency in their skill level or a death audit indicates a problem with resuscitation skills.