

# Uterine Balloon Tamponade

unicef   
for every child

Supply Division



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## The challenge

Post-partum hemorrhage – severe bleeding in childbirth – is the largest direct cause of maternal mortality globally, taking the lives of 130,000 women every year.

At the same time, a newborn whose mother dies in childbirth is also [46 times more likely to die in their first month of life](#).

Many of these deaths can be prevented: there are several life-saving interventions commercially available that can provide effective treatment for post-partum hemorrhage. However, these are often not accessible in low- and middle-income countries, where 99 per cent of these deaths occur.

One such device is the Uterine Balloon Tamponade (UBT). Used as part of a series of treatment options, UBTs are inserted inside the uterus by a trained health care provider and inflated to compress blood vessels to stop the hemorrhaging and stabilize the woman.

The devices are proven to save lives, reduce the need for surgical interventions and blood transfusions and prevent unnecessary hysterectomies and disabilities in women.

In April 2021, the [World Health Organization \(WHO\) recommended UBTs](#) for the treatment of post-partum hemorrhage. However, they are still widely unavailable in low- and middle-income countries, with most commercial devices prohibitively expensive, ranging from \$US125 to \$350 for one-time use.

UNICEF Country Offices and external partners have contacted UNICEF Product Innovation to share their interest in procuring UBTs for government health programmes, should suitable and affordable products be introduced to the [UNICEF Supply Catalogue](#).

## The response

UNICEF is now working with UNFPA to increase access to medical UBT devices in low- and middle-income countries.

This includes introducing a medical UBT into the UNICEF and UNFPA Supply Catalogues and creating inter-agency technical materials, such as training guides and job aids, to support sustainable integration into health programmes.

Both agencies are also working together to develop joint technical specifications to assess UBTs with the aim of making a range of appropriate devices available, including low-cost options, to suit different country contexts.

## The impact

Through increased access to UBTs, UNICEF can save mothers' lives and lower maternal mortality rates, in line with [Sustainable Development Goal 3: Good health and wellbeing](#).

Greater access to UBTs will help prevent unnecessary disability and hysterectomies in women who suffer post-partum hemorrhage in childbirth.

UNICEF will also be able to ensure more newborns grow up with their mother, providing the best start in life and reducing neonatal mortality rates.

## Key figures

### Issue

**130,000** mothers lose their lives from post-partum hemorrhage every year, which remains the largest direct cause of maternal mortality.

### 46x

A newborn whose mother dies in childbirth is 46 times more likely die within their first month of life.

### 8% annual increase

Hysterectomies are increasing by 8% per year. The UBT can help prevent unnecessary operations and the associated morbidities and costs.

## Response

### 95% success rate

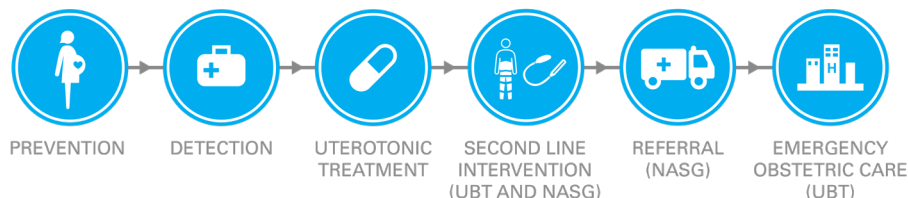
UNICEF Côte d'Ivoire found a 95 per cent success rate in UBTs stopping post-partum hemorrhage.

Photo: Dr. Dosso shows an improvised low-cost Uterine Balloon Tamponade kit which was locally manufactured in Côte d'Ivoire. The product helps stop post labour hemorrhage and save mothers' lives.

# Uterine Balloon Tamponade

## Post-partum hemorrhage continuum of care

The UBT is part of a continuum of care provided to women with post-partum hemorrhage. WHO recommends the product in situations where women do not respond to treatment with uterotonic drugs, or if uterotonics are unavailable. UNICEF is working to strengthen the continuum through scaling access to innovative products, such as UBTs and [Non-pneumatic Anti-shock Garments](#), and strengthening health care systems.



## Medical and low-cost UBTs

UBTs vary in quality and price. A medical UBT is a regulated medical device that comes pre-assembled and often costs around \$200 per single use product. They have been used as a non-surgical treatment for post-partum hemorrhage for several decades in developed countries.

In low-resource settings, some health care practitioners have begun using improvised devices, such as condom UBTs (\$5/single use), where a condom is inserted inside the uterus and filled with clean water or saline solution via catheter to compress the blood vessels. While improvised products have proven to be effective in saving women's lives, they are not regulated medical devices and are sometimes compromised in their safety.

For this reason, UNICEF is introducing a medical UBT into the Supply Catalogue while also working to identify suitable low-cost alternatives. The market for low-cost medical UBT products is emerging. Currently one manufacturer provides a device for \$5-\$15/single use. Over 11 countries have registered this new low-cost UBT as a medical device, with at least 16,000 procured in two years, demonstrating significant demand for the device should it be introduced to the Catalogue, or other suppliers innovate similar products.

## Case study: local innovation leading the way

**Côte d'Ivoire:** After giving birth to twins, Fatoumata (pictured) suffered post-partum hemorrhage. She was rapidly losing blood and fast intervention was essential to save her life.

Health workers were able to stop the bleeding using a low-cost improvised UBT kit to compress the blood vessels in her uterus. The device was available thanks to a UNICEF Côte d'Ivoire programme which introduced the devices to 96 per cent of referral hospitals, along with a 2-3-hour training course for health staff and follow up meetings.

This was welcomed by health professionals, who find it an effective way to save lives. **"It's a perfect kit that handles bleeding well and is easy to install,"** said Dr Dosso at the Bondoukou health centre. **"At the end of 24 hours after its installation, unless there are other complications, the life of the patient is saved."**

UNICEF Côte d'Ivoire found **a 95 per cent success rate in UBTs stopping post-partum hemorrhage.** The innovative product has now been scaled nationally to save women's lives and ensure newborns have the best start in life.

Initially the UNICEF Côte d'Ivoire Country Office reached out to Supply Division to procure the product. However, UBTs were not available in the Catalogue at this time, so they procured a low-cost version locally, which includes a catheter and a condom.

Now UNICEF Supply Division is working to introduce medical UBTs into the Supply Catalogue. If scaled it could save thousands of lives and lower maternal mortality rates.



Fatoumata survived post-partum hemorrhage thanks to the use of a UBT. She's pictured giving her three-month-old twins Zoumana and Karim a bath in front of her home in the North of Côte d'Ivoire. © UNICEF/UN0241796/Dejongh

For more information: [www.unicef.org/innovation/productinnovation](http://www.unicef.org/innovation/productinnovation)

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