

*Helping Mothers Survive*  
***Bleeding after Birth Complete***

*Facilitator Flip Chart - Second Edition*




# What the facilitator needs to know and do

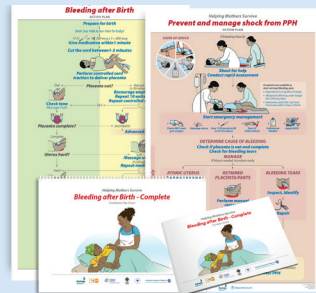
## BEFORE - DURING - AFTER training day

Use this section to prepare yourself as a facilitator and guide the development of a Helping Mothers Survive program before, during, and after the training day.  
As a facilitator, you are essential to achieving the goal of ensuring providers are skilled and equipped to deliver high quality, respectful care to women and their newborns.

### BEFORE

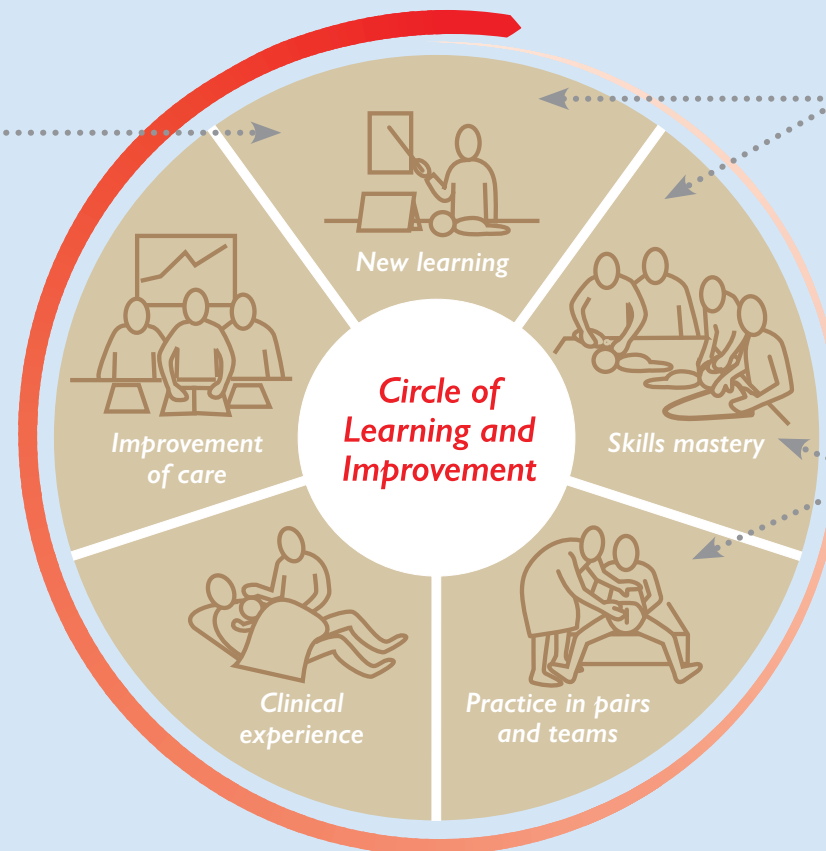
#### Begin planning with local leaders for Helping Mothers Survive training well in advance

- Visit [helpingmotherssurvive.org](http://helpingmotherssurvive.org) and [hmbs.org](http://hmbs.org) to find the tools you will need.
- You can download training modules, a training preparation checklist with supplies needed, sample agendas and other useful resources including how to order simulators if needed.
- Review service delivery data with facility management to consider strengths and gaps related to the clinical area.
- See page 5b, 28b, 30b, 32b for lists. If using NASG, have at least one for demonstration and practice.
- Download the [video chapter book](#) created by Global Health Media Project. You will use the video clips from this video book when you see this icon 



#### Prepare yourself as a facilitator

- This is a 1 or 2 day course depending on your audience and facility. Day 1 is for everyone caring for women at birth and Day 2 is for advanced skills for skilled birth attendants. Your program may choose not to teach cervical laceration repair if providers are not authorized or use of NASG if these are not available. Check if UBT is included in national guidelines for treatment of PPH; if not, do not teach insertion of UBT.
- As a facilitator you will have experienced an HMS training. Now it is important to carefully read the Provider's Guide and Flipbook. Read the "Discuss", "Facilitation Notes", and "Knowledge Checks" so you can lead discussions, answer questions, and get teaching tips.
- Carefully review the role-plays and learning activities so you can engage participants. Practice each of the demonstrations and simulations in advance so you can be an effective facilitator.
- Arrange the space to facilitate learning with 1 facilitator for every 6 participants.



### DURING

#### Evaluate knowledge and skills

- Evaluate the participants in a way that encourages further learning.
- Use the knowledge test for each module as a pre-test and post-test.
- Use the OSCEs for each module to assess for transfer of skills at the end of the course.

#### Engage every participant in discussion and practice in pairs

- Helping Mothers Survive modules are active, hands-on learning modules.
- As you teach and demonstrate, involve participants by "Inviting Discussion", and engaging them in practice and role-plays.
- Spend more time in learning activities than talking to ensure skills are mastered. Tell participants to expect to do some short activities for several weeks after training to help improve their skills.
- Always emphasize and role-model respectful care and good communication between the woman and provider, and also between providers.
- There are opportunities to demonstrate through videos. If you can show videos during training, download them in advance to show on a laptop screen or wall. The electronic version of this Flipbook has live links and the web addresses are spelled out on corresponding pages in the Provider's Guide. You will also find links on the HMS website for this module. If you cannot show videos, the steps for demonstration are carefully outlined for you.
- Use "Invite Discussion" questions to identify local problems and find solutions to overcome barriers to quality care.
- Identify 2 providers at each facility to help everyone practice after training. You will orient them as Peer Practice Coordinators after the training day.

## AFTER

### Identify and support leaders and practice coordinators at each facility who promote ongoing practice

- Orient practice coordinators to their role of facilitating ongoing practice activities after the training day. These will be short weekly activities that providers will do in groups or alone with the coordinator.
- Encourage providers to continue to use self-reflection, feedback, and review of their actions during practice and after managing complications.
- Promote collaboration with the local health system to collect clinical performance and outcome data, and to use that data for decision-making.
- Support improvement activities and share experiences among facilities.
- Become a member of HMS at [helpingmotherssurvive.org](http://helpingmotherssurvive.org) and connect with other HMS Champions. Here you can find more resources and information, and register your training information - what module, how many you trained, where and when.

- [HMS Implementation Guide](#)

- [Self-Certification](#)

- [Improvement Guide: Improving Care of Mothers and Babies](#)

- [Helping Mothers Survive modules](#)

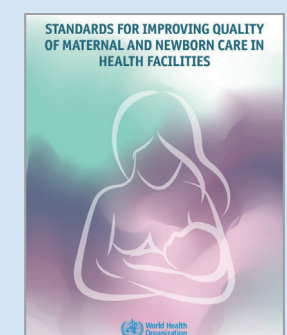
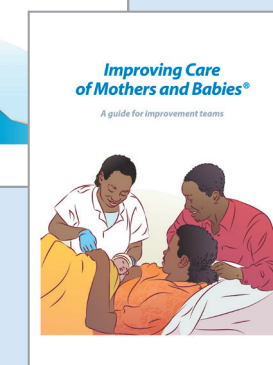
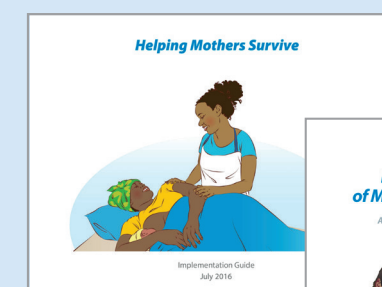
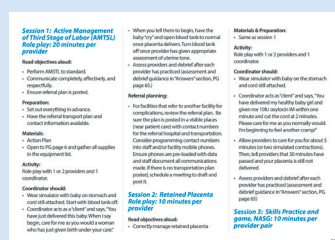
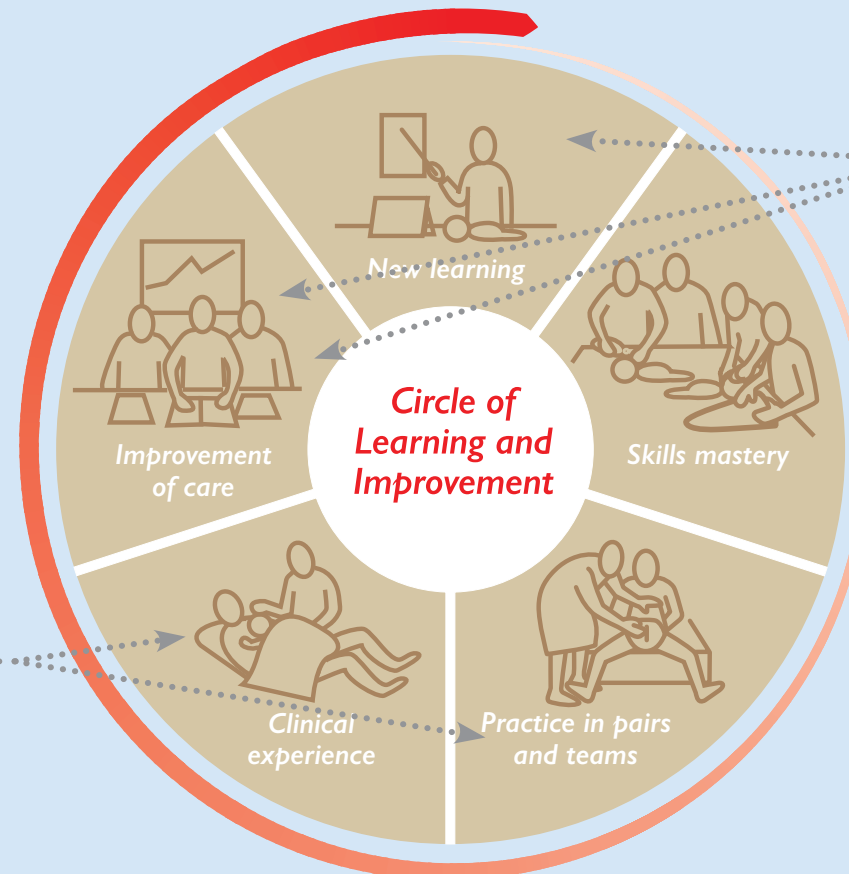
- [Helping Babies Survive modules](#)

## DURING

### Engage participants in ongoing quality improvement

- Saving lives of women and their newborns after Helping Mothers Survive training requires ongoing low-dose, high-frequency practice and quality improvement activities in the facility in order to change clinical care.
- Reflect with the participants:
  - What are you going to do differently?
  - What will you no longer do?
  - What do you need to make these changes happen?
  - Who needs to be involved?
- Use the plan for weekly practice in the back of the Provider's Guide of each module and select two peers from each facility to facilitate practice.
- Help participants plan a change that will improve care in their facility.

- **Resources:**  
LDHF Activities in the Provider's Guide for each module



# ***Saving lives at birth***





## Saving lives at birth



The Helping Mothers Survive (HMS) and Helping Babies Survive (HBS) training modules build capacity of providers to give lifesaving care for women and babies.

HMS and HBS target all levels of providers who attend births or who are called to respond to emergencies. Training in HMS and HBS equips providers to promptly detect and manage life-threatening complications.

HMS and HBS use simulation and scenarios for learning and include hands on practice and feedback.

Training is followed by short, weekly activities at the worksite to strengthen and maintain skills.

## To those who care for women at birth

- There are two people who need our care: the woman and her newborn. Survival of the baby can depend on survival of the mother.
- HMS Bleeding after Birth Complete (BABC) helps learners master competencies needed to safely and effectively prevent, detect, and manage postpartum hemorrhage (PPH).
- HMS BABC is designed as a 1 or 2-day facility training depending on the level of care provided and the audience. The first day is for all learners; the second day teaches advanced care skills for skilled birth attendants (SBAs).

### Training materials include:

- BABC Action Plan and Prevent and Manage Shock Action Plan
- This Flipbook - used for instruction
- The Provider's Guide - contains detailed information and support for ongoing practice. You will receive this at the end of training.

## Facilitation note

Have Flipbook open to this page at the start of training. Prior to the training, all supplies necessary for a clean and safe delivery should be out and ready. Have a simulator that can “bleed” ready. When you are done delivering content from this page, interrupt training with a role play of a normal birth that progresses to PPH and leads to death. If you are facilitating alone, prepare a volunteer in advance to wear the simulator and act as the woman while you call on learners to help.

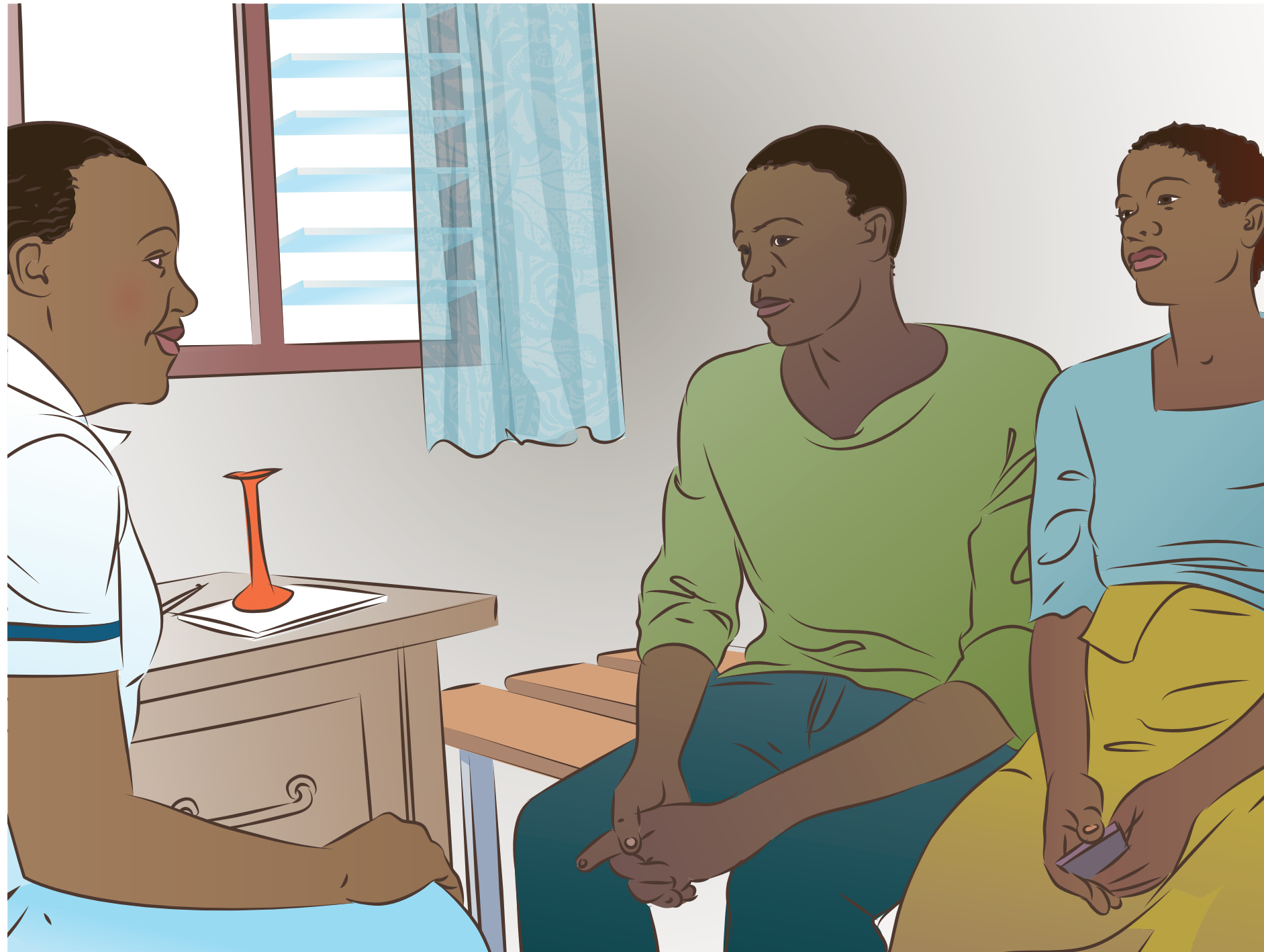
## Discuss

- Did you ever see someone die from bleeding after birth?
- What happened?
- Was there anything else that could have been done if the mother had been somewhere else?

## Knowledge check

**Why is it important for the health and survival of the baby that the baby's mother is well cared for?**  
*If the mother dies, the baby is at greater risk of dying too.*

# ***Provide respectful care to women and their families***



## Explain

### *Provide respectful care to women and their families*



- Women are worthy of respect regardless of ethnic background, culture, social standing, religion, educational level, and marital or economic status.
- Respectful care saves lives; women may not seek care if they think they will not be treated well.
- Women have a right to privacy and confidentiality during counseling, physical exam, clinical procedures, and in the handling of their records.
- Respect a woman's right to a companion. A companion improves outcomes and can shorten labor.
- Women have a right to refuse care or to seek care elsewhere.

- Always explain what is happening to the woman and why.
- Give age-appropriate care.
- Be gentle when giving hands-on care.

## Discuss

Ask learners, *"What are ways that you can demonstrate respect for the women in your care?"*

### **Appropriate responses include:**

- Introduce yourself by name and smile.
- Look at women when speaking to them.
- Use simple, clear language.
- Speak calmly.
- Pay attention when women speak.
- Include women and families in discussions about care.
- Always explain any procedure and get permission before you begin.

Ask learners, *"Have you ever had a client who refused your care? Was this woman handled with respect? Would you do anything differently in a similar situation in the future?"*

# ***Communicate effectively with woman and team members***





## Explain



Good communication saves lives and poor communication can result in bad outcomes.

Have an emergency plan in place and know whom to call in an emergency. Quickly alert others on your team to an emergency so they can act fast.

- Team members include staff at your facility, staff at the referral site, and the woman and her family.
- Communicate confidently and clearly - do not assume others know what you are thinking.
- Speak loudly enough so everyone knows what needs to be done.

- In an emergency, clearly establish roles for each person. Address people by name and clarify who will do what. Have each person repeat the task she has been assigned - for example, "I will start an IV of normal saline" - to show that the instruction was heard and understood.
- Anxiety and fear are normal in an emergency, but these emotions can block communication. You must stay calm to be effective.

## Discuss

Ask learners, *"Have you ever seen poor communication result in a bad outcome?"*

Invite them to share their experiences.

Then say, *"The simulations we will do here today, will give everyone the chance to practice problem-solving, teamwork, communication, and decision-making during an emergency. Simulations also provide an opportunity to establish roles during an emergency."*

# *Prepare for birth*



## Explain



Make the area for birth private, warm, and well lit. Gather your supplies and equipment.

Careful handwashing, wearing sterile gloves and using sterile instruments helps prevent infection.

Knowing how to use available equipment will reduce stress and improve care.

Before EVERY BIRTH, always prepare the uterotonic and have it ready to use. Test the function of the bag and mask.

Wear an apron, mask, and eye shield to protect yourself from infection. Double glove prior to delivery so you can remove the dirty gloves before clamping and

cutting the cord. This helps protect the baby from infection.

Communicate what you are going to do and why to keep the woman and your team informed and help them to stay calm.

Note time of birth.

After birth, it is important to keep the woman and her baby together.

## Facilitation note

As you demonstrate or run simulations, be sure you model respectful care for the learners.

## Simulation supplies

Have supplies for birth laid out neatly for demonstration.

- Sterile gloves
- Apron
- Scissors
- Cloths
- Ties
- Hemostats or clamps
- Timer
- Medication - Mock uterotonics
- Suction bulb
- Bag and mask
- Stethoscope

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It is very important that injectable uterotonic is drawn up into the syringe or misoprostol is ready to give BEFORE THE BABY IS BORN. This will allow you to give the medicine quickly to prevent the mother from bleeding and will reduce delays in life saving care if the baby needs help to breathe.

