



**POPPHI**

Prevention of Postpartum  
Hemorrhage Initiative



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# Postpartum hemorrhage and active management of the third stage of labor: **An Overview**

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**PATH**

# ACRONYMS

- AMTSL
  - Active management of the third stage of labor
- PPH
  - Postpartum hemorrhage
- CCT
  - Controlled cord traction

# DEFINITIONS

- Postpartum
  - Post = after
  - Partum = delivery
- Hemorrhage = excessive bleeding
- Postpartum hemorrhage – usually bleeding in excess of 500 ml

# Definitions <sub>2</sub>

- Labor –period of time from the start of regular contractions through delivery of the placenta
  - 1<sup>st</sup> stage: from 4 cm to 10 cm cervical dilation
  - 2<sup>nd</sup> stage: from full dilatation through delivery of baby
  - 3<sup>rd</sup> stage: from delivery of baby through delivery of placenta

# Third stage of labor

- The third stage of labor is usually uneventful, although significant complications can occur in this period.
- The most common complication is postpartum hemorrhage (PPH).
- Several complications encountered in the third stage of labor may lead to maternal morbidity and mortality.

# Physiology of third stage

- Once the baby is born, the muscles of the uterus contract, helping the placenta to separate from the uterine wall.
- The amount of blood lost depends on how quickly this happens, since the uterus contracts more effectively after the placenta is expelled.

## Physiology of third stage <sub>2</sub>

- If the uterus does not contract normally, the blood vessels at the placental site stay open and hemorrhage results.
- Because the estimated blood flow to the uterus is 500-800 ml/min at term, a severe postpartum hemorrhage can happen within just a few minutes.

# Two methods of third stage management

- Physiologic (“expectant”) management
  - Uterotonic not used.
  - Placenta is delivered by gravity and maternal effort.
  - Cord is clamped after delivery of the placenta.
- Active management
  - Uterotonic is given.
  - Cord is clamped.
  - Placenta delivered by controlled cord traction (CCT) with counter-traction to the fundus.
  - Fundal massage.

MG1

## Slide 8

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**MG1**

Is this meant to be included as a step? If it is just that it is in the original research protocols, then that should be explained.

Meghan, 8/27/2007

# Definitions <sub>3</sub>

- Maternal death
  - Death of a woman while pregnant or within 42 days of the termination of pregnancy from any cause related to or worsened by the pregnancy but not from accidental causes (World Health Organization).
- Every minute of every day, one woman dies of causes related to pregnancy or childbirth.

# PPH: Magnitude of the Problem



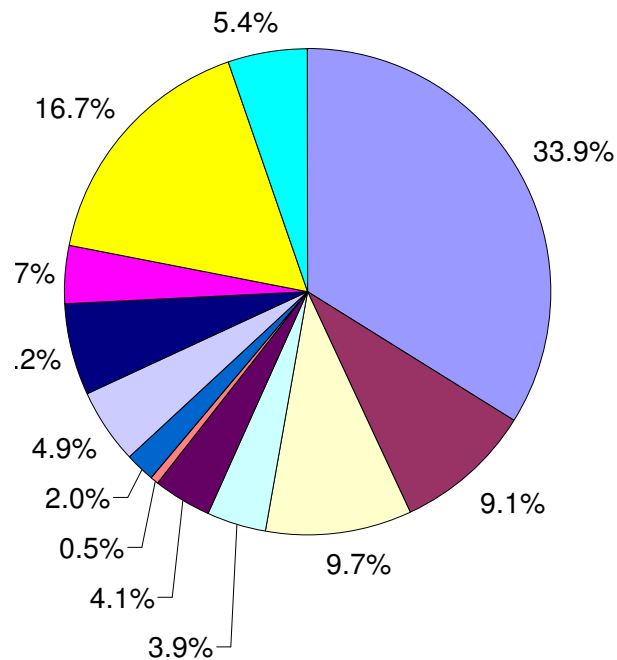
**Each year:**

- **529,000 maternal deaths**
  - 20 to 60% due to PPH
  - 130,000 deaths
- **14 million cases of PPH**

