

# Tackling the Biggest Maternal Killer

How the Prevention of  
Postpartum Hemorrhage  
Initiative Strengthened  
Efforts Around  
the World

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**USAID**  
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**POPPIHI**  
Prevention of Postpartum  
Hemorrhage Initiative

## About POPPHI

The Prevention of Postpartum Hemorrhage Initiative (POPPHI) was a five-year project (2004–2009) focusing on the reduction of postpartum hemorrhage, the single most important cause of maternal deaths worldwide. Funded by the United States Agency for International Development (USAID), POPPHI was led by RTI as the prime contractor; Program for Appropriate Technology in Health was the technical lead agency. POPPHI's partners also included EngenderHealth, the International Federation of Gynecology and Obstetrics, and the International Confederation of Midwives.



## About this document

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## For more information

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**POPPHI**  
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Cover photo: Richard Lord



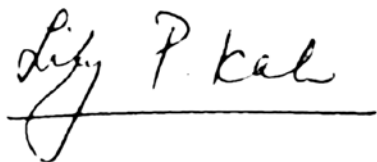
# Message From USAID

It is with great pleasure and pride that I introduce *Tackling the Biggest Maternal Killer: How the Prevention of Postpartum Hemorrhage Initiative Strengthened Efforts Around the World*. This document summarizes the culmination of a US Agency for International Development (USAID) special initiative that shone a spotlight on the most important cause of maternal death: postpartum hemorrhage (PPH). This special project—the Prevention of Postpartum Hemorrhage Initiative (POPPHI)—galvanized many partners to join hands and work together to reduce PPH globally.

POPPHI had one simple but immensely challenging mandate: to catalyze the expansion of active management of the third stage of labor (AMTSL) practices worldwide. It worked toward this mandate through partnerships with the International Federation of Gynecology and Obstetrics, the International Confederation of Midwives, professional associations from many developing countries, the World Health Organization, and several USAID partners that implemented global and country-level programs. POPPHI also prioritized community-based strategies for preventing PPH, particularly as data demonstrated the effectiveness of misoprostol and the Uniject® device prefilled with oxytocin became commercially available.

The initiative harnessed the strength of multiple implementation strategies—policy change, systems strengthening, social mobilization, technology development, and research—and yielded many valuable lessons about opportunities, challenges, and strategies for scaling up AMTSL. A key lesson we have learned is that, when there is political commitment, AMTSL is rapidly scalable.

Through leadership, perseverance, collaboration, and inspiration, POPPHI has brought about a sea change in the prevention of PPH. As USAID's special initiative comes to a close, the journey is far from over, and we look forward to an integrated maternal health program that will build on POPPHI's legacy in saving women's lives.

A handwritten signature in black ink, reading "Lily P. Kak", with a horizontal line underneath.

Lily Kak

Contracting Officer's Technical Representative, POPPHI  
Senior Maternal and Newborn Health Advisor  
Bureau for Global Health  
USAID



## Introduction

Postpartum hemorrhage (PPH) is the single largest cause of maternal death worldwide,<sup>1</sup> accounting for an estimated 132,000 deaths each year. In developing countries, where most births occur in homes or local clinics, the interventions needed to treat PPH—emergency referrals, obstetric care, blood transfusion, and surgery—are simply out of reach for the majority of women.

Fortunately, the effectiveness of a feasible and inexpensive intervention that prevents PPH has already been proven. Active management of the third stage of labor (AMTSL) consists of three components that can prevent postpartum hemorrhage when used together: administering uterotonic drugs (oxytocin is the drug of choice),

controlled cord traction, and uterine massage after the placenta has been delivered. AMTSL can eliminate at least half of PPH cases.

This document describes the strategies and activities undertaken by the Prevention of Postpartum Hemorrhage Initiative (POPPHI) to expand the use of AMTSL and other approaches that prevent PPH, such as the use of misoprostol and oxytocin in the Uniject® prefilled injection device. By increasing use of evidence-based, lifesaving interventions, POPPHI and its many partners established a critical foundation for global efforts to prevent PPH and save thousands of women's lives.