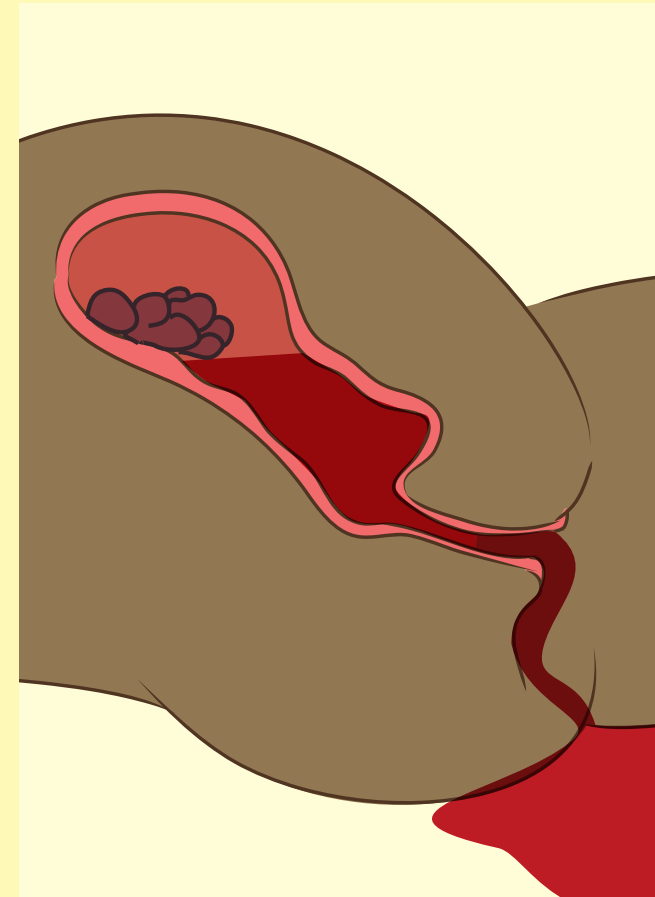
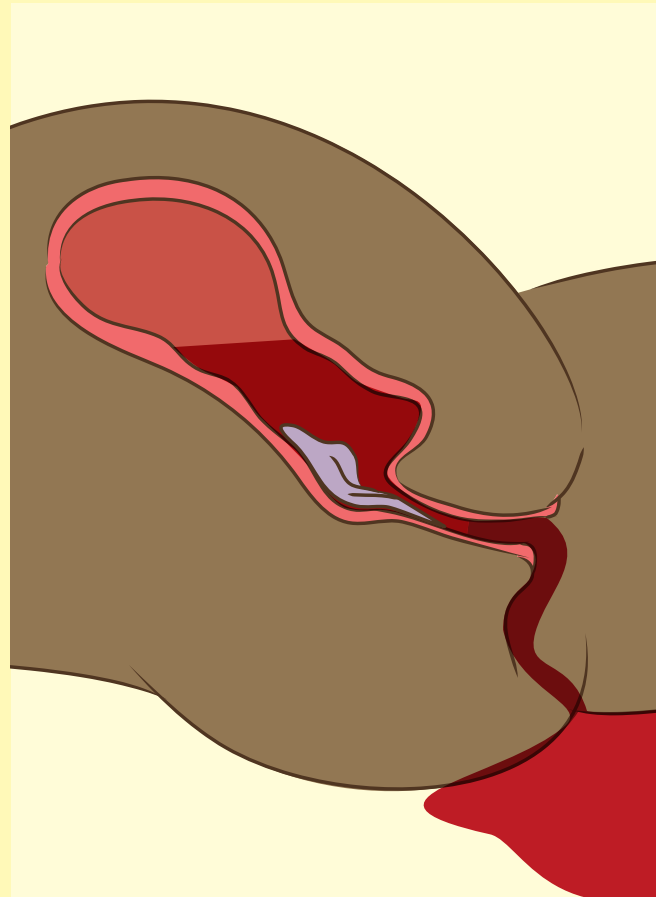
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# ***Main causes of bleeding after birth***

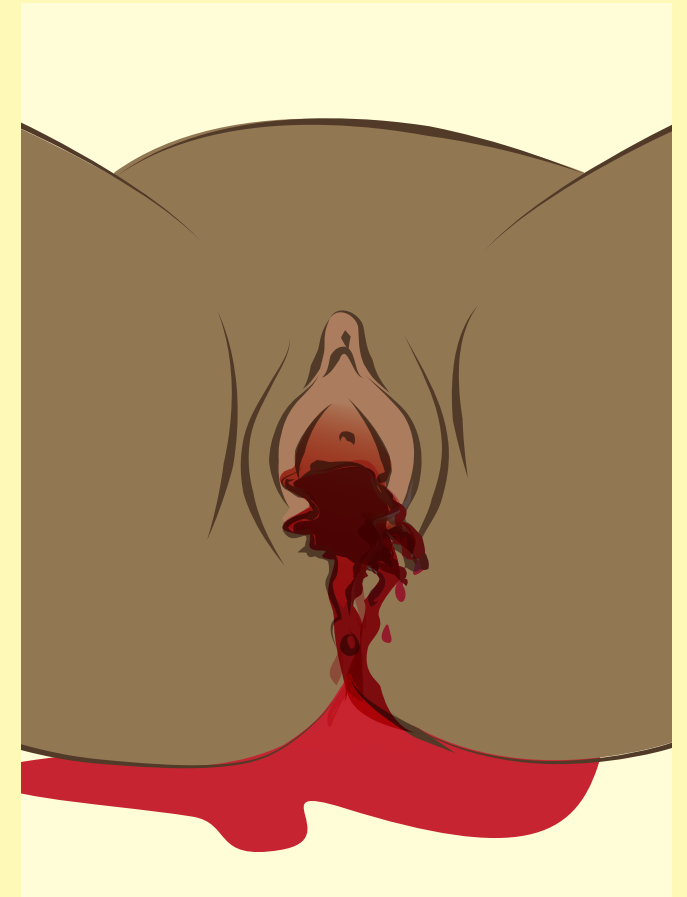
***Poor tone***



***Retained placenta or tissue***



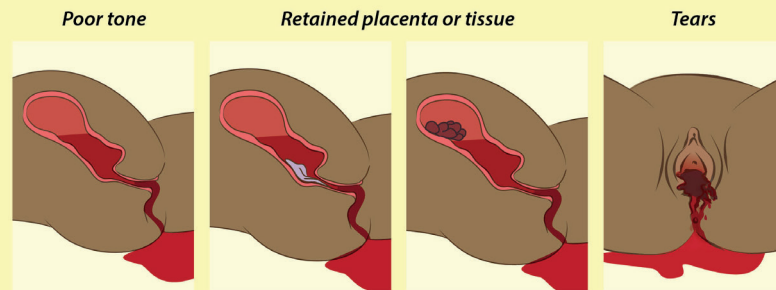
***Tears***





## Explain

### Main causes of bleeding after birth



Anyone can bleed too much after birth and all bleeding can be life-threatening.

Poor tone, retained tissue, and tears are the three main causes of PPH. Of these, poor tone, or a uterus that will not contract, causes the most bleeding after birth.

Bleeding can be a slow, constant trickle, or a large gush. Either can be dangerous. Respond quickly **BEFORE** the woman has PPH.


The definition of PPH is losing more than 500 mL. Some women can lose less than 500 mL and still die.

If a woman is bleeding heavily, has bleeding that trickles slowly but does not stop, or passes clots bigger than a lemon, begin treating her **regardless of how much blood she has lost if she has any of the**

### following:

- Increasing pulse rate ( $>100$  bpm or an increase of 20 bpm);
- Decreasing systolic BP ( $<100$  mmHg or a decrease of 20 mmHg).

### Facilitation note

If available, show video  ["Bleeding After Birth"](#) (10 min) from the BABC Video Chapter Book. The video will provide an overview of topics that will be reinforced during the training.

If you cannot show video, explain:

- The majority of bleeding after birth is due to an atonic uterus.
- If the uterus does not contract, blood continues to pump into the uterus.
- Large babies, long labors, many pregnancies, or a full bladder can make it more difficult for the uterus to contract.
- Every woman is at risk for atonic uterus.
- We have to monitor women closely because a uterus that is contracted can then become atonic.
- If a piece of the placenta or membranes is left behind, the uterus may not contract and the woman may bleed or get an infection.
- Tears are another common source of

bleeding. They can be big or small, inside or outside the vagina.

- Episiotomies can increase the risk of tearing; they should not be done routinely.
- Female genital cutting also increases the likelihood of tearing.

## Knowledge check

**Who is at risk for bleeding?**  
*All women*

**What are the three main causes of bleeding after birth?**  
*Poor uterine tone, retained tissue, and tears*

**If a woman is bleeding too much, what is the first thing you should check?**  
*Check to see if the uterus is contracted.*

**Why is it important to check the placenta and membranes?**  
*To be sure there are no pieces left inside the uterus which can prevent the uterus from contracting and may cause heavy bleeding*

### \*Advanced Care Note\*

If learners have additional training and authorization to provide more advanced care, they should act within their scope of practice. This may include cutting an episiotomy if there is a medical reason.

# ***Actively make decisions for mother and baby***



## Explain

### *Actively make decisions for mother and baby*



Things can change quickly right after birth. Both the woman and her baby must be closely watched. The first minute is a critical time to be sure the baby is breathing well.

Actively look for signs of trouble, make decisions, and act quickly to save lives! Carefully monitor blood loss, uterine tone, and infant breathing to guide your decisions:

- For the woman, this means actively looking for heavy bleeding from the moment of birth, as you wait for the placenta, and **every 15 minutes for the first two hours after the placenta has delivered**. It also means feeling her uterus to see if it is contracted and watching for

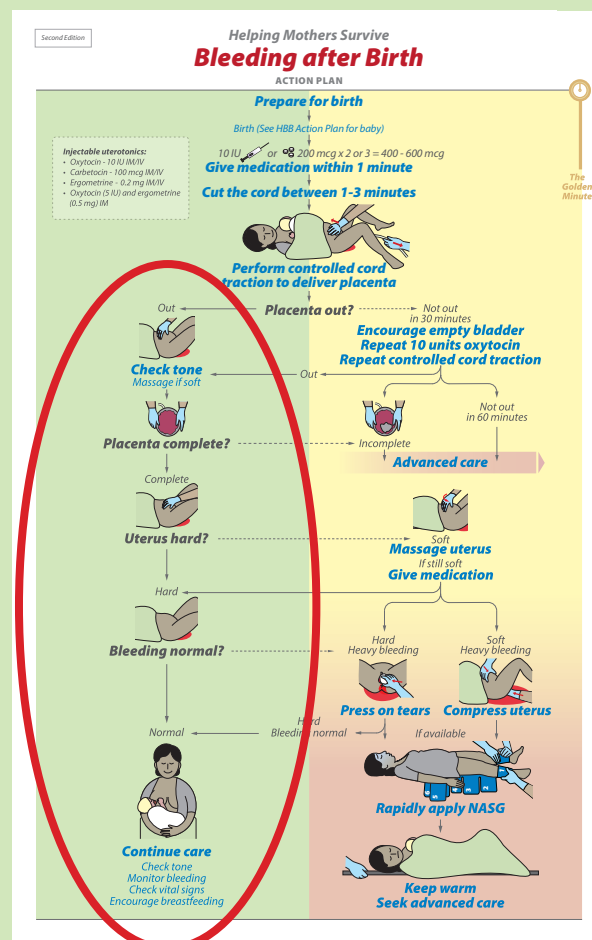
signs that she may be losing too much blood – increased pulse, dropping blood pressure, or pale, clammy skin.

- For the baby, this means actively watching to see that she begins breathing and responding to your touch as you dry her. If the baby is not breathing, keep her warm and begin resuscitation.
- For both, it means using what you see, feel, and hear to actively make decisions on what you need to do next for the woman or her baby.

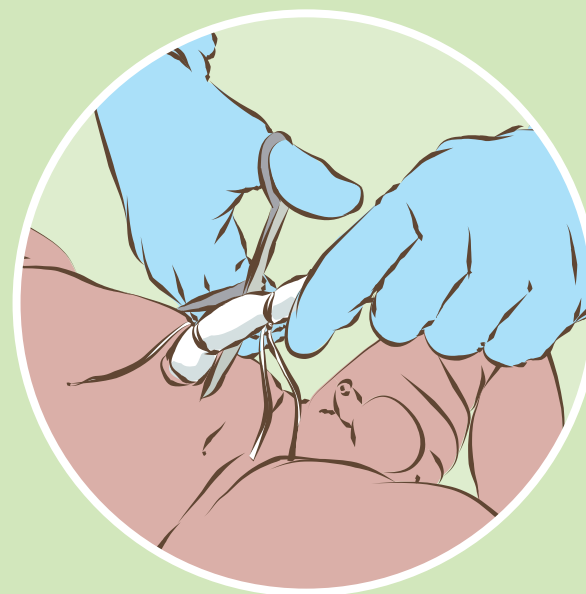
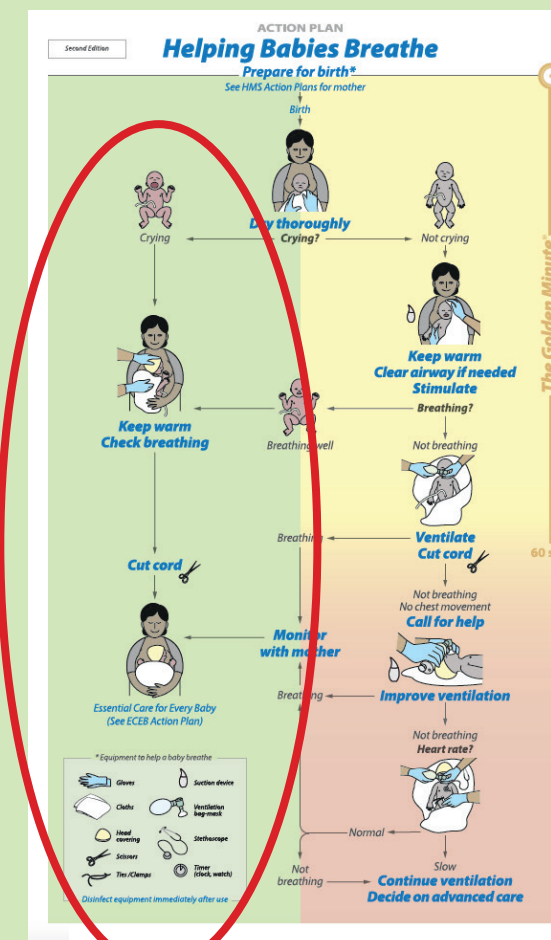
## Knowledge check

**What routine checks should be carried out in the first two hours after birth for the mother?**  
*Feel the uterus for tone, look at the amount of bleeding and watch for signs such as pale skin, low blood pressure, high pulse.*

**How often should you check on the mother in the first two hours?**  
*Every 15 minutes*

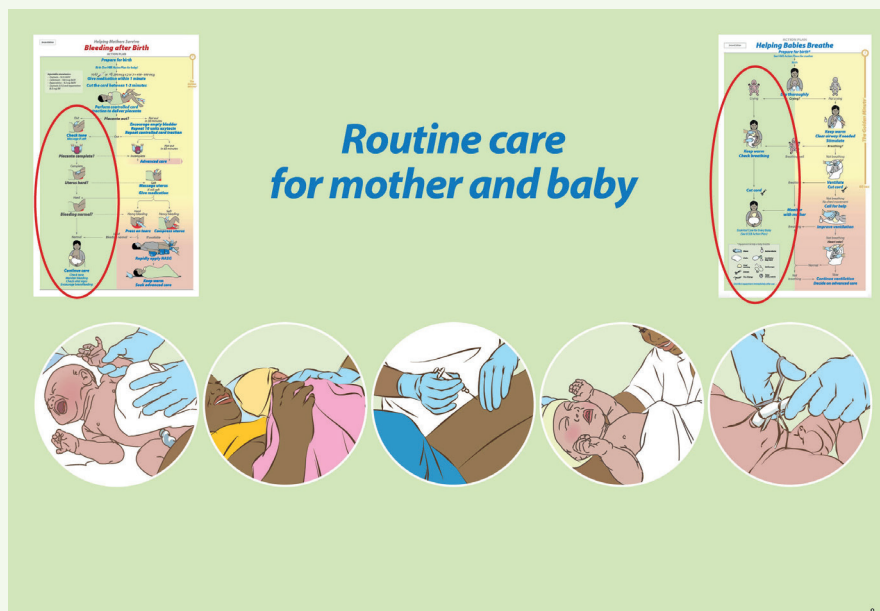


# Routine care for mother and baby





## Facilitators will demonstrate routine care of mother and baby



### Explain

The third stage of labor is the time between the birth of the baby and the placenta.

The three steps of active management of the third stage of labor (AMTSL) are:

1. Give uterotonic
2. Provide controlled cord traction if you are a skilled birth attendant
3. Check for uterine tone and massage if soft

AMTSL can speed delivery of the placenta and reduce bleeding. If the baby needs resuscitation and the provider is alone, give preference to care for the baby. If possible, at least give the uterotonic dose, preferably by the IM route, even if CCT is not possible.

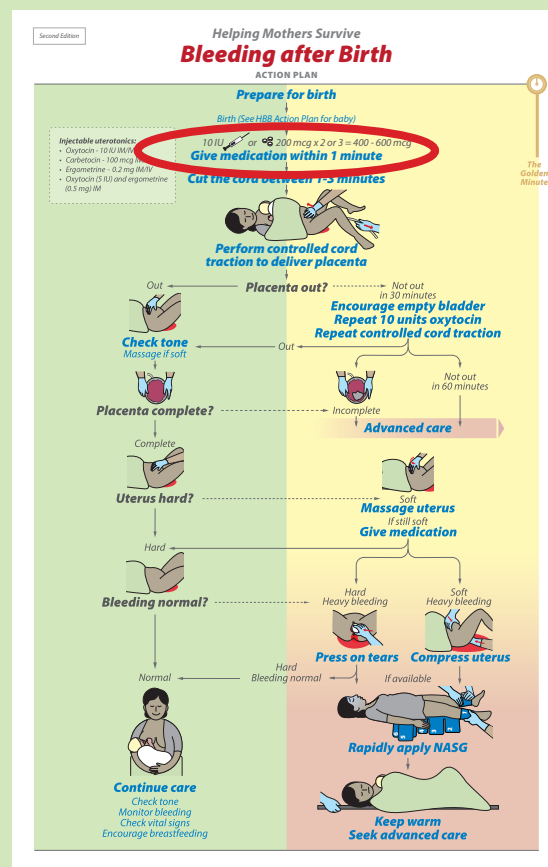
- While you wait for the placenta, check vital signs every 15 minutes after birth: a systolic blood pressure of  $< 90$  or a pulse  $\geq 110$  means she is in shock!

### Facilitation note

Begin this page with an introduction of the Action Plan and the connection to *Helping Babies Breathe*. Next, introduce the simulator with which you will conduct the training. Take a moment to briefly show the workings of the simulator.

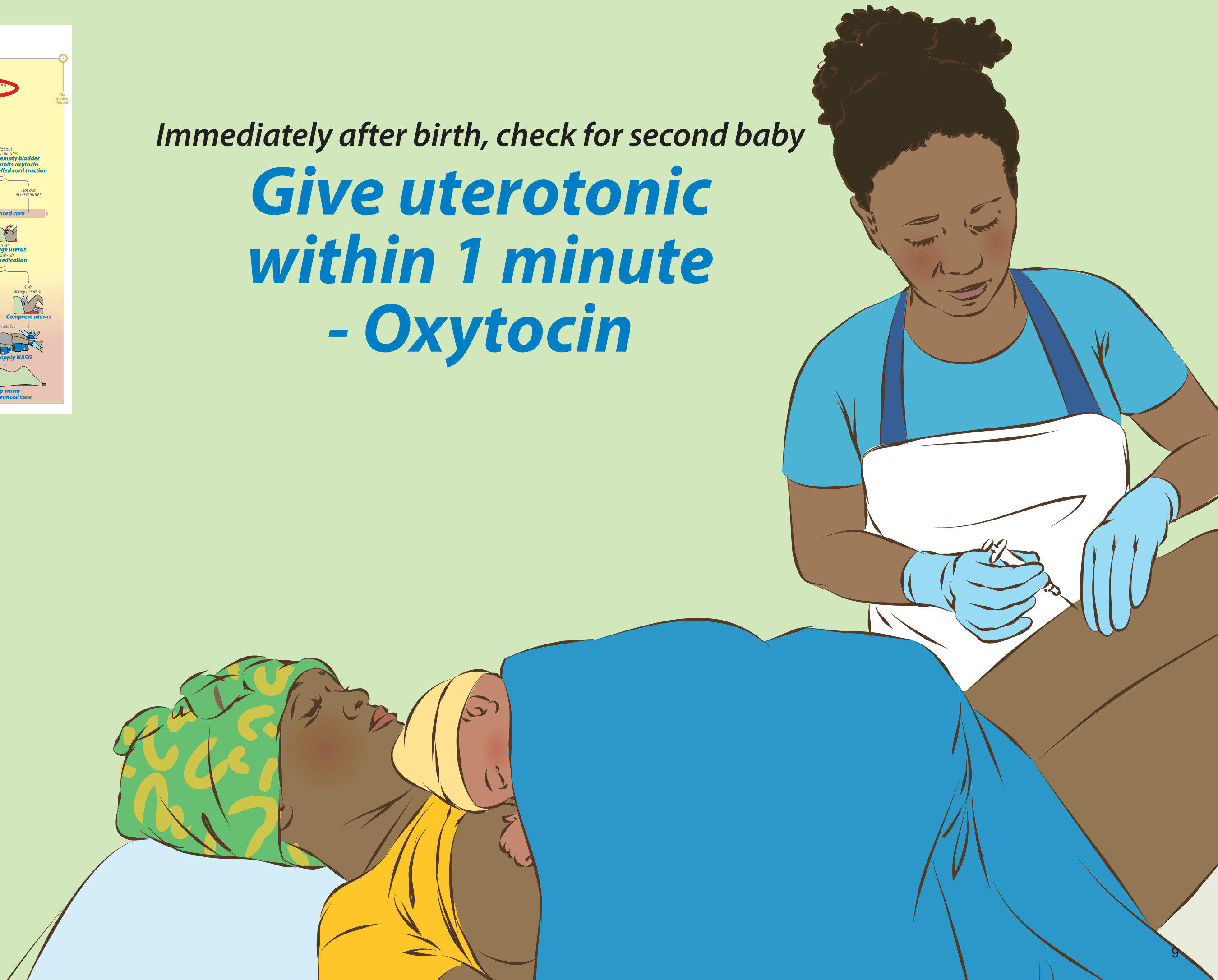
Next, go through the following 10 pages of the Flipbook through "Routine Care". Emphasize each action from the Action Plan as you go and be sure to ask all Knowledge Check questions. When you have completed these pages, demonstrate the entire sequence from start to finish.

If you are conducting the training alone, ask for a volunteer to take on the role of the woman, so that you are able to demonstrate active management of the third stage of labor and care of the newborn.



Immediately after birth, check for second baby

**Give uterotonic  
within 1 minute  
- Oxytocin**



## Explain



Oxytocin is a long acting uterotonic that causes the uterus to contract. It is recommended for actively managing the third stage of labor and can be used for treatment of PPH. Oxytocin is preferred because it is inexpensive, widely available, and it works quickly. The side effects are few and it can be used in all women.

- Oxytocin must be kept at 2-8°C (36 to 46 °F), never frozen, to ensure quality. In settings where this cannot be guaranteed, another uterotonic drug may be used. Always follow the manufacturer's recommendations for transport and storage.
- The onset of action of oxytocin is immediate if given IV and 2-3 minutes if given IM.

- The duration of action is 60 minutes when given IV and 2-3 hours when given IM.
- The correct dose of oxytocin for AMTSL is 10 IU IM or IV **given within 1 minute of birth of the last baby.**
- In situations **where women already have IV access**, the slow IV injection of 10 IU oxytocin (over 1-2 minutes) is recommended over IM injection. Do not start an IV if there is not one in place.
- **Always check to see if there is another baby before giving any uterotonic for AMTSL. NEVER give any uterotonic before birth of the last baby.** If oxytocin is given with a baby in the uterus, it can cause the uterus to contract too strongly which can rupture the uterus or reduce oxygen to the baby. This can cause the woman to die and can cause cerebral palsy or death of the baby.

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Be sure to have oxytocin drawn up in the syringe **BEFORE THE BIRTH!**

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## Discuss

Ask learners which uterotonic they use. Discuss with them any issues they may have regarding use: stock-outs, storage, comfort with use, acceptance by women.