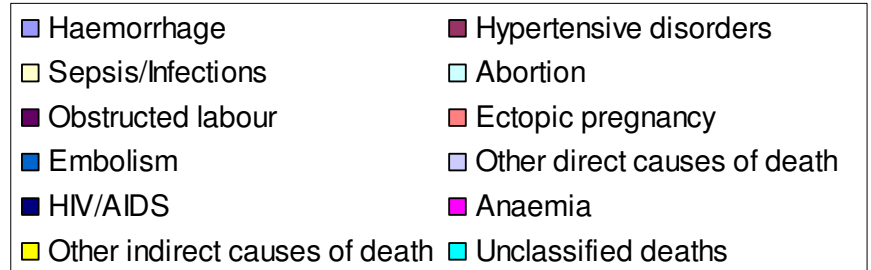
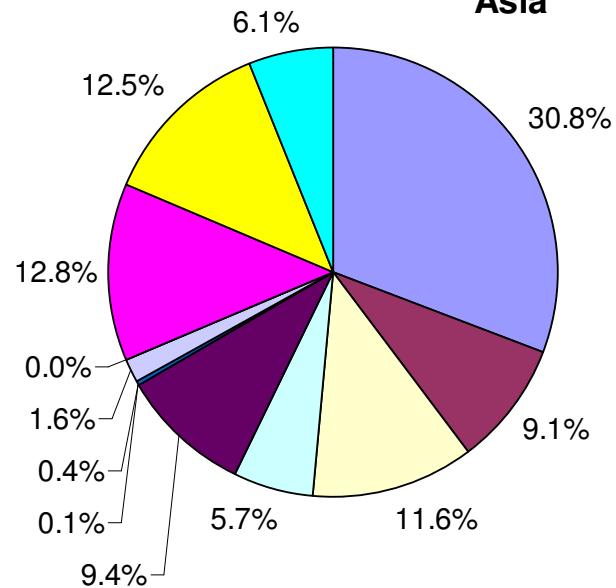
# Causes of Maternal Death

MG2

**Africa**



**Asia**



## Slide 11

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**MG2**

I think that it would be important to include the reference for this slide (especially if these presentations are going to be out there for people to use on their own).

Meghan, 8/27/2007

# Other consequences of PPH

- PPH may cause anemia or lead to poor iron reserves, ultimately contributing to anemia.
- Anemia may cause weakness and fatigue.
- Hospitalization may be prolonged, and the establishment of breastfeeding may be affected.
- A blood transfusion may improve anemia and shorten hospital stay, but there are risks of transfusion reaction and infection.
- Access to safe blood is not universal; PPH can sometimes strain the resources of the best blood bank.

# Definitions <sub>3</sub>

- Uterine atony
  - When the muscles of the uterus fail to contract adequately after childbirth.
  - The most common cause of PPH.
- Uterotonic
  - A drug that gives tone to the uterus—i.e., causes uterine contractions.

# What Can be Done to Prevent PPH?

**Skilled birth attendants can implement active management of the third stage of labor (AMTSL):**

- **Administer a uterus-contracting drug (uterotonic) within one minute after birth.**
- **Apply controlled cord traction and counter traction to the uterus.**
- **Massage the uterus through the abdomen after delivery of the placenta.**
- **Monitor for further signs of bleeding.**

# What Can be Done to Prevent PPH?

**Provide the following interventions routinely to all women:**

- **Screen routinely for, prevent, and treat anemia during pre-conceptual, antenatal, and postpartum visits. Counsel on nutrition with a focus on available iron and folic acid rich foods, and provide iron/folate supplementation during pregnancy.**
- **Help prevent anemia by addressing major causes like malaria and hookworm.**
- **Develop a birth plan to plan for giving birth with a skilled attendant who can appropriately manage PPH should it occur.**

# What Can be Done to Prevent PPH?

- **Develop a complication readiness plan that includes recognition of danger signs and what to do if they occur, where to get help and how to get there, and saving money for transport and emergency care.**
- **Check for bleeding frequently after birth.**
- **Teach the woman to monitor herself for uterine atony/increased bleeding and to call for assistance if they occur.**