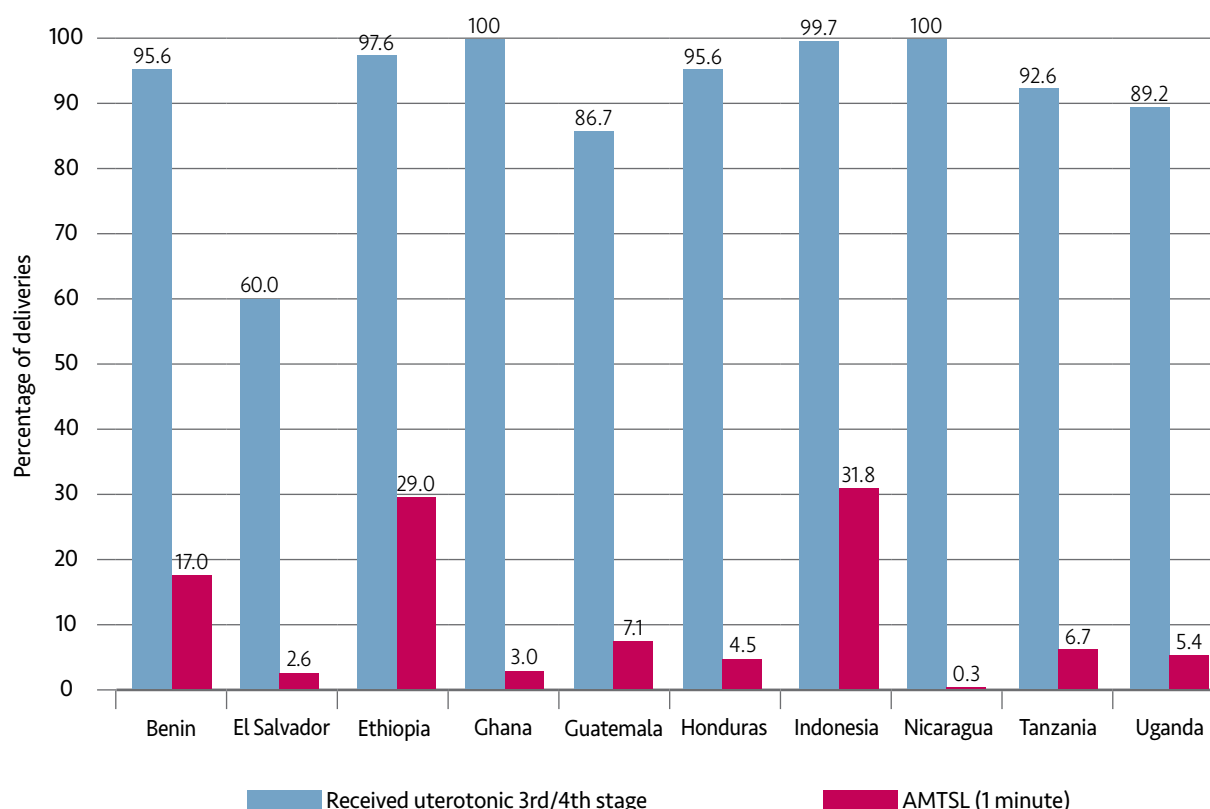
# Defining the challenge

POPPHI began its work by assessing the challenge to effective prevention and treatment of PPH. While AMTSL had been proven to be highly effective, data regarding its use were limited. POPPHI therefore conducted national surveys in ten countries to document use of AMTSL among a diverse group of developing countries. The resulting data would both guide POPPHI's work and provide information to ministries of health and the global community, helping them improve adoption and implementation of AMTSL.

POPPHI's researchers used nationally representative samples of facility-based deliveries to determine AMTSL use and associated factors.

The survey focused on three main issues: policies, providers, and logistics. The team assessed the policy environment through document review and interviews and conducted assessments of facilities and observations of births.

The survey results showed that correct use of AMTSL was low: only 0.5 to 32 percent of observed deliveries (Figure 1). The findings revealed multiple deficiencies in practice: few women were benefiting from the correct use of uterotonics, and even fewer were benefiting from the additional components of AMTSL. Overall, the findings suggest that AMTSL was not used at 1.4 million deliveries per year.<sup>2</sup>



**Figure 1.** Percentage of observed deliveries in which uterotonic drugs were given during the third/fourth stages of labor and AMTSL was used correctly (including uterotonic administration within 1 minute).



# Identifying solutions

Through the global AMTSL survey and related activities, POPPHI identified a need for key solutions: effective approaches for increasing uptake of AMTSL as well as tools and resources that could be used to build provider skill in the method. The team also recognized that innovative ways to introduce and add community-based strategies were needed.