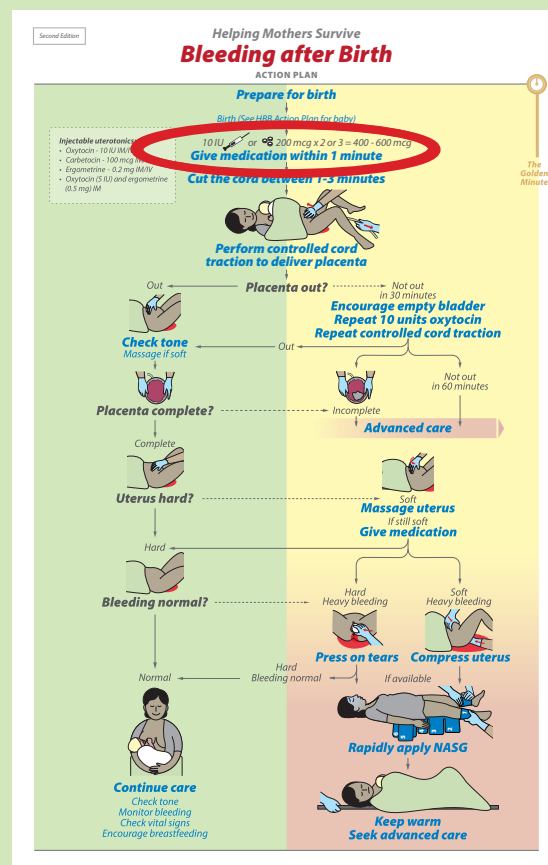
### Knowledge check

**What are the three main causes of bleeding after birth?**

*Poor uterine tone, tissue remaining inside the uterus, tears*

**Which cause(s) does giving medication address?**

*Poor uterine tone, retained placenta*



*Immediately after birth, check for second baby*

***Give uterotonic  
within 1 minute  
- Carbetocin / HSC***





## Explain



**Carbotecin** is a long-acting uterotonic similar to oxytocin. Store under refrigeration 2 to 8 °C (36 to 46 °F). Do not freeze. Always follow manufacturer's recommendations.

**Heat-stable carbetocin (HSC)** does not require refrigeration during transport and storage and keeps high potency in hot climates. It must be protected from light. Always follow manufacturer's recommendations.

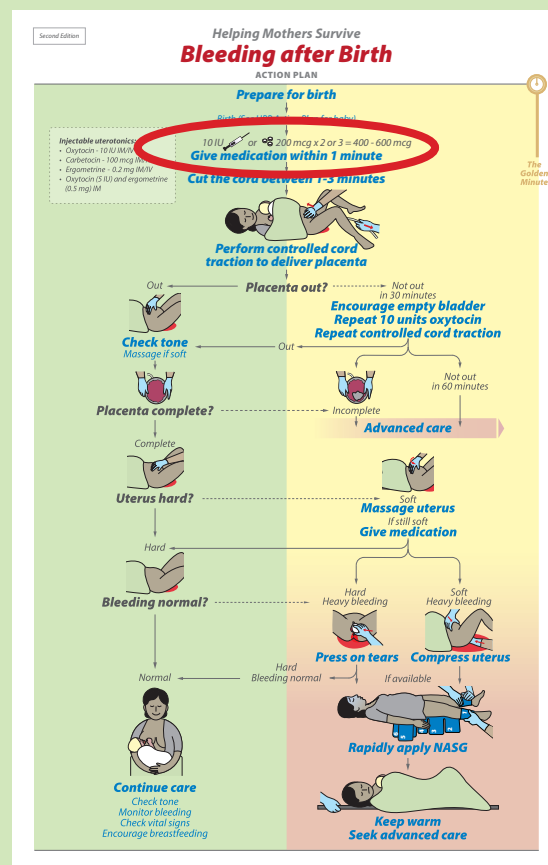
When used for PPH prevention, carbetocin/HSC was found to be as good as oxytocin for decreasing PPH after vaginal delivery and is recommended for AMTSL where oxytocin is not available or its quality cannot be guaranteed.

- The onset of action for carbetocin/HSC is about 1 minute after an IV injection and about 2 minutes after IM injection.
- The duration of action for carbetocin/HSC is 1 hour after IV and 2 hours after IM injection which is similar to oxytocin.
- The correct dose of carbetocin/HSC for AMTSL is 100 mcg (1mL) IM or IV **given within 1 minute of birth of the last baby**. If giving IV, inject 100 mcg over 1 minute.
- **Unlike oxytocin, carbetocin/HSC should NEVER be used for labor induction, augmentation or treatment of PPH.** If used during labor, strong contractions can lead to rupture of the uterus or may reduce oxygen reaching the fetus leading to cerebral palsy, organ damage or death.
- **Always check to see if there is another baby before giving carbetocin/HSC.** If carbetocin/HSC is given before birth, the uterus may contract too strongly which can kill both the woman and her baby.
- HSC maintains high potency for:
  - A minimum of 4 years at 30°C and 75% relative humidity
  - At least 6 months at 40°C and 75% relative humidity
  - 3 months at 50°C
  - 1 month at 60°C
- Before injecting carbetocin/HSC, check for contraindications:
  - Pregnancy
  - First and second stages of labor
  - Serious cardiovascular disorders
  - Epilepsy
  - Liver or kidney disorders
- **Only give one dose of carbetocin/HSC. No further doses should ever be administered.**
- Inform the woman about possible side-effects: nausea, abdominal pain, headache, shivering and fever.

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Be sure to have the carbetocin/HSC out and ready to give BEFORE THE BIRTH!

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Immediately after birth, check for second baby

**Give uterotonic  
within 1 minute  
- Misoprostol**



## Explain



Where oxytocin or carbetocin/HSC are not available, misoprostol should be used for AMTSL. Similar to other uterotonics, misoprostol causes the uterus to contract however it does not need to be kept cold. It is inexpensive and can be used by lay health workers in community settings or by providers who cannot give injections. Always follow the manufacturer's recommendations for transport and storage.

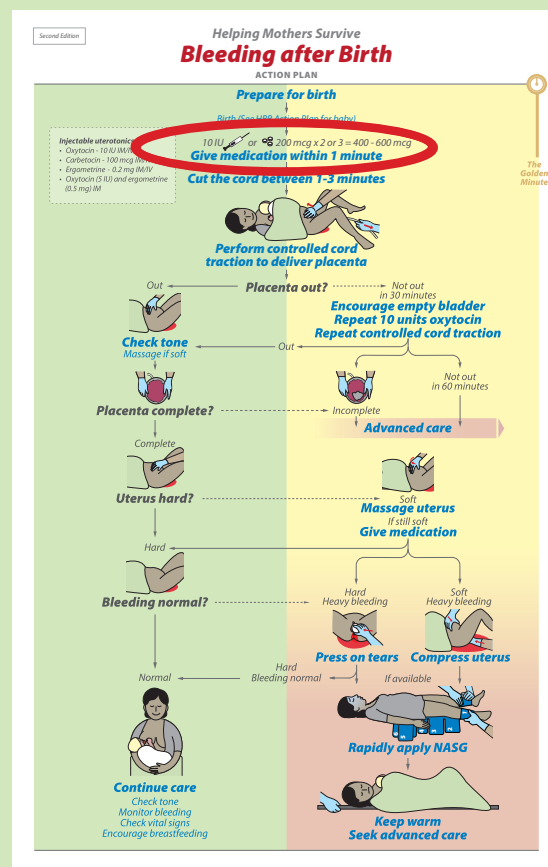
- The correct dose of misoprostol for AMTSL is 400-600 mcg by mouth **given within 1 minute of birth of the last baby.** It comes in 200 mcg tablets. Give 2 or 3 tablets depending on local protocols.

- If high doses (400-600 mcg) of misoprostol are used during labor, strong contractions can cause the uterus to rupture or may reduce oxygen reaching the fetus leading to cerebral palsy, organ damage or death.
- **Always check to see if there is another baby before giving misoprostol.** If this dose of misoprostol is given with a baby in the uterus, it can cause the uterus to contract too strongly which can kill both the woman and her baby.
- Misoprostol has side effects that do not last long and are not harmful, but the woman should be told what to expect. They include shivering, diarrhea, and fever.

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Be sure to have the misoprostol out and ready to give **BEFORE THE BIRTH!**

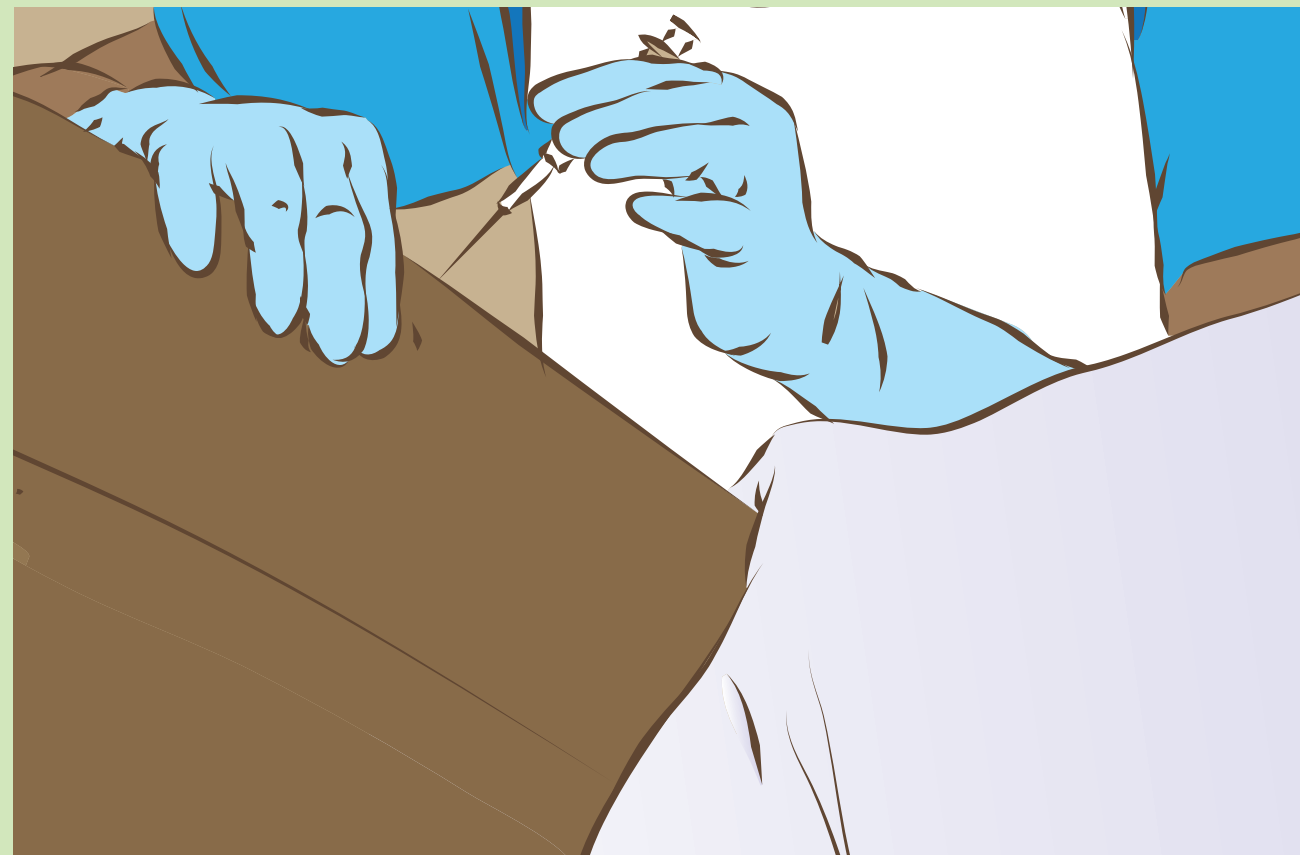
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Immediately after birth, check for second baby

**Give uterotonic within 1 minute**

**- Ergometrine or ergometrine/oxytocin fixed dose**





## Explain



Immediately after birth, check for second baby  
**Give uterotonic within 1 minute**  
**- Ergometrine or ergometrine/oxytocin fixed dose**



Ergometrine is a long-acting uterotonic used to prevent and treat PPH. It is also available in a fixed dose combination with oxytocin. Because it has some contraindications, and it can have more side effects, ergometrine or ergometrine in combination with oxytocin is not the first choice for AMTSL. **Only use ergometrine or ergometrine / oxytocin fixed dose if oxytocin, carbetocin/HSC, or misoprostol are not available.**

- **Do not give ergometrine to women with pre-eclampsia, eclampsia or high blood pressure because it increases the risk of convulsions and stroke!**

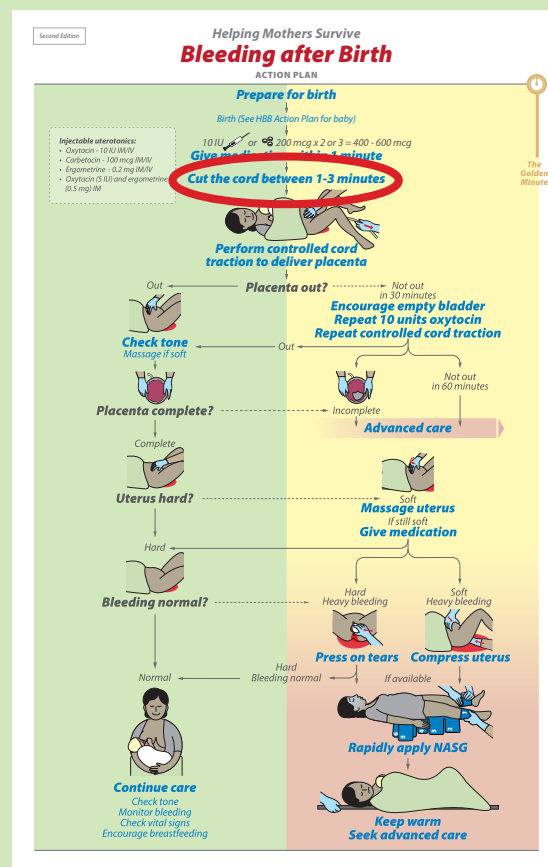
- The onset of action of ergometrine is immediate if given IV and 2-7 minutes if given IM.
- The duration of action is 45 minutes when given IV and more than 3 hours when given IM.
- Ergometrine is more sensitive to heat than oxytocin and is also sensitive to light. Store any products with ergometrine in a refrigerator at 2-8°C (36 to 46 °F) and do not freeze. To protect this uterotonic from light, keep the ampoules in the carton. Always follow the manufacturer's instructions for transport and storage.
- Ergometrine or ergometrine/oxytocin fixed dose for AMTSL should be **given within 1 minute of the last baby.**  
The correct dose is:
  - Ergometrine (0.2 mg) IM OR
  - The fixed drug combination of oxytocin and ergometrine: 1 mL = 5 IU oxytocin + 0.5 mg ergometrine IM.
- **Similar to carbetocin/HSC, ergometrine should NEVER be used for labor induction, augmentation or treatment of retained placenta.**

- Before injecting ergometrine, check for contraindications:
  - Pregnancy / 1st and 2nd stages of labor
  - Pre-eclampsia, eclampsia, hypertension
  - Allergy
- **Always check to see if there is another baby before giving ergometrine or ergometrine / oxytocin fixed dose.**  
If ergometrine or ergometrine/oxytocin is given with a baby in the uterus, it can cause the uterus to contract too strongly which can kill both the woman and her baby.
- Tell the woman about possible side-effects: nausea, vomiting, abdominal pain, headache, dizziness, rashes, hypertension, bradycardia, arrhythmias, chest pain.

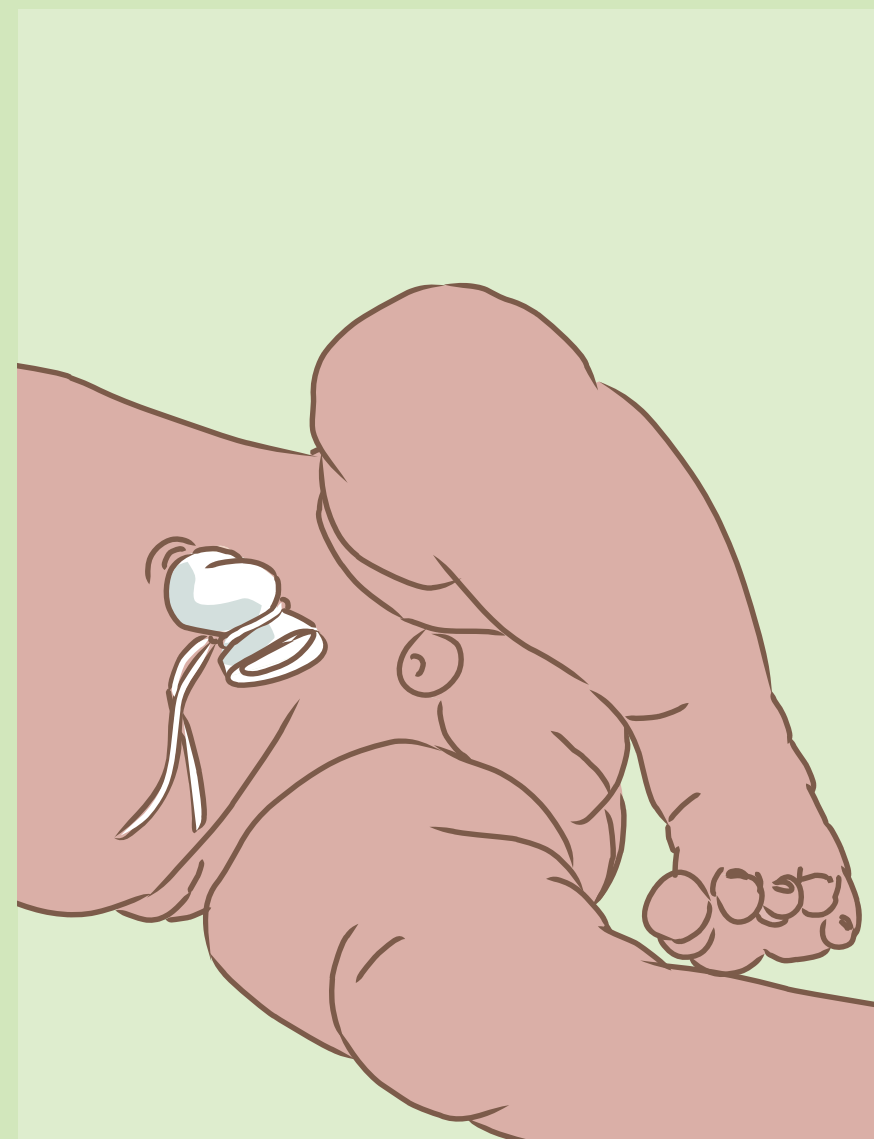
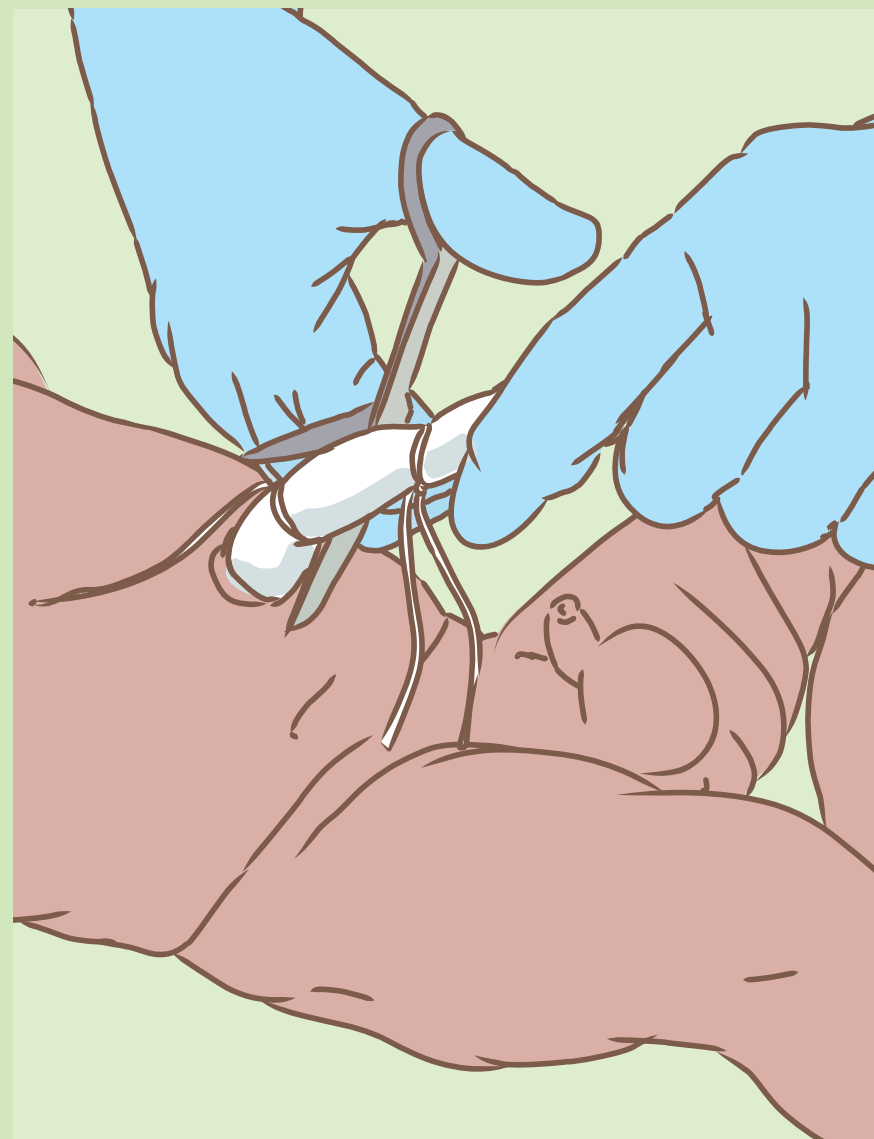
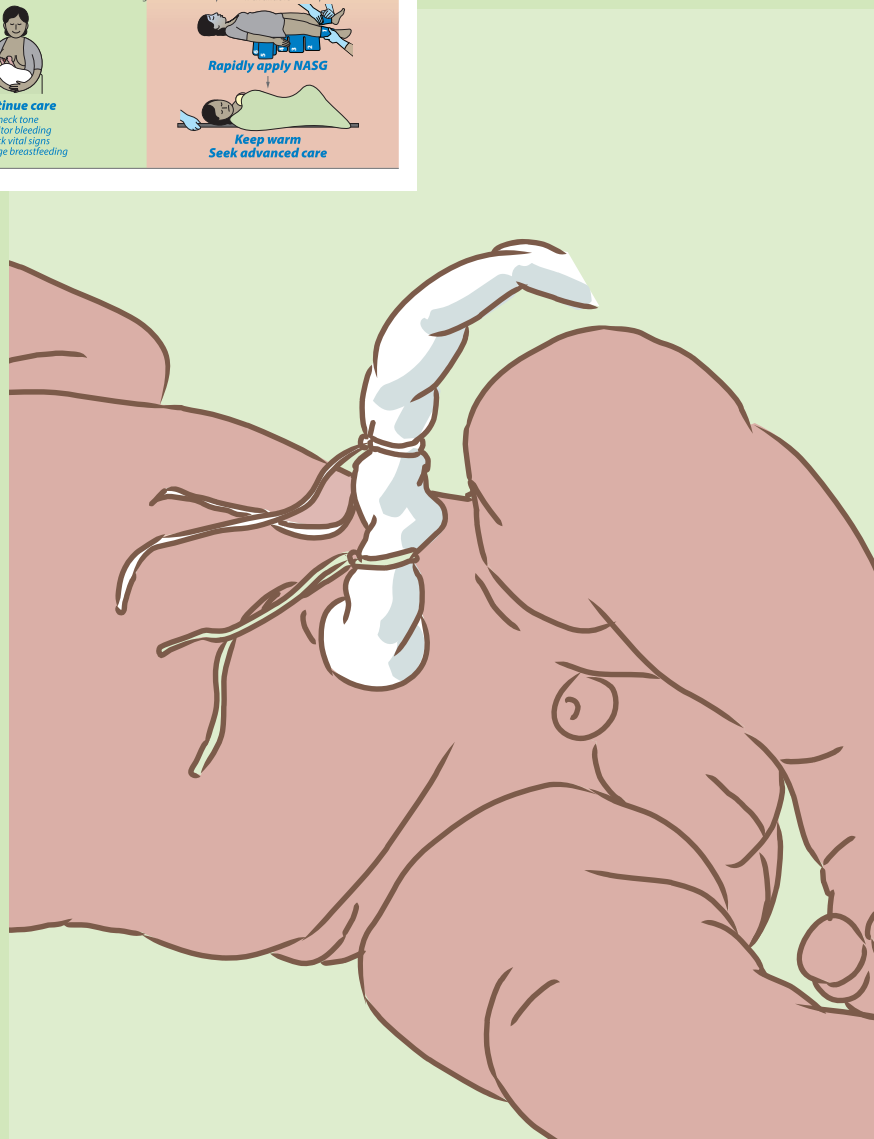
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Be sure to have the injection ready to give BEFORE BIRTH!

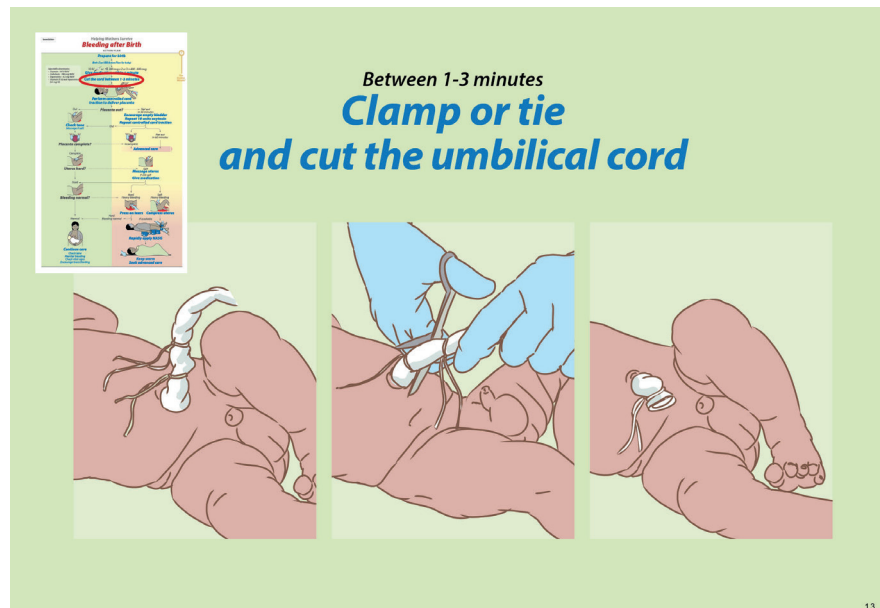
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Between 1-3 minutes  
**Clamp or tie**  
**and cut the umbilical cord**



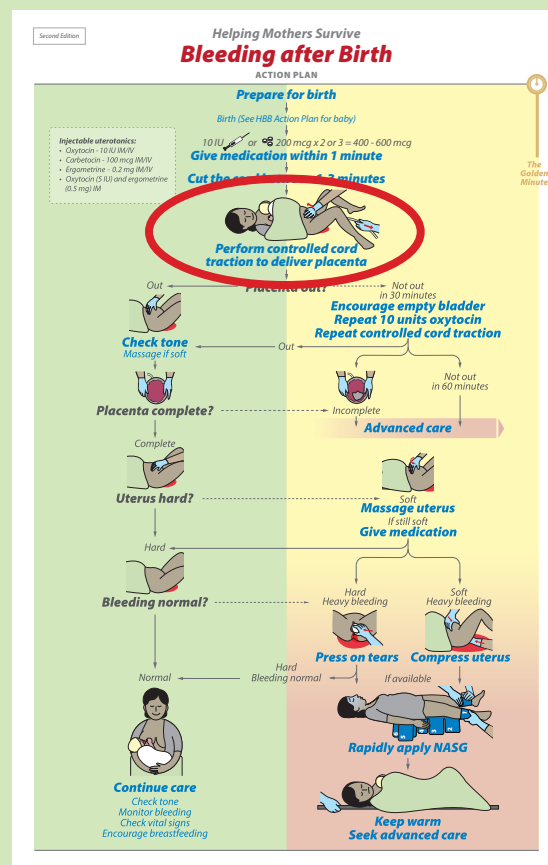
## Explain



Timing of cutting the cord depends on the condition of both woman and baby. It is recommended to cut the cord between 1 and 3 minutes after birth if both are doing well. This allows time to give uterotonic for AMTSL to prevent bleeding. Waiting at least one minute will also make sure the baby gets enough red blood cells from the placenta to prevent anemia.

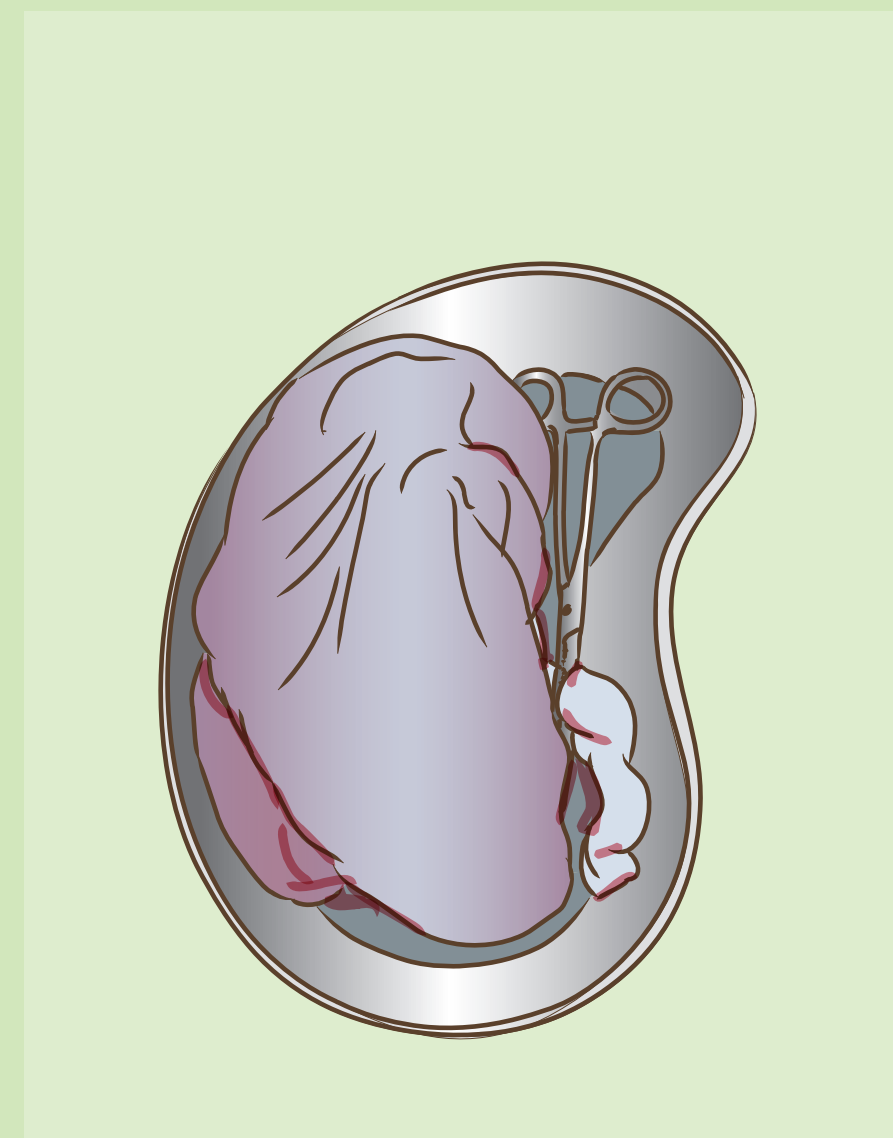
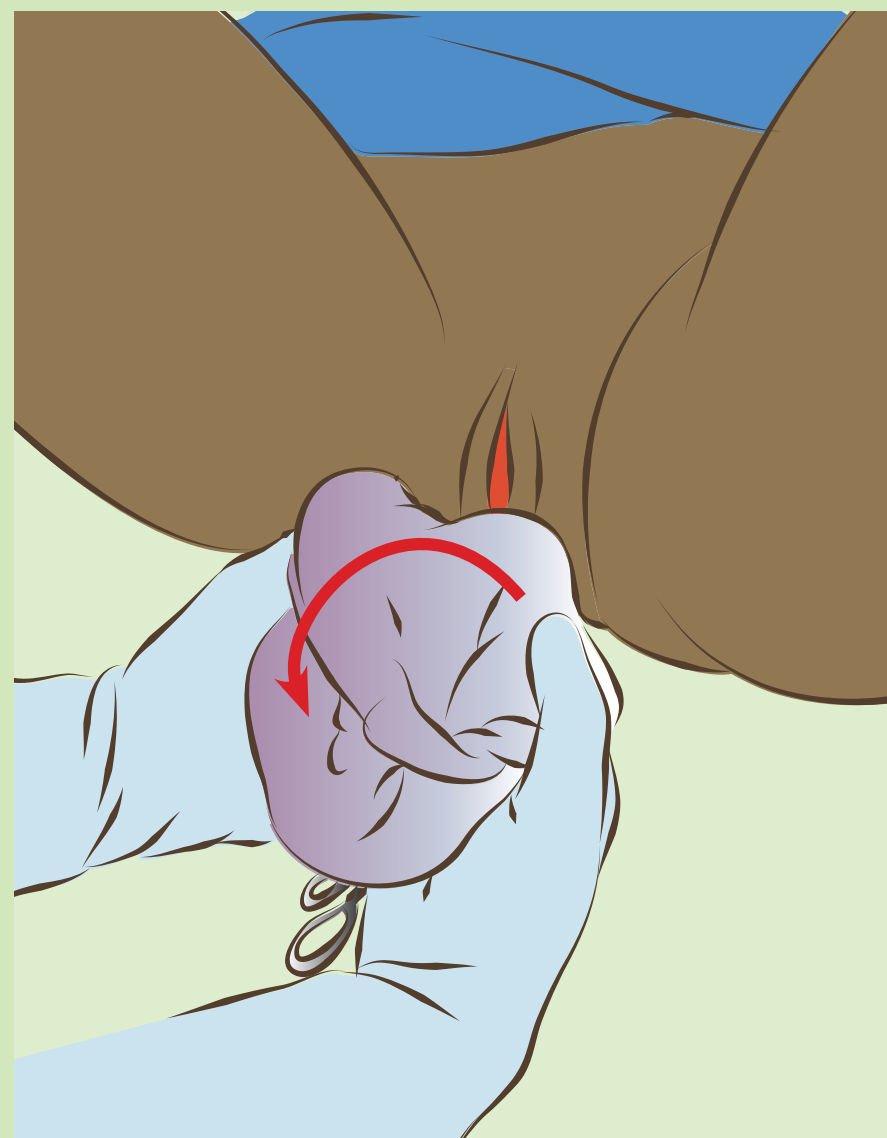
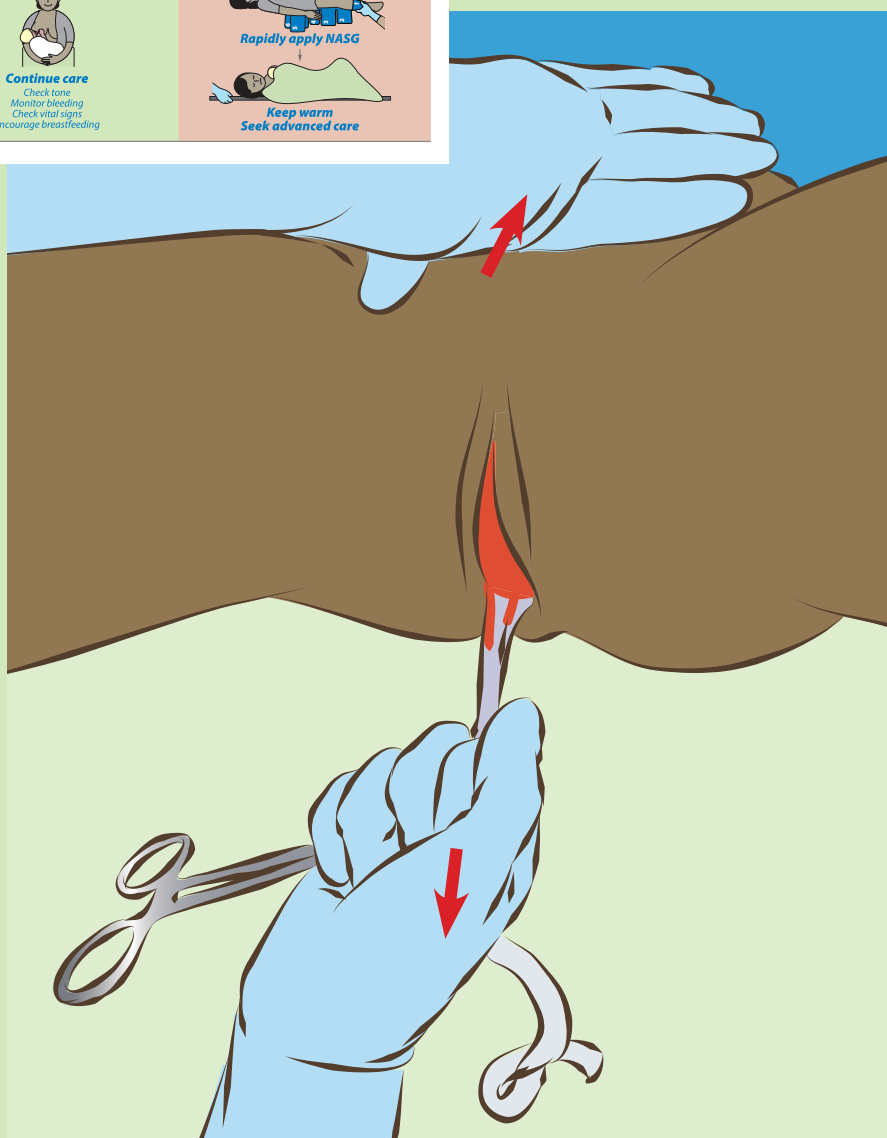
- If the woman is bleeding heavily or if the baby is not breathing well, cut the cord sooner and call for help.
- Cleanliness is important to prevent infection of the cord. Double glove before birth so that one pair may be removed before you cut the cord. All supplies should be sterile or disinfected.

- To cut the cord place 2 clamps or ties around the cord. Place the first clamp or tie around the cord about 2 finger-breadths from the baby's abdomen. Place another clamp or tie about 5 finger-breadths from the abdomen.
- Before cutting the cord, remove your first pair of gloves if doubled gloved, or change gloves.
- When cutting the cord, be sure to shield your face from blood splashing by covering the scissor or blade with a thin piece of sterile gauze before cutting.



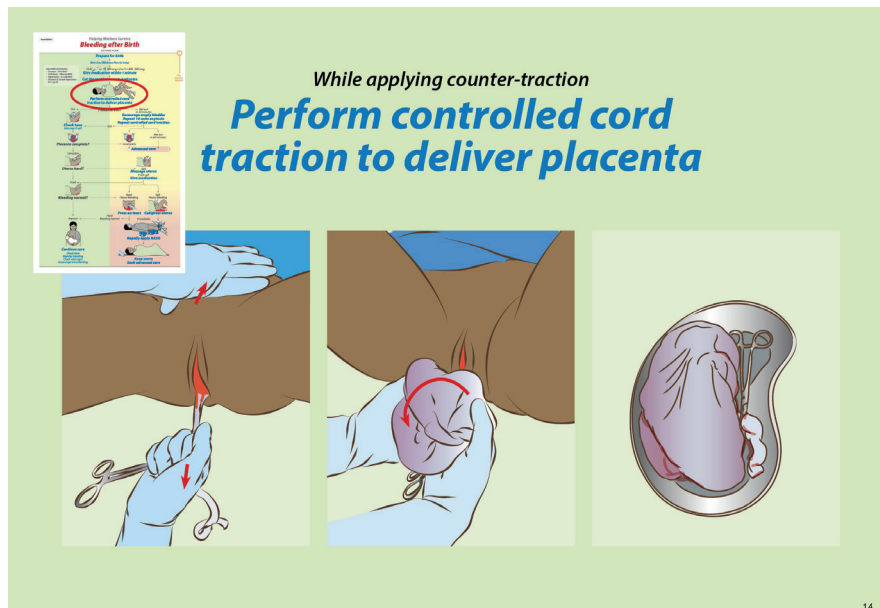
While applying counter-traction

# Perform controlled cord traction to deliver placenta





## Explain



The placenta will usually deliver within 10 minutes but it can take up to 1 hour and still be normal.

Performing controlled cord traction to deliver the placenta is the second step of active management of the third stage of labor and should only be done by skilled birth attendants.

- Controlled cord traction can speed delivery of the placenta, however, if not done properly, it can be harmful.
- Controlled cord traction must be gentle and done only during contractions.
- Always stabilize the uterus when providing controlled cord traction.

- Never pull too hard on the cord or if you feel resistance as this can tear the cord or invert the uterus.
- Tissue left inside the uterus can cause hemorrhage and infection.

### Explain how to safely provide controlled cord traction.

- Clamp cord close to perineum and wait for contraction.
- During contraction, pull the cord gently downward and provide counter-traction to stabilize the uterus. Do not pull suddenly or in other directions.
- Release all traction between contractions.

### Explain how to safely deliver the placenta.

- When the placenta is visible at the opening of the vagina, gently pull the cord upward to guide the placenta out.
- As the placenta delivers, hold it with both hands and gently turn the placenta as it delivers. Gentle twisting of the placenta as it delivers helps keep the membranes from tearing.

## Knowledge check

**Why should you never pull on the placenta or cord when resistance is felt?**

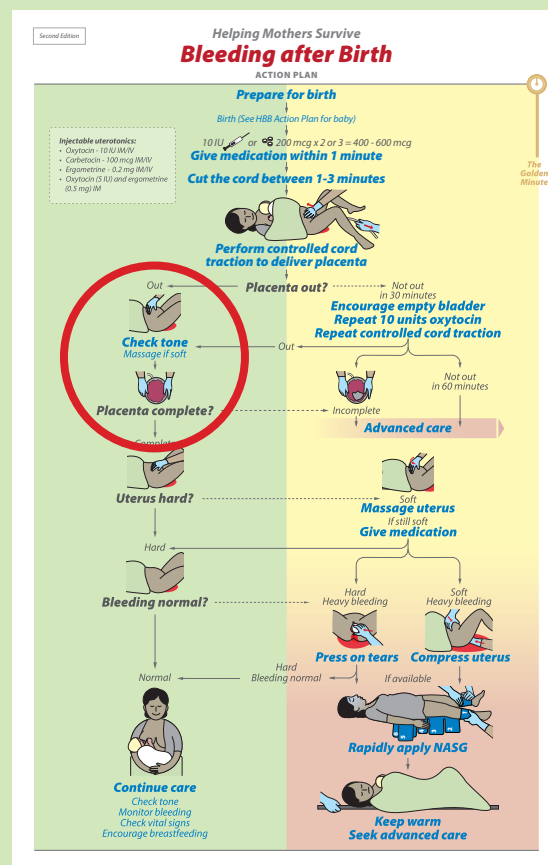
*Because you might tear the cord off or pull the uterus out.*

**When is it safe to touch the placenta to remove it?**

*When it is visible at the opening of the birth canal*

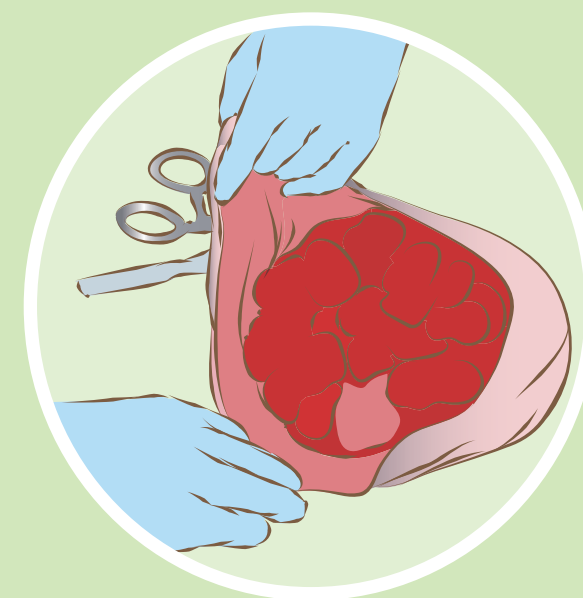
**How does turning the placenta reduce the risk of leaving tissue behind?**

*It helps it form a rope with the membranes, which is stronger and less likely to leave pieces behind.*



When placenta is out

# Check tone Check placenta for completeness



## Explain



The third step of AMTSL is to check the uterus for tone and massage if soft.