## Promising approaches for increasing uptake

POPPHI identified numerous approaches for increasing uptake of AMTSL and preventing PPH. Highlights include the following:

- **Changing AMTSL Behaviors in Obstetrics (CAMBIO).** This method uses proven strategies to change the behavior of providers and increase their use of AMTSL. The approach centers on staff selection of well-respected colleagues who become trained in AMTSL and the CAMBIO method. These opinion leaders hold seminars and then meet with each provider to talk about AMTSL, offer reminders such as posters, and promote data analysis and sharing. Research showed a 67 percent increase in use of AMTSL among providers trained in the method.
- **Site and individual training (SAIN).** The SAIN approach was developed for in-service training of skilled birth attendants. The blended learning approach combines a self-paced study for the theoretical portion followed by a clinical practicum. Training activities are decentralized to the district level, where the SAIN team selects a clinical site and trains providers at the site as mentors. In turn, the mentors update and strengthen their skills and then guide skilled birth attendants and other providers through the learning materials and clinical practice. This approach saves time and funds through decentralization, reducing time providers are away from work and the number of days needed for training.
- **Integrated treatment packages.** An integrated training package that combines AMTSL, essential newborn care, and immediate

postpartum care can effectively address both the woman's and infant's needs during the critical first 24 hours after birth, when most maternal and newborn deaths occur.

- **Pilot projects of misoprostol administration and administration of oxytocin with the Uniject® device.** A pilot study on oxytocin in the Uniject® injection device in Mali allowed providers—including matrones who attend 50 percent of births—to use the prefilled device. Providers' strong enthusiasm prompted the Ministry of Health to conclude that oxytocin-filled Uniject® devices would benefit Mali; the ministry is now investigating ways to purchase them. POPPHI also provided technical assistance to a pilot study of misoprostol in Ghana and identified and connected Ventures Strategies to assist Bangladesh with its misoprostol program. Honduras now plans to conduct pilot studies of oxytocin in the Uniject® device with traditional birth attendants as well as pilot studies on misoprostol.
- **Monitoring and evaluation indicators.** The inclusion of indicators for PPH prevention into national health information systems allows ministry of health leaders and program managers to determine whether increased use or scale-up of AMTSL or community-based approaches is occurring and, if so, whether it is having an impact on PPH prevalence and deaths.

## Resources for building skills

To meet the need for materials that could be used to train providers and strengthen their ability to use AMTSL, POPPHI developed resources that partners could use or adapt for local settings.

### AMTSL learning materials

POPPHI developed a learning package on prevention of PPH. Consisting of a reference manual, participant's notebook, and facilitator's guide, the package is



designed to increase knowledge of AMTSL among physicians, nurses, and midwives providing childbirth and immediate postpartum care. The materials can also be used during in-service training to equip nurses, midwives, physicians, and other health workers to use AMTSL. The materials are offered in English, French, and Spanish.

### **Preventing Postpartum Hemorrhage: A Toolkit for Providers**

This toolkit provides practical information and materials for health care providers, health management teams, facility managers, and policymakers on the prevention, management, and treatment of PPH.

It provides essential materials for adopting interventions that may be particularly useful to providers and policymakers.



### **On-site and individual learning package**

This learning package on prevention of PPH consists of a facilitator's guide for training mentors, a mentor's guide, a learner's guidebook, and a learner's notebook. The package is designed for in-service training of skilled birth attendants using a mixed or blended learning approach that combines self-paced study and a clinical practicum.



### **Postpartum hemorrhage prevention website**

This comprehensive website ([www.pphprevention.org](http://www.pphprevention.org)) includes sections on PPH, AMTSL, uterotonic drugs and devices, and monitoring and evaluation. The site also provides learning tools and resources, current PPH research, and materials developed during the POPPHI program.



### **CD-ROM**

The *Active Management of the Third Stage of Labor: A Demonstration*

CD-ROM is an integral part of the PPH toolkit. It includes a narrated presentation that provides basic information on PPH, describes the main steps of AMTSL as well as the rationale for each, and demonstrates the procedure using illustrations and animated sequences. The CD-ROM is available in English, French, and Spanish.



### **Fact sheet**

*Active Management of the Third Stage of Labor (AMTSL) for Prevention of Postpartum Hemorrhage (PPH): A Fact Sheet for Policymakers and Program Managers* has been distributed worldwide in English, French, and Spanish. The fact sheet

includes information on AMTSL, its role in reducing PPH, when it should be offered, and steps for increasing its use.



### **Poster**

This AMTSL poster depicts and describes the three steps of AMTSL. Available in English, French, and Spanish, the poster has been displayed in delivery rooms around the world.



### **AMTSL/essential newborn care integrated poster**

Developed by USAID, POPPHI, and the Pan American Health Organization, this poster describes the three steps of AMTSL while integrating steps for essential newborn care.