Uterine tone can change quickly. Check the uterus every 15 minutes for the first two hours after birth. Look for bleeding as you check tone. Recheck often for the first 24 hours.

After you have checked her uterus, check the placenta and membranes for completeness. Any tissue left inside the woman can cause hemorrhage and infection.

### Explain how to assess the uterus for tone and massage if soft.

- A hard uterus feels like your forehead and does not need massage. A soft uterus feels like the tip of your nose and needs massage.
- If the uterus is soft, massage and check for bleeding. Also check to see if the bladder is full.
- Teach the woman how to check and massage her own uterus.

### Demonstrate and explain how to check the placenta for completeness.

- Look at both sides of the placenta.
- Cup the placenta in your hands to see if the lobes fit together and none are missing.

Hold the placenta upside down and look at the membranes to be sure large pieces are not missing.

## Knowledge check

**Why is it important to keep checking the tone of the uterus?**

*If the uterus is soft, it is not contracted and the mother will bleed. Massage it to make it contract.*

**If a piece of the placenta stays in the uterus, why does the mother bleed more?**

*The uterus cannot contract to squeeze the blood vessels and stop the bleeding.*

**True or False - Once the uterus contracts or gets hard, it will always stay hard.**

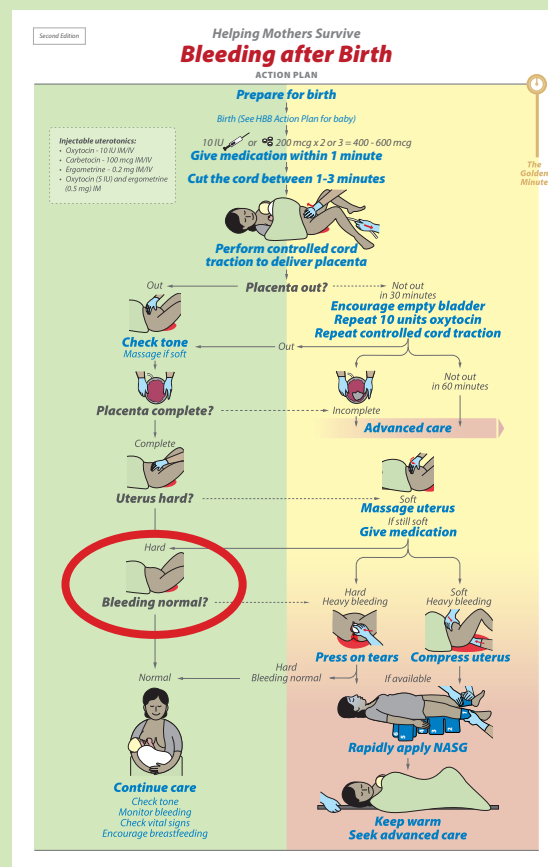
*False – A uterus can lose tone and begin to bleed.*

**What are some reasons why a uterus might not contract?**

*There may be retained tissue or the mother's bladder may be full.*

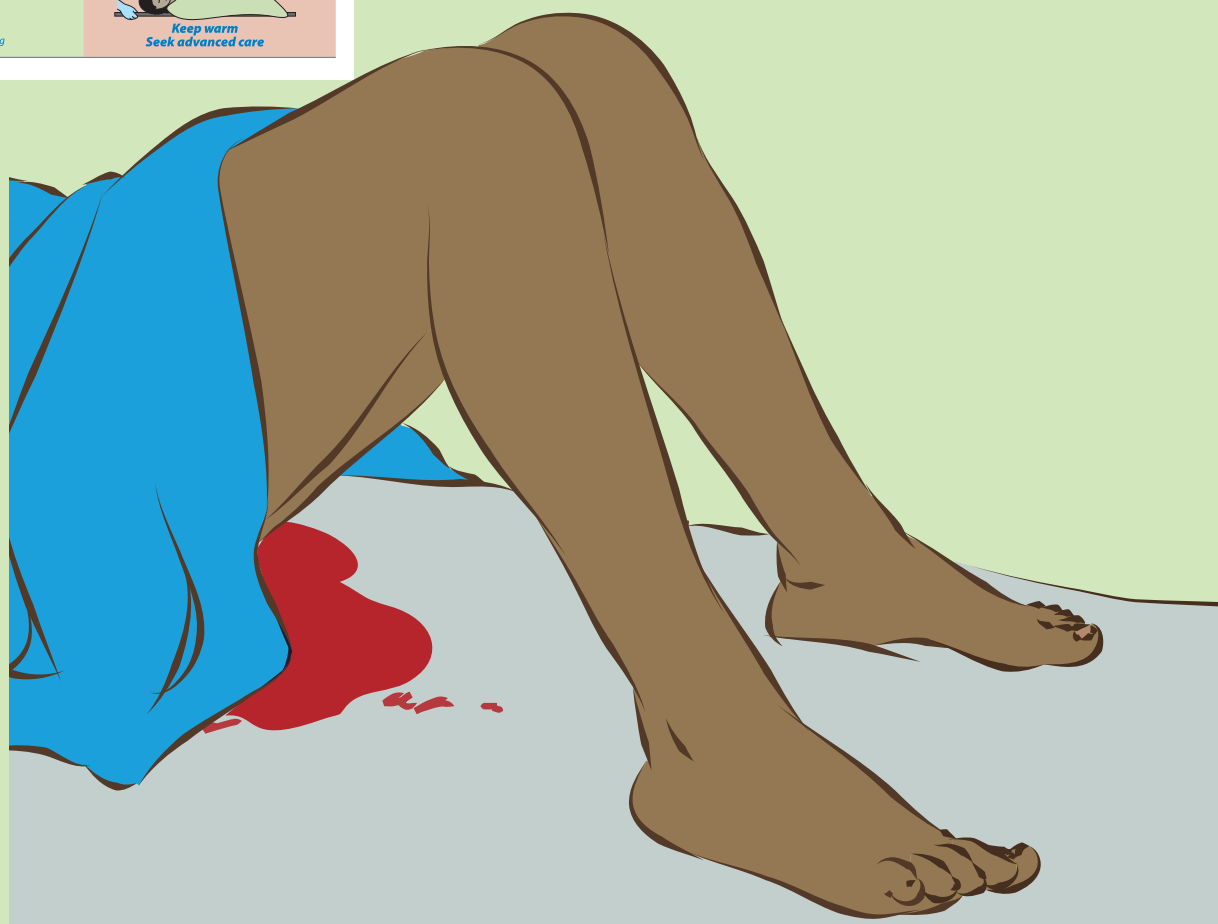
### \*Advanced Care Note\*

If learners have additional training and authorization to provide more advanced care, they should act within their scope of practice. This may include catheterizing the woman's bladder if she is unable to empty it.

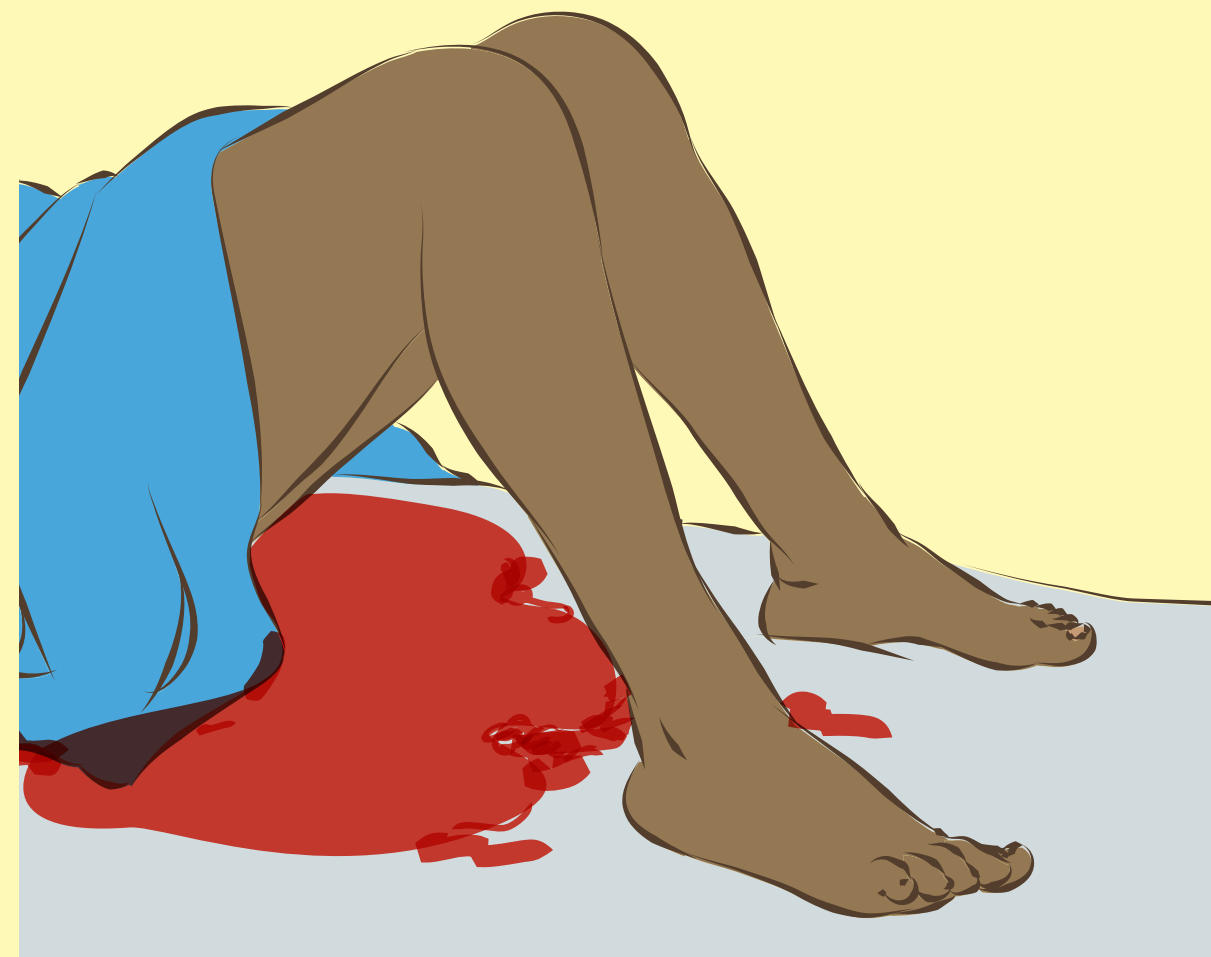


*If uterus hard*

**Check if bleeding is normal**



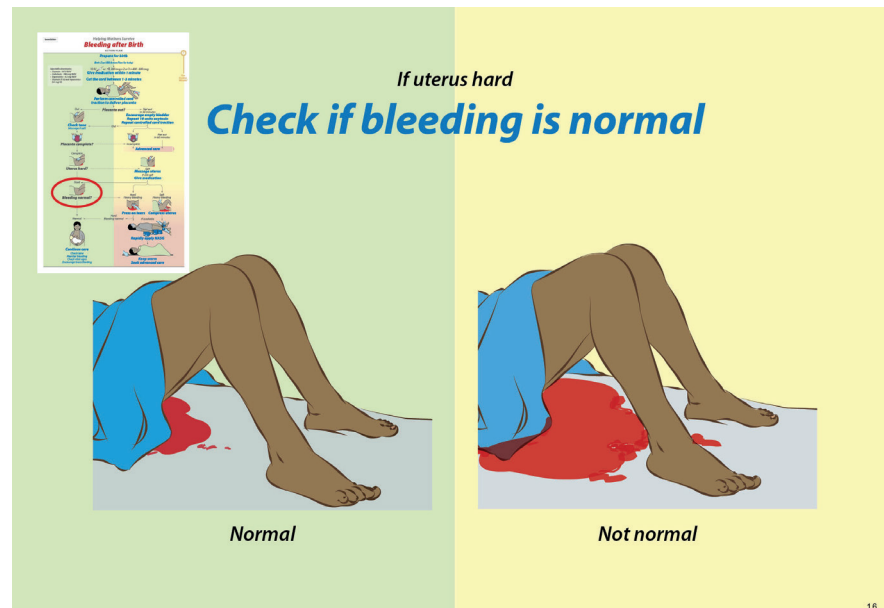
**Normal**



**Not normal**



## Explain



Check to see if bleeding is normal. After you check the placenta for completeness, see how much she is bleeding as you check for tears.

Checking and rechecking uterine tone and bleeding are critical for the first two hours.

Bleeding can be slow or fast. Any bleeding that does not stop is life-threatening.

If we do not actively check at least every 15 minutes for the first two hours, we may not notice heavy blood loss until it is too late.

Have the woman alert you if she notices a gush of blood or a trickle that does not stop or if her uterus is soft.

### Explain how to carefully monitor for too much bleeding.

- Actively assess the amount of bleeding. Remember, blood can be soaked up in bedding or clothes or spilled on the floor.
- If bleeding is more than normal, check uterine tone, check for a full bladder, and check BP and pulse.
- Respond immediately if you think the woman is bleeding too much or you diagnose PPH!!

### We will review management of PPH shortly.

## Discuss

- Ask, *“Is it common practice in this facility to assess uterine tone and bleeding for women every 15 minutes for the first 2 hours after birth?”*
- *Have you ever come back to check on a woman and found her bleeding heavily?*
- *Are there challenges that keep you from checking this often?*
- *What can you do to make this easier to do?”*

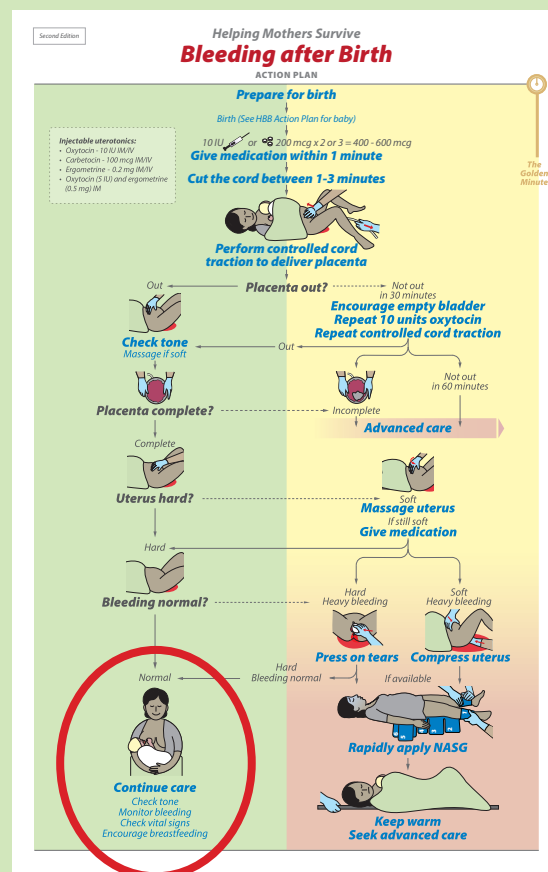
## Knowledge check

### What kind of bleeding after birth is dangerous?

*A large gush that will not stop or a constant small stream that will not stop.*

### Why should the provider check and re-check the mother often?

*The uterus could get soft at any time, or bleeding that was normal could become heavy.*



If bleeding is normal and uterus hard

# Continue care for mother and baby



Explain



As you continue care for the mother and her baby, keep them skin-to-skin to keep the baby warm. Start breastfeeding as soon as they baby is ready within the first hour after birth.

- Routine care means continued monitoring of both woman and baby. Check and re-check them both every 15 minutes for the first two hours. Checking tone, bleeding and vital signs of the woman and also check the baby’s color and breathing.
- If woman and baby are healthy, breast-feeding should be started as soon as possible after delivery.
- Encourage the woman to keep her bladder empty.

- Active decision-making does not end here. A woman and baby who are fine now might have trouble later.
- Women and babies should remain in facilities for 24 hours following a normal vaginal birth so they can be monitored.
- Prior to discharge, counsel women about the amount of bleeding to expect, as well as warning signs of excessive bleeding. Explain that blood soaking a pad in less than five minutes is too much.

Demonstrate

With a volunteer wearing the birthing simulator, demonstrate the steps of AMTSL..

- ☐ Deliver baby onto mother’s stomach  
.....
- ☐ Dry baby thoroughly and assess for crying or breathing; cover with a dry cloth  
.....
- ☐ Check for second baby; if none, proceed with third stage care while continuing to observe baby  
.....
- ☐ Give a uterotonic drug to the woman within one minute of birth of the last baby.  
.....
- ☐ While awaiting the placenta, remove first pair of gloves if double gloved or change gloves and clamp and cut the cord between 1-3 minutes after birth  
.....
- ☐ Perform controlled cord traction during contractions  
.....
- ☐ Feel the uterus once the placenta delivers and massage if soft  
.....
- ☐ Check placenta for completeness  
.....
- ☐ Check the amount of bleeding  
.....
- ☐ Check for tears  
.....
- ☐ Continue to closely observe mother and baby and provide routine care  
.....

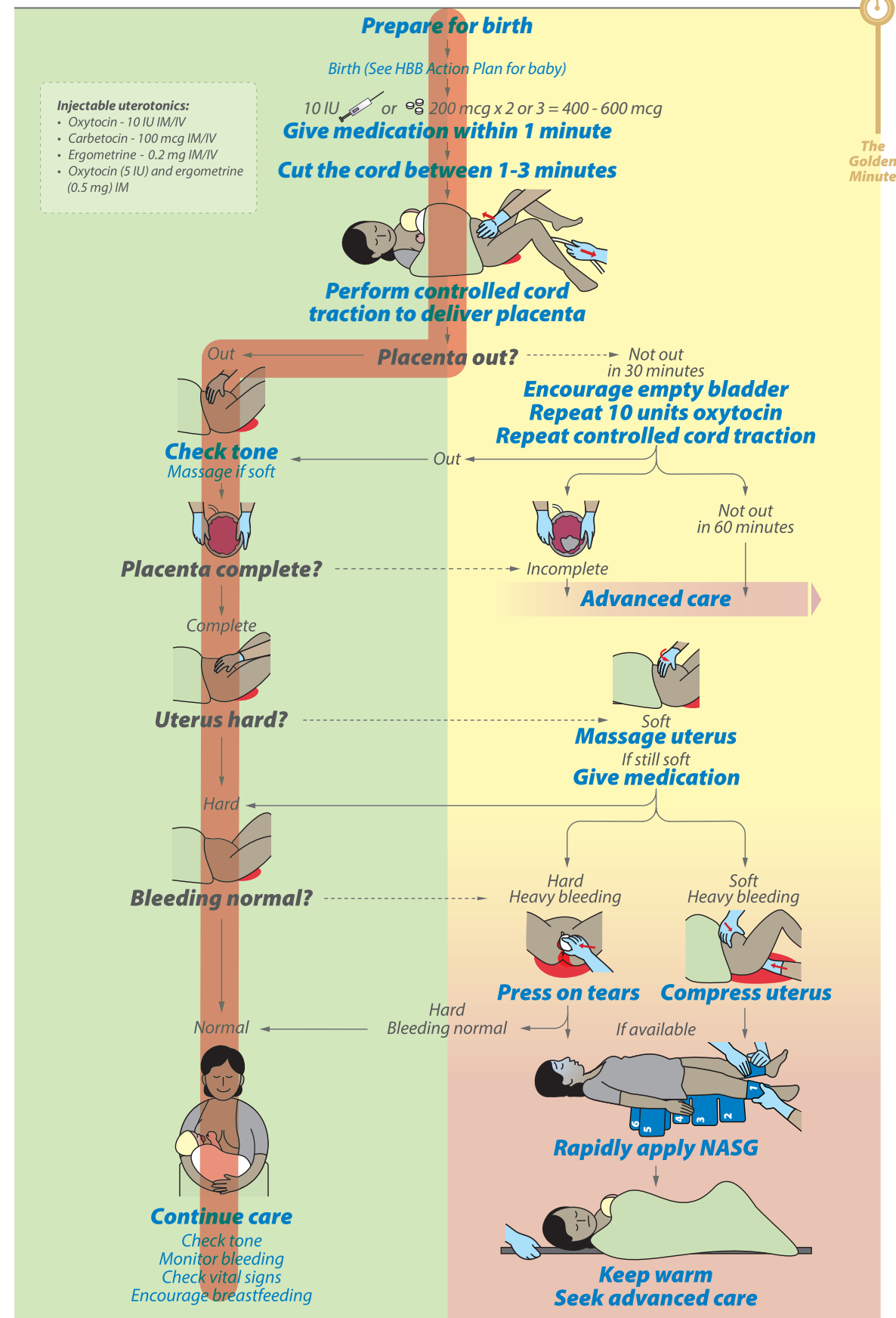
# LEARNING ACTIVITIES

How much is too much?  
Assessing blood loss  
Practicing AMTSL

Second Edition

## Helping Mothers Survive Bleeding after Birth

### ACTION PLAN





# LEARNING ACTIVITIES

*How much is too much?  
Assessing blood loss  
Practicing AMTSL*

## Explain

- Remember blood loss may be quick in a large gush, or slow in a constant trickle. Both types can be dangerous.
- Visual estimation of blood loss is difficult.
- Decision-making should be guided based on both blood loss AND the woman's vital signs.

## Exercise 1

### Blood estimation exercise

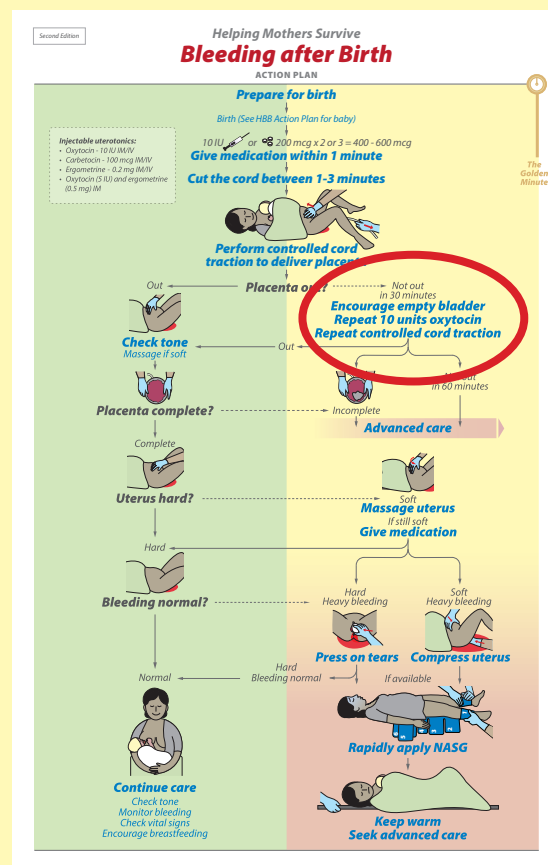
The purpose of this activity is to demonstrate how hard it is to accurately estimate blood loss. Set up four stations showing different amounts of blood and label them A, B, C, D:

- A.** White towel or culturally appropriate cloth – 600 cc
  - B.** Gauze bandage – 100 cc
  - C.** Liquid in a basin – 300 cc
  - D.** Blood clot (use red fruit jam) – 500 cc
- Release learners for a short break to walk by stations and write their estimates of blood loss at each station.
  - When they come back together, discuss their estimates. Show the differences among the group and discuss how easy it can be to underestimate.

## Exercise 2

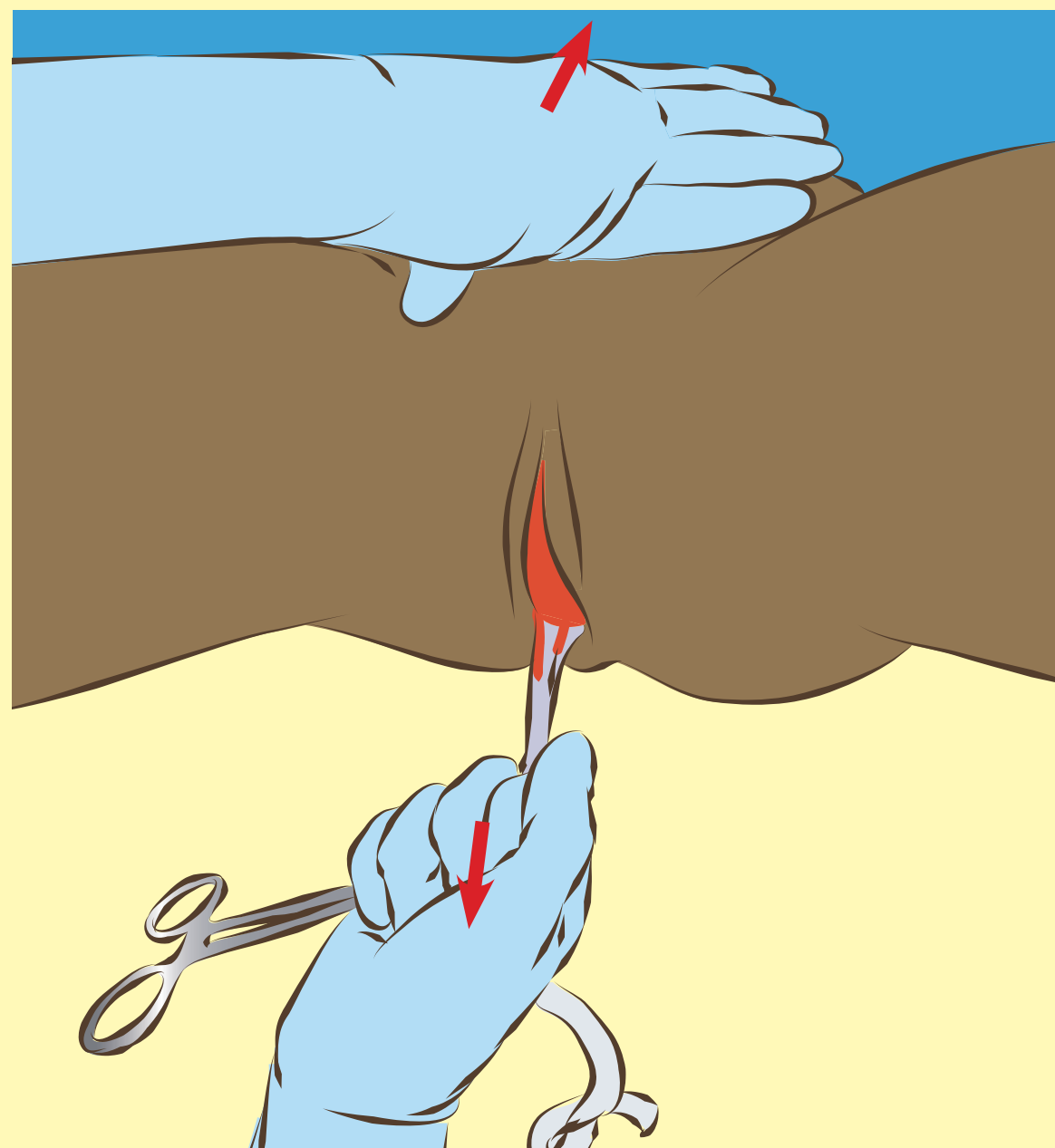
### Routine third stage practice

- Divide learners so there are no more than six learners to one facilitator and simulator.
- Begin practice with the baby delivered on the abdomen and the cord still attached.
- Have the first learner demonstrate normal care from the moment of birth to routine care.
- Guide the learner as necessary using the Action Plan and give feedback.
- Have each learner practice this same scenario while the facilitator gives feedback.
- Have the other learners trace what is happening on the Action Plan.

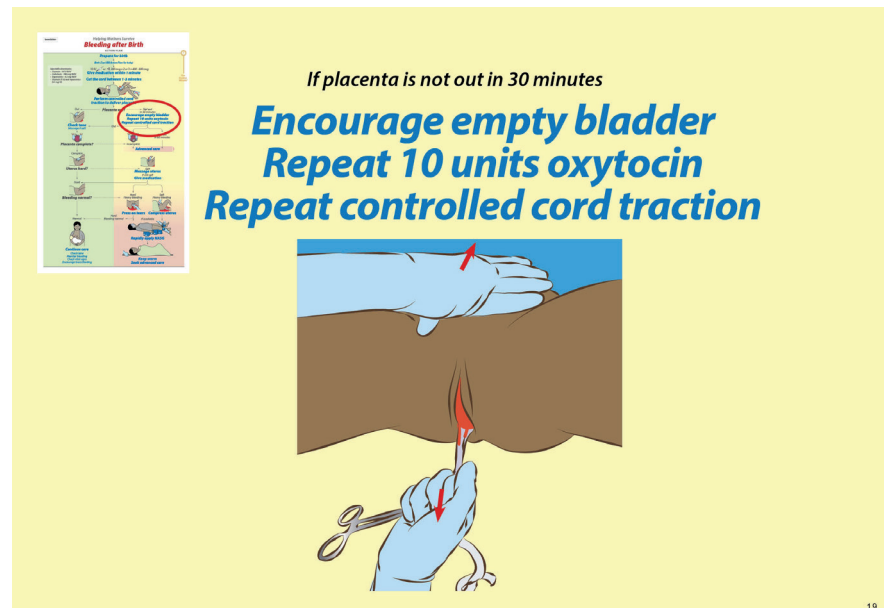


If placenta is not out in 30 minutes

**Encourage empty bladder**  
**Repeat 10 units oxytocin**  
**Repeat controlled cord traction**



## Explain



Remember, the placenta usually delivers within 10 minutes, but can take one hour so be sure to keep track of the time since birth. If the placenta does not deliver, the uterus cannot contract to stop the bleeding and the risk of infection is increased.

Seek advanced care if the placenta does not deliver in one hour or if the woman is bleeding too much.

### To manage a placenta that does not deliver in 30 minutes and bleeding is normal:

- Encourage the woman to empty her bladder.
- If the placenta does not deliver after this, repeat 10 units of oxytocin. **DO NOT** repeat misoprostol or carbetocin for retained placenta. **Do NOT** give ergometrine/methylergometrine or oxytocin and ergometrine fixed dose combination.
- Continue controlled cord traction. It may take several more contractions for the placenta to deliver.
- Give gentle downward traction only during contractions to help deliver the placenta safely. Pulling harder or when you feel resistance is dangerous! You can pull the uterus out or tear the cord off.
- You must stabilize the uterus with one hand above the pubic bone.

Sometimes a woman will arrive in your care after she delivered elsewhere and has a retained placenta or PPH. In these cases, you will need to care for her based on her

signs and symptoms and what you learn about any care she has received.

## Knowledge check

**When should you seek advanced care if the placenta will not deliver?**

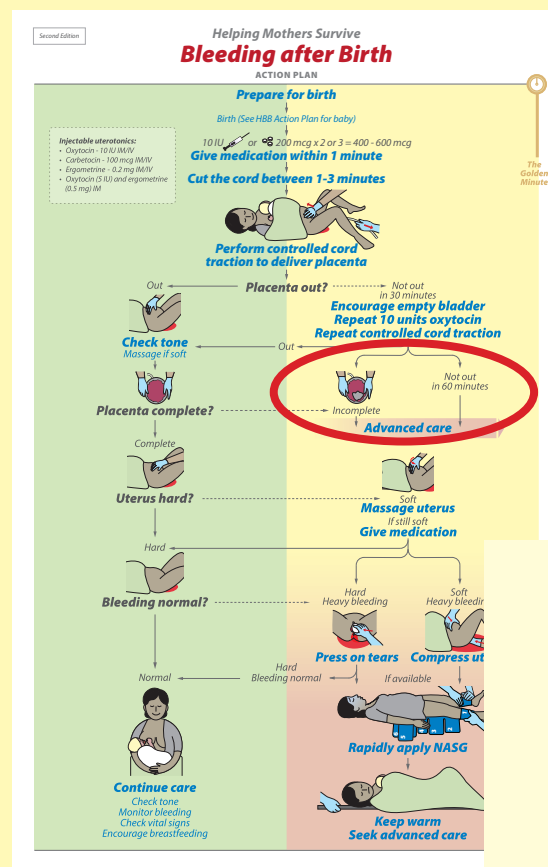
*Any time the bleeding is heavy  
After one hour*

**If the placenta does not deliver, what are the risks to the mother?**

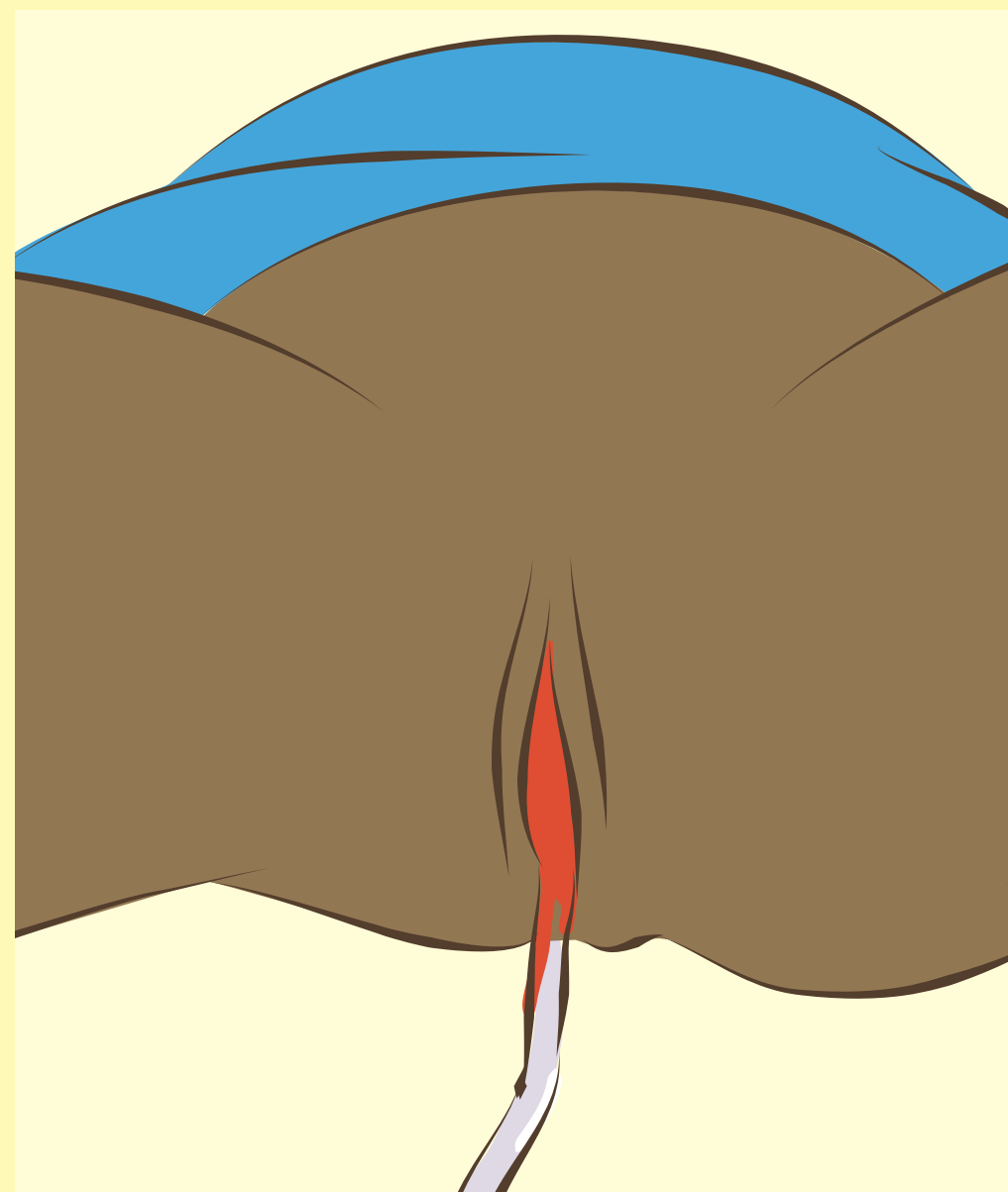
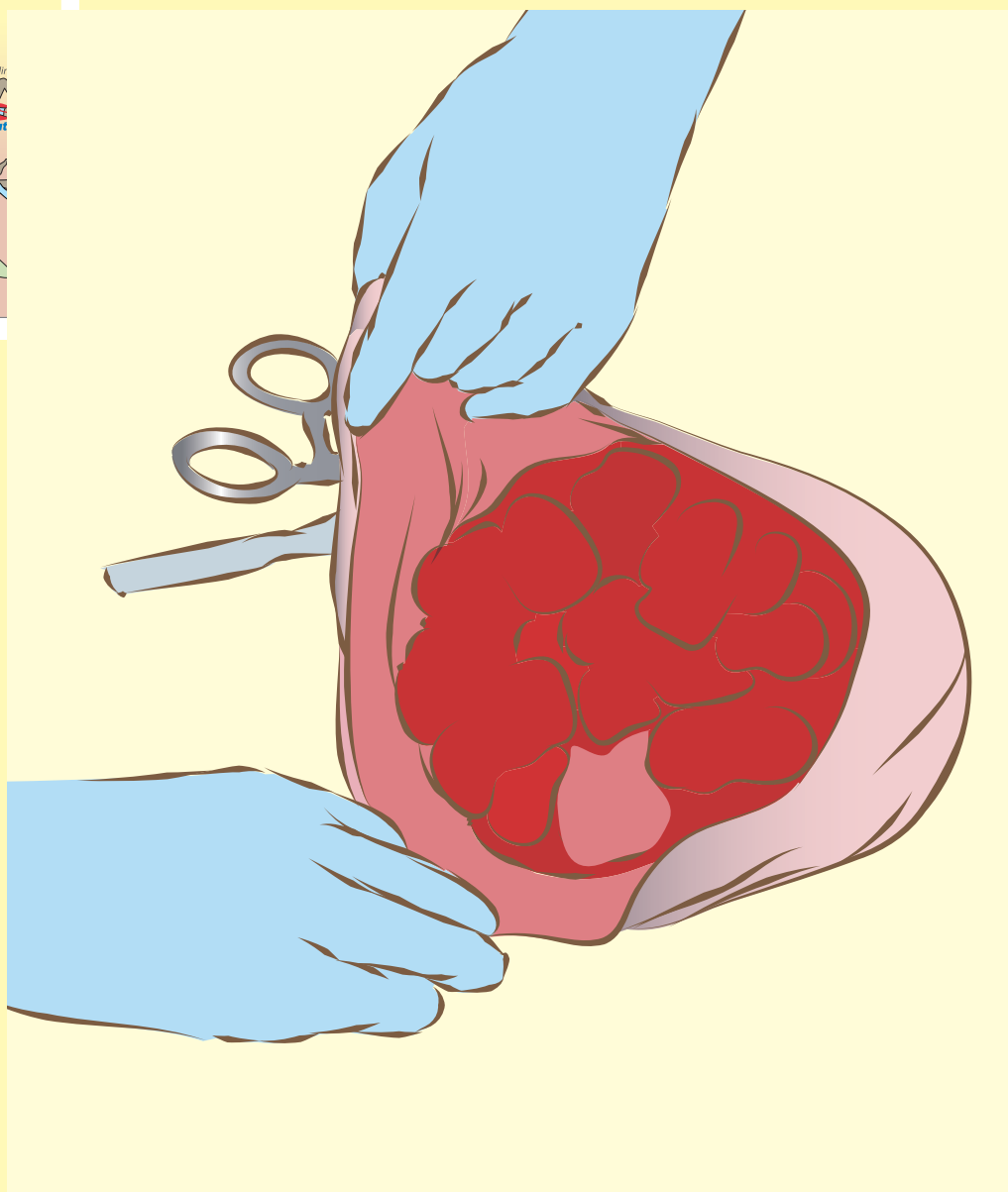
*Infection and bleeding*

### \*Advanced Care Note\*

If learners have additional training and authorization to provide more advanced care, they should act within their scope of practice. This may include repeating controlled cord traction described here, repeating oxytocin or catheterizing a full bladder.

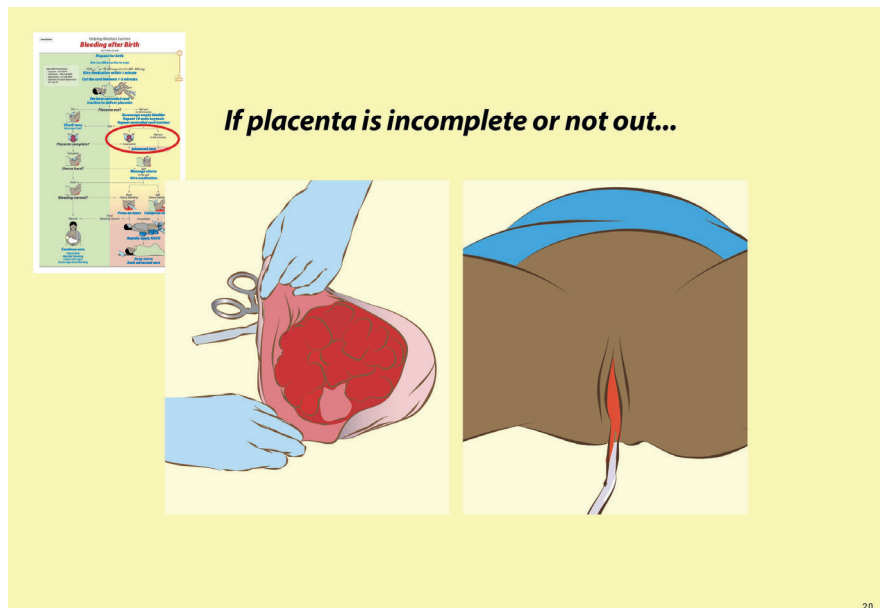


***If placenta is incomplete or not out...***





## Explain



A woman with retained placenta after 1 hour OR incomplete placenta at any time will need advanced care to remove the placenta or any pieces that remain in the uterus.

While you wait for the placenta, monitor the woman's pulse and blood pressure to watch for shock (pulse  $\geq 110$ , systolic BP  $< 90$ ).

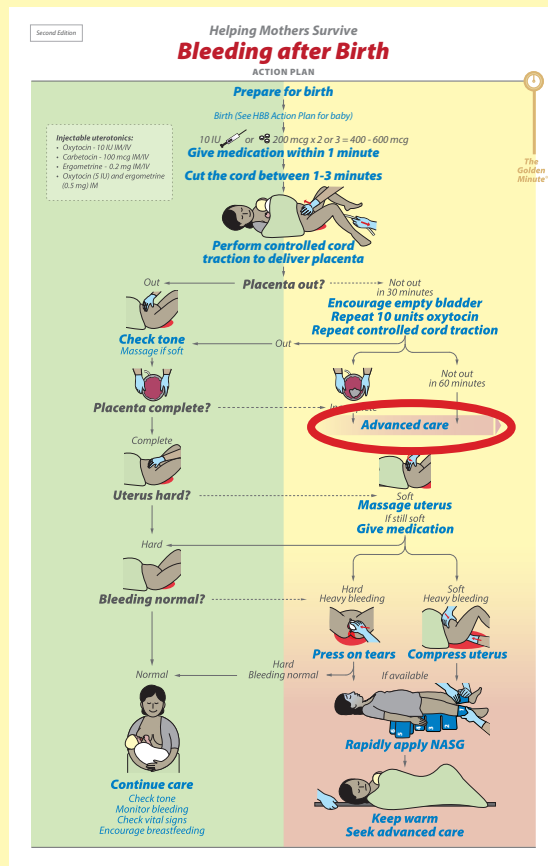
If the placenta is out, check for completeness.

Seek advanced care if:

- The placenta does not deliver in 1 hour, regardless of bleeding
- Bleeding is heavy at any time
- The placenta is out but is not complete

### \*Advanced Care Note\*

- If learners have additional training and authorization to provide more advanced care, they should act within their scope of practice. This may include manual removal of the placenta or retained pieces. For those participating in Day 2, this skill will be covered.
- If manual removal is done, the woman will require antibiotics to reduce the risk of infection.
- Manual removal should NEVER be attempted without proper training and authorization.



# ...Seek advanced care



## Explain



If a woman needs more help than you can give, knowing who can help and how to reach them quickly will save lives. Advanced care may be in your facility or you may need to transfer her to another facility.

Depending on the provider, advanced care providers may be able to manually remove a placenta, suture deep tears, or even do surgery. Contact information for advanced care providers and who to call for transport when needed should be clearly posted.

It is better to transport the woman while she is stable than to wait until it is an emergency.

When advanced care is needed:

- Immediately call for help. Send staff or family to get advanced care, if available at your facility. If advanced care is not immediately available at your facility, the woman and her baby should be transported together to a higher level of care.
- NEVER leave the woman alone.
- Start an IV infusion with normal saline or Ringers lactate.

In case of flooding, broken vehicles, or lack of fuel, your facility should have a backup plan for transportation.

Notify the referral facility that the woman is coming.

Send a provider with the woman to check vital signs, monitor bleeding, and provide care.

## Knowledge check

**Why should advanced care be called?**

*To help you manage problems that are outside your scope of practice*

**When should providers begin thinking about getting advanced help?**

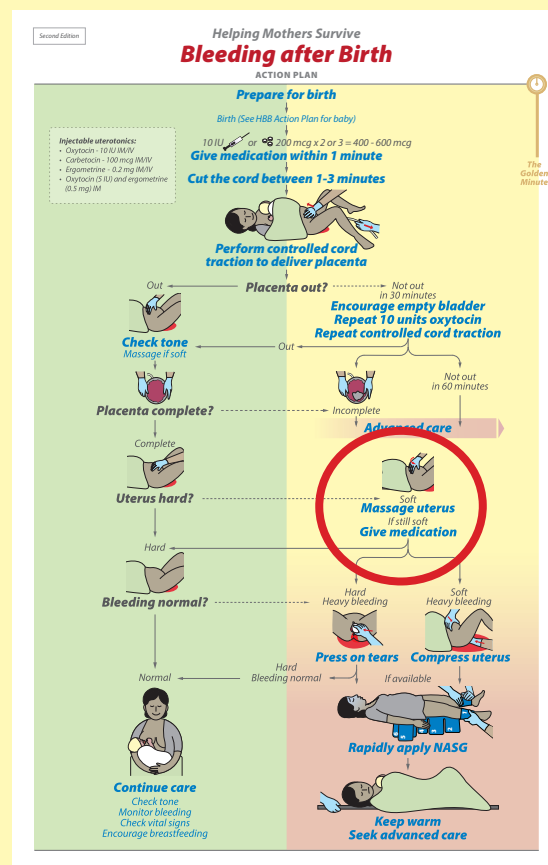
*As soon as any problem arises that they cannot manage on their own*

**Who should go with the woman and why?**

*The baby and a provider if possible because the baby's survival depends on the mother and a provider can check vital signs, help if the placenta delivers and watch for bleeding.*

**What should the woman be checked for during transport?**

*Check for bleeding and if the placenta has delivered. Check tone if placenta is out but incomplete.*



If placenta is out and uterus is soft

# Massage uterus

If still soft

# Repeat medication





## Explain



### A soft uterus is the #1 cause of PPH.

**If the uterus is soft, massage until it contracts.** Massage can expel blood clots which will help the uterus contract. Watch the woman's bleeding while you massage to see if bleeding slows as the uterus contracts.

A full bladder can keep a uterus from contracting. Encourage an empty bladder after birth or catheterize if needed.

**If the uterus does not contract with massage, act fast!** Give a second dose of oxytocin or misoprostol:

- 10 units oxytocin IM or IV
- 800 mcg misoprostol under the tongue

**Do NOT** give another dose of carbetocin.

### If bleeding continues:

- Immediately call for help, start an IV infusion with normal saline or Ringers lactate, and seek advanced care.
- Regardless of the cause of PPH, if the woman is diagnosed with PPH within 3 hours of birth, give tranexamic acid (TXA) 1g in 10 mL intravenously over 10 minutes. **Do not give if birth was more than 3 hours ago!** TXA prevents clots from breaking down at the bleeding site. Do not give if the woman has a history of blood clots in her legs during pregnancy.
- Give a second dose of TXA if bleeding continues 30 minutes after the first dose OR if bleeding restarts within 24 hours.
- Continue to massage the uterus to help it contract and watch bleeding at the same time to know if treatment is working.
- Monitor for signs of shock (pulse = or >110, Systolic BP < 90).

## Knowledge check

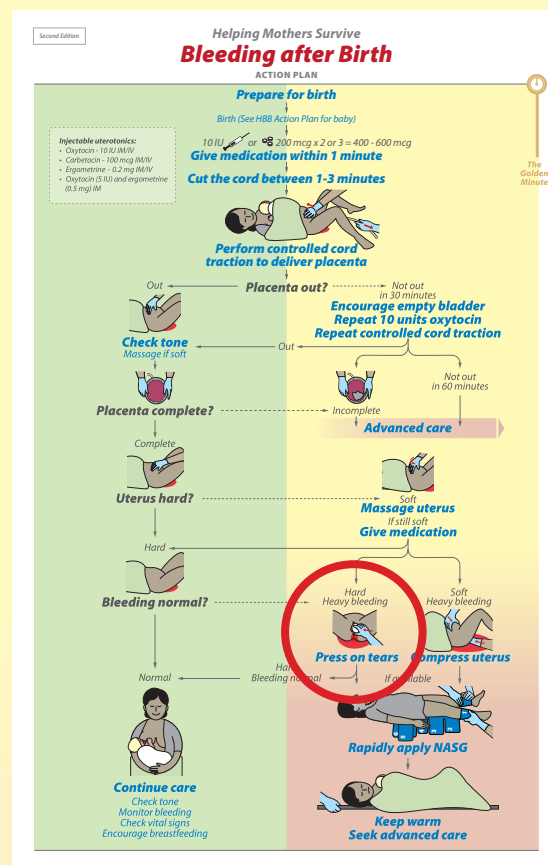
**What drug should you NEVER repeat?**  
*Carbetocin/HSC*

**Why is it important to keep checking the mother's uterus and bleeding?**  
*Her uterus may get soft at any time and she may begin to bleed heavily.*

**What are the correct doses of uterotonic?**  
*10 units oxytocin IM or IV OR  
800 mcg misoprostol under the tongue*

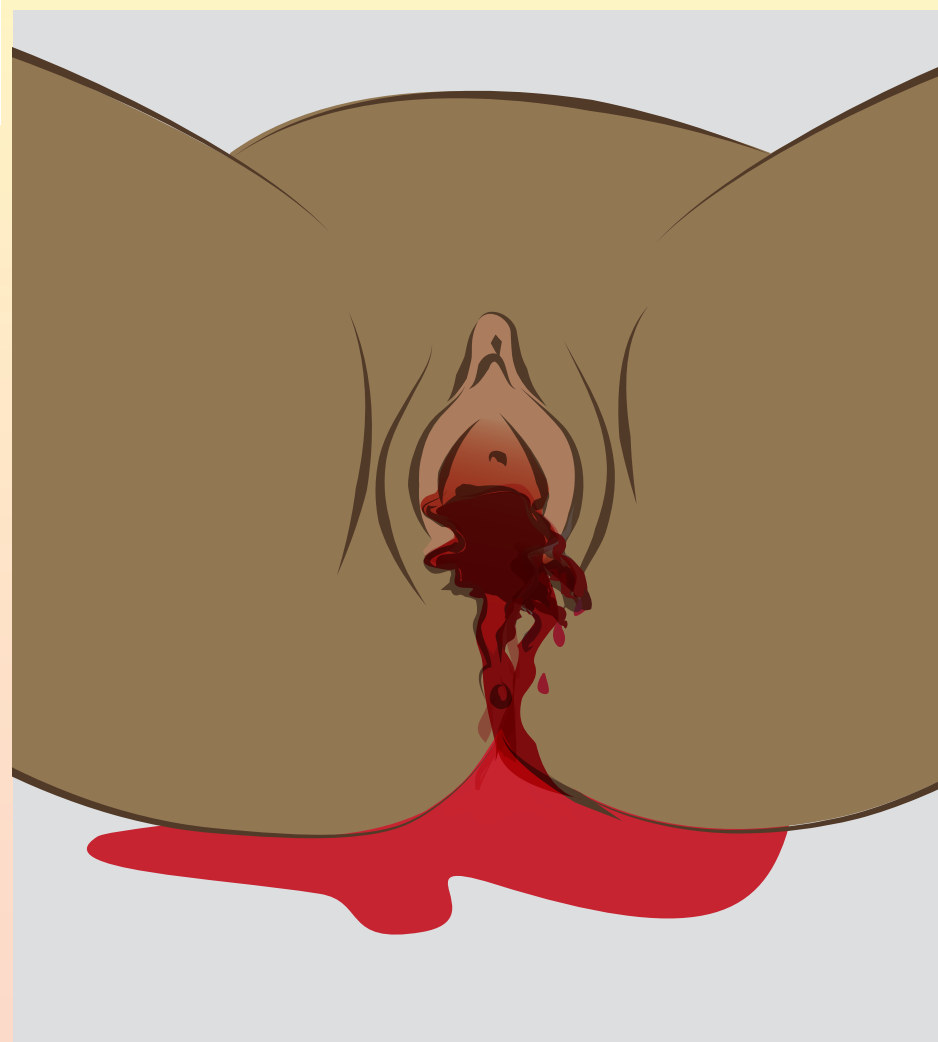
## Discuss

- Ask, "If you find a woman is bleeding from a uterus that will not contract, what medication do you use at your facility?"
- Do you have drugs other than oxytocin and misoprostol?"

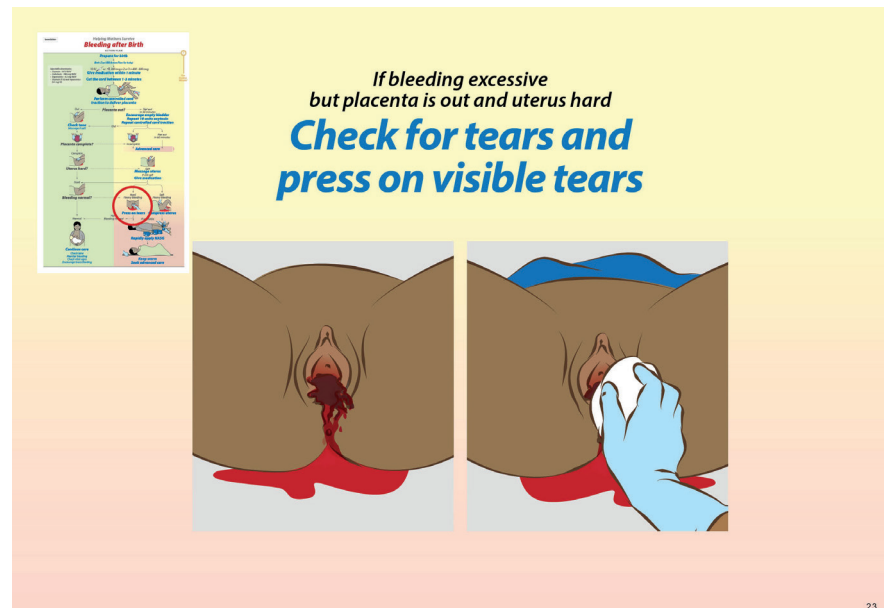


If bleeding excessive  
but placenta is out and uterus hard

# Check for tears and press on visible tears



## Explain



Lacerations or tears are another cause of bleeding after birth. If the uterus is firm and the woman is still bleeding, tears are likely even if they cannot be seen. Seek advanced care immediately.

A woman who has had female genital cutting or an episiotomy is at increased risk for bleeding from tears.

### To manage tears:

- Gently wipe away blood so you can see tears.
- Apply firm, steady pressure to tears with a clean or sterile cloth to slow bleeding.

- Continue to apply pressure to tears until the bleeding stops or advanced care has arrived.
- If you are not able to repair tears, do not remove soaked cloths, but add additional cloths on top and seek advanced care.
- If you are able to repair tears, now is the time to do so.

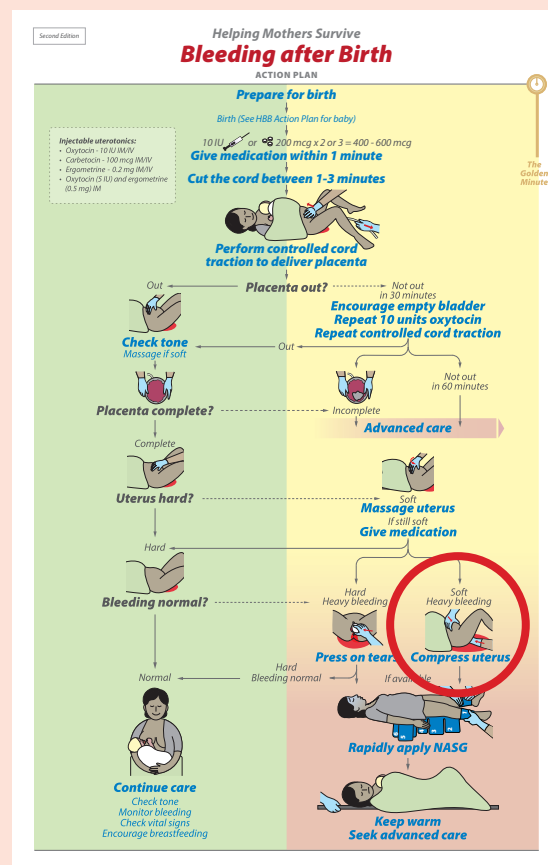
If the uterus is firm and the woman continues to bleed, but you can't see any tears, seek advanced care.

If PPH is diagnosed, give treatment dose of uterotonic: 10 units oxytocin IM or IV OR 800 mcg misoprostol sublingual. If it is within 3 hours of birth, give 1g TXA in 10 mL over 10 minutes while waiting for advanced care.

### \*Advanced Care Note\*

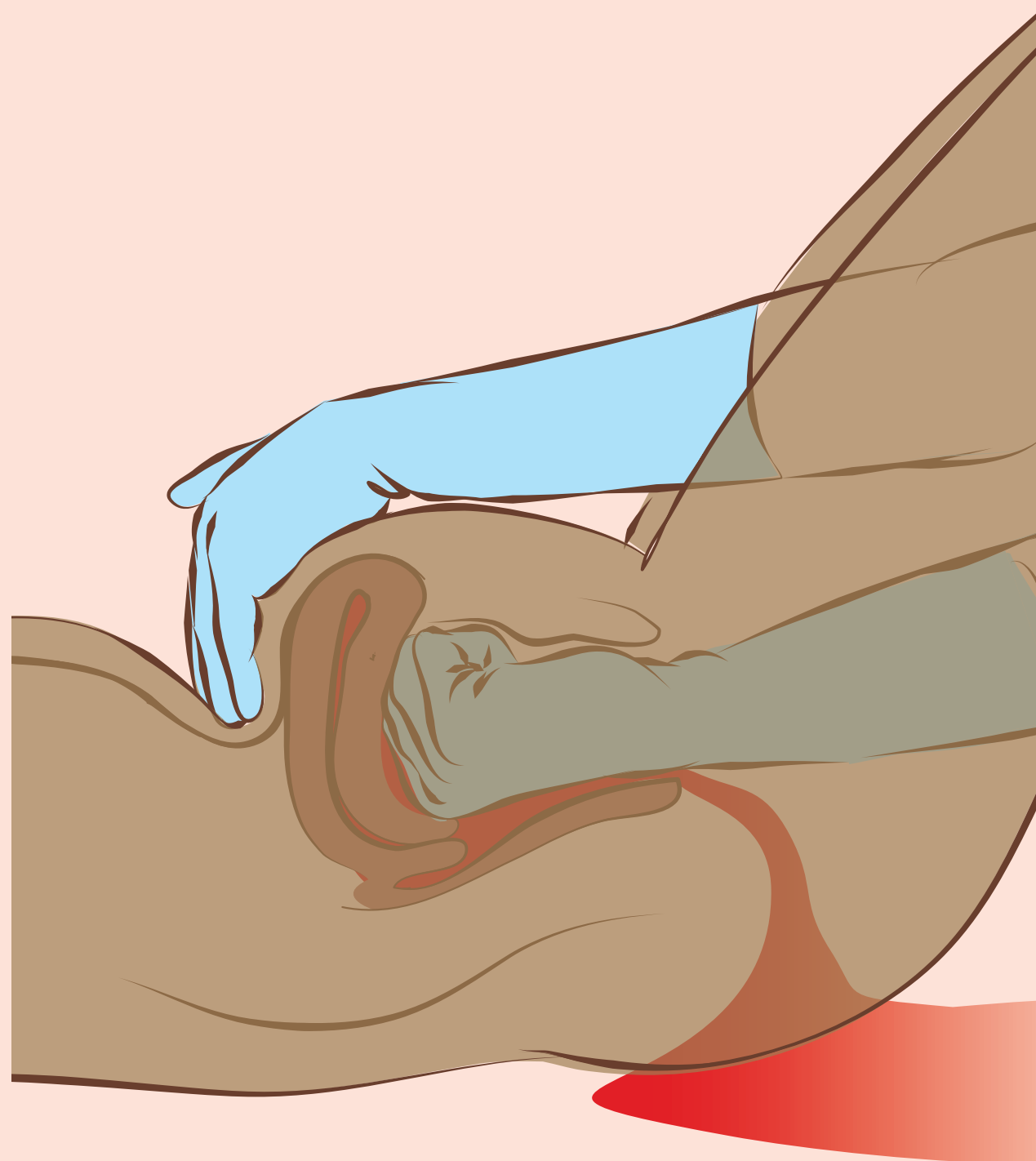
If learners have additional training and authorization to provide more advanced care, they should act within their scope of practice. This may include repairing lacerations.

For those participating in Day 2, repairing cervical lacerations will be covered.



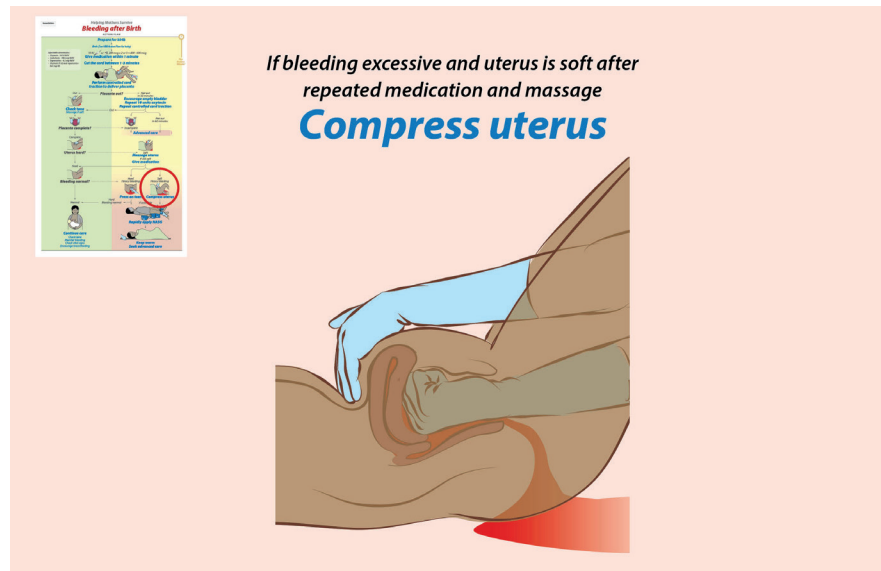
If bleeding excessive and uterus is soft after repeated medication and massage

# Compress uterus





## Explain




If the uterus does not contract after emptying a full bladder, repeating medication and massage, squeezing the uterus between your hands - or bimanual uterine compression, may help stop the bleeding. Act fast! You do not need to wait until the woman is in shock to compress the uterus.

Make sure the woman has an IV, has received a treatment dose of uterotonic, and has received 1g TXA in 10 mL over 10 minutes.. Remember, the first dose of TXA should only be given within the first three hours of birth.

Compression may buy time to allow the medication to work and advanced help to arrive.

Putting anything into the vagina after birth can cause an infection. Care must be taken to clean hands thoroughly and wear sterile gloves.

## Demonstrate & Practice

Show video  [Uterine compression](#) (2:40 min). If you cannot show video:

### Explain and demonstrate bimanual compression of the uterus

- Shout for help!
- This is a painful but life-saving measure: it is important to tell the woman what you are about to do and why and that it will hurt.
- Quickly but thoroughly wash hands and put on sterile, long gloves or improvise to use regular gloves to make long gloves.
- Insert a flattened hand in the upper vagina and then make a fist. Put the other hand on the abdomen at the fundus.
- Squeeze the uterus between your two hands until the bleeding stops and the uterus is firm OR someone has a uterine balloon tamponade (UBT) prepared and ready to insert. If no UBT is available, wait at least 5 minutes before removing your hand to see if bleeding has slowed.

Women who need bimanual compression of the uterus have already lost a lot of blood and are more likely to bleed again. They need to be watched even more closely and for longer than mothers who have not bled

this much. If your facility cannot supply blood transfusion, the woman must be transferred.

Have participants practice bimanual uterine compression. As facilitator, wear the simulator with the baby and placenta delivered. Tighten the cervix ribbon. Have learners turn to page 45 of the PG as they practice. Offer supportive feedback.

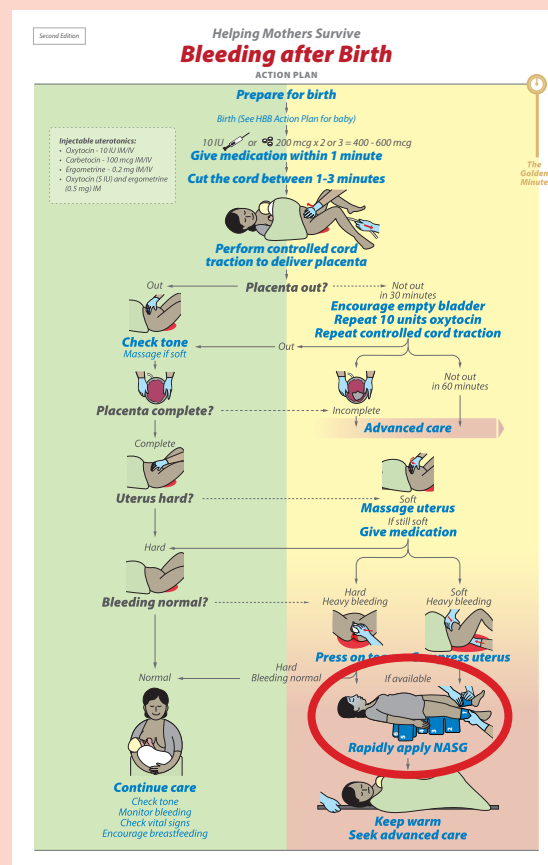
## Knowledge check

**Why must a mother who has received bimanual uterine compression be at an advanced care facility?**  
*Because she has lost too much blood, may bleed again and she may need a blood transfusion*

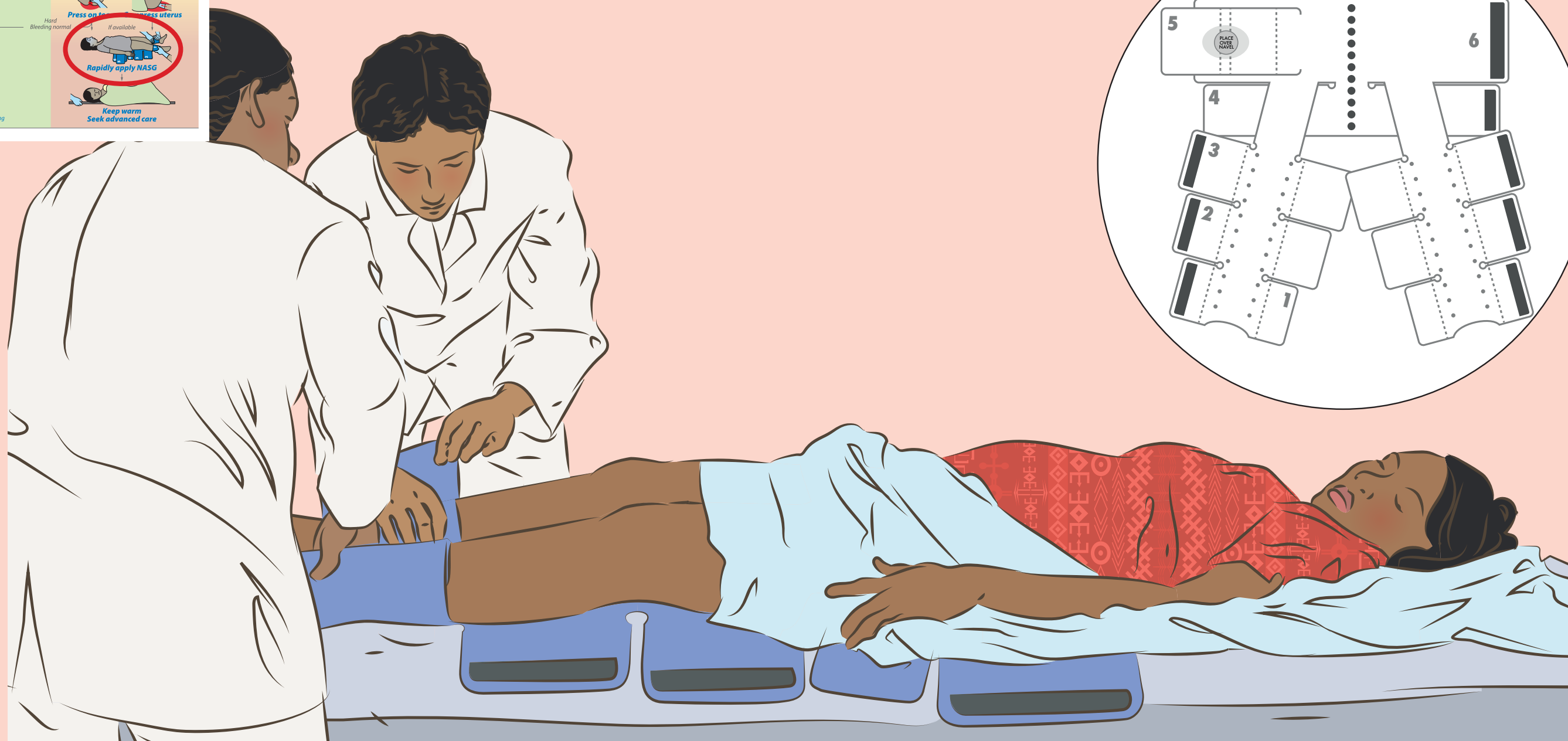
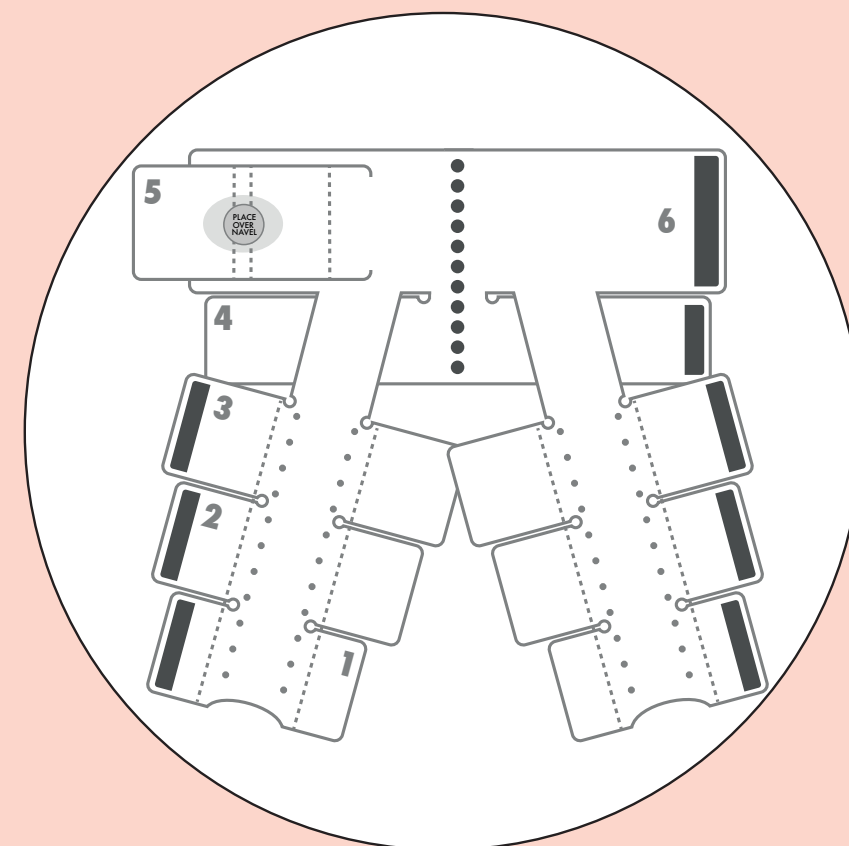
**What steps should be done to stop bleeding before uterine compression?**  
*Call for help, massage the uterus, be sure the bladder is empty, and repeat medication.*

### \*Advanced Care Note\*

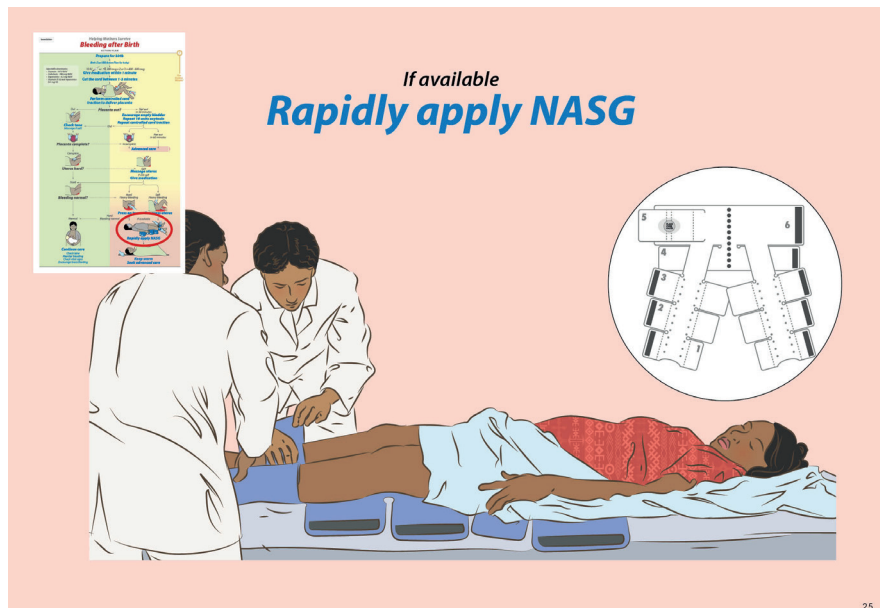
If learners have additional training and authorization, they should act within their scope of practice. This may include inserting an intrauterine balloon tamponade (UBT). For those participating in Day 2, this skill will be covered.



If available  
**Rapidly apply NASG**



## Facilitation Note



Before training day, determine if the non-pneumatic anti-shock garment (NASG) is available at this facility. If it is, check the protocol for timing of use. If NASG is not available, skip this page.

### Explain

The NASG is a wrap that applies pressure to the lower body and abdomen. It forces blood to the heart, lungs, and brain to stabilize a woman in shock.


After the NASG is on, women can receive treatments, be transported, and survive delays in receiving blood and surgery.

NASG does not treat PPH, but adds time to seek treatment.

**The NASG should stay on during all procedures and surgery until the source of bleeding is found and corrected, no matter how long this takes.**

**Always wear gloves when applying, removing, and cleaning the NASG!**

### Demonstrate

Show video  [Using an anti-shock garment](#) (9:15 min). If you cannot show videos, invite a learner to have the NASG applied and demonstrate using the steps below.

#### To apply:

- As you explain what you are doing and why, place the woman on open NASG - top of NASG is at lowest rib and pressure ball at the level of umbilicus.
- Close each segment pair beginning at ankles and ending with 6th segment using 1 OR 2 people. Use as much strength as possible, while ensuring the woman can breathe normally.
- To ensure proper fit, place 1-2 fingers under the top of each closed segment. Pull up on fabric and let go. If no snapping sound, tighten segment.

- Monitor for shortness of breath and decreased urine output. These are signs that the NASG may be too tight. If either occur, loosen 5th & 6th segments.

#### To remove:

**Confirm pulse and BP immediately before beginning removal of NASG.**

Remove if for at least 2 hours all the following are true:

- Pulse is 100 bpm or less.
- Systolic BP (sBP) is 100 or greater.
- Bleeding reduced to normal postpartum rate.
- Keep IV running.
- Begin at ankle segments. Open both segments, wait 15 minutes, retake BP and pulse.
- If pulse does not increase more than 20 beats per minute and sBP does not decrease more than 20 mmHg, continue opening each segment pair, waiting 15 minutes and checking vitals before opening next segment.
- If at any time BP or pulse change more than outlined above, rapidly reclose the NASG starting with the last segment opened and continue from top to bottom. Look for source of bleeding.

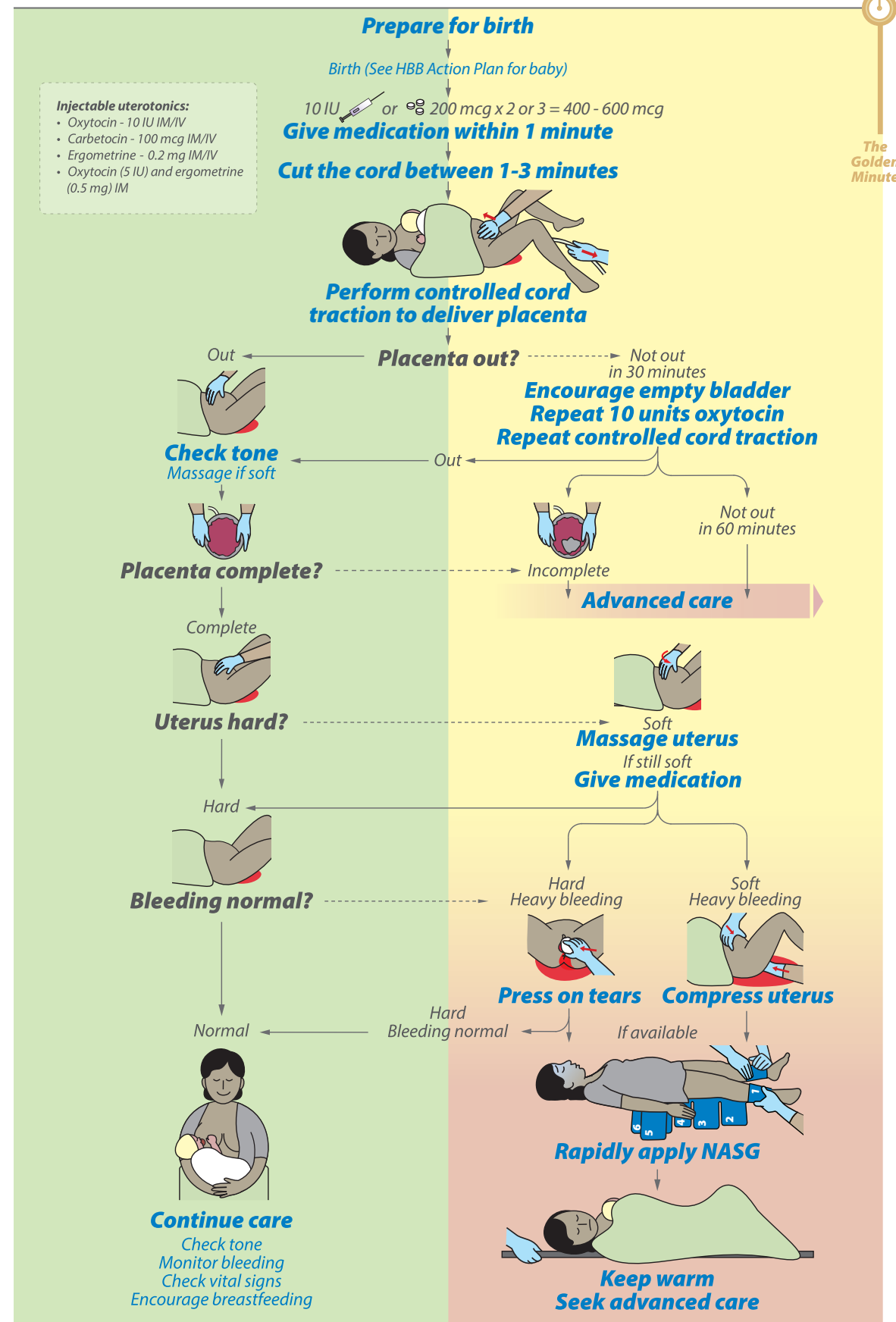
# LEARNING ACTIVITIES

NASG

Second Edition

## Helping Mothers Survive **Bleeding after Birth**

### ACTION PLAN





# LEARNING ACTIVITIES

## NASG

### Facilitation note

After demonstration, if NASG will be used at this facility, have all learners practice application and removal using the checklist on this page. When done discuss with learners:

1. How to incorporate NASG into PPH management protocols.
2. Identify facility focal person responsible for training staff on cleaning and storage, NASG transport and maintenance to/from referral/referring facilities, and orienting new providers to NASG protocol.

### Checklist

#### To apply:

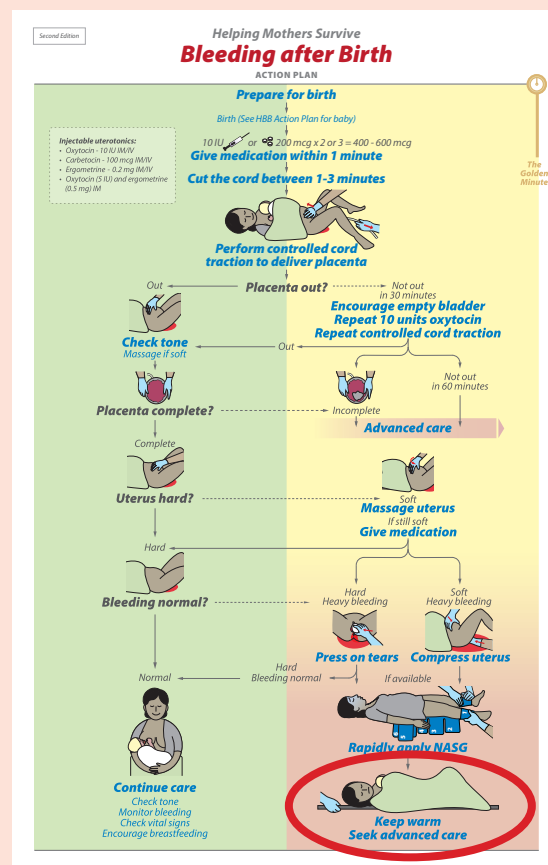
- Explain what you are doing and why
- Place woman on open NASG
- Close each segment pair beginning at ankles and ending with 6th segment
- Check proper fit (with snapping sound) for each segment
- Monitor for shortness of breath and decreased urine output.

#### To remove:

- Remove NASG if for at least 2 hrs: pulse is 100 bpm or less, sBP is 100 or greater, bleeding at expected rate.
- Open ankle segments
- Wait 15 mins, retake BP and pulse.
- If pulse does not increase more than 20 beats per minute and sBP does not decrease more than 20 mmHg, continue opening each segment pair, waiting 15 minutes and checking vitals before opening next segment.

### Usage tips for NASG

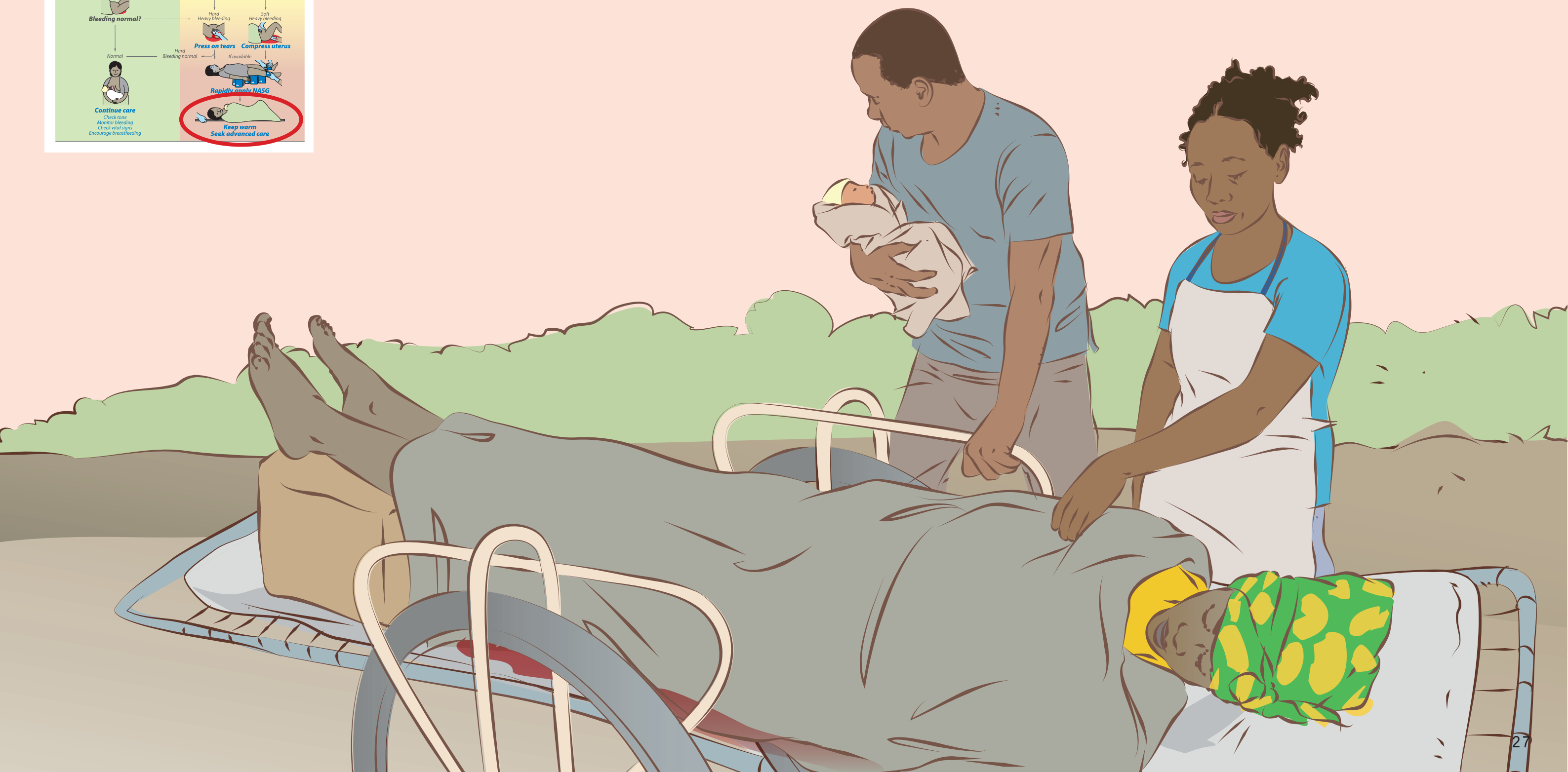
- All segments should be applied using as much strength as possible. But don't apply abdominal segments so tightly that woman cannot breathe.
- Two people can more rapidly apply the NASG, but only one person should apply segments 4, 5, & 6 to avoid making it too tight.
- During application, try to leave the knees exposed so they can bend.
- If a woman is short and the NASG extends beyond her feet, fold segment "1" into segment "2" and proceed as above beginning with segment "2".
- If woman is not conscious, roll her on her side and place a folded NASG so the top is level with her lowest rib and the dotted line is along her spine. Roll her over on her back and then to the other side so you can pull the garment flat. Roll her onto her back and proceed to apply the NASG.
- Because the NASG stretches, you can reach under the segment to check uterine tone and provide massage.
- The NASG can be left in place while any vaginal procedure is done. If a woman is short, segment 4 can be removed until procedure is complete.
- NASG can be left in place during surgery but segments 4, 5, & 6 should be removed just before skin incision. These segments should be replaced immediately after surgery.
- For toileting, a woman can use a bedpan after segment 4 is slid up along her back and out of the way. When she is finished, slide segment 4 back in place.



If emergency transport is needed

# Keep warm

# Seek advanced care



## Explain



**Act fast!** If the woman continues to bleed, she may go into shock and die. If you are not in an advanced care facility with access to blood and surgery, emergency transport is necessary.

If bimanual compression was needed to slow bleeding, advanced care is needed even if bleeding has slowed or stopped!

Make sure the woman has an IV, has received a treatment dose of uterotonic, and has received 1g TXA in 10 mL over 10 minutes.. Remember, the first dose of TXA should only be given within the first three hours of birth.

Always keep the woman and her baby together and keep them warm during transport.

A delay in getting care is one of the most common reasons women die from PPH.

Make contact with the hospital in advance to reduce waiting when the woman arrives. During transport, monitor for any changes in vital signs or bleeding. Continue to massage uterus as needed.

### **\*Advanced Care Note\***

If learners have additional training and authorization to provide more advanced care, they should consider doing so prior or during transport. This may include:

- IV insertion
- Foley catheterization
- Aortic compression
- Balloon tamponade

## Knowledge check

**What should be included in a transport plan?**

*Call ahead if possible. Have a provider go with the woman if possible. Keep the woman and her baby together.*

**Prior to transportation, what steps should have been tried to stop bleeding?**

*Repeat medication, massage, and bimanual compression.*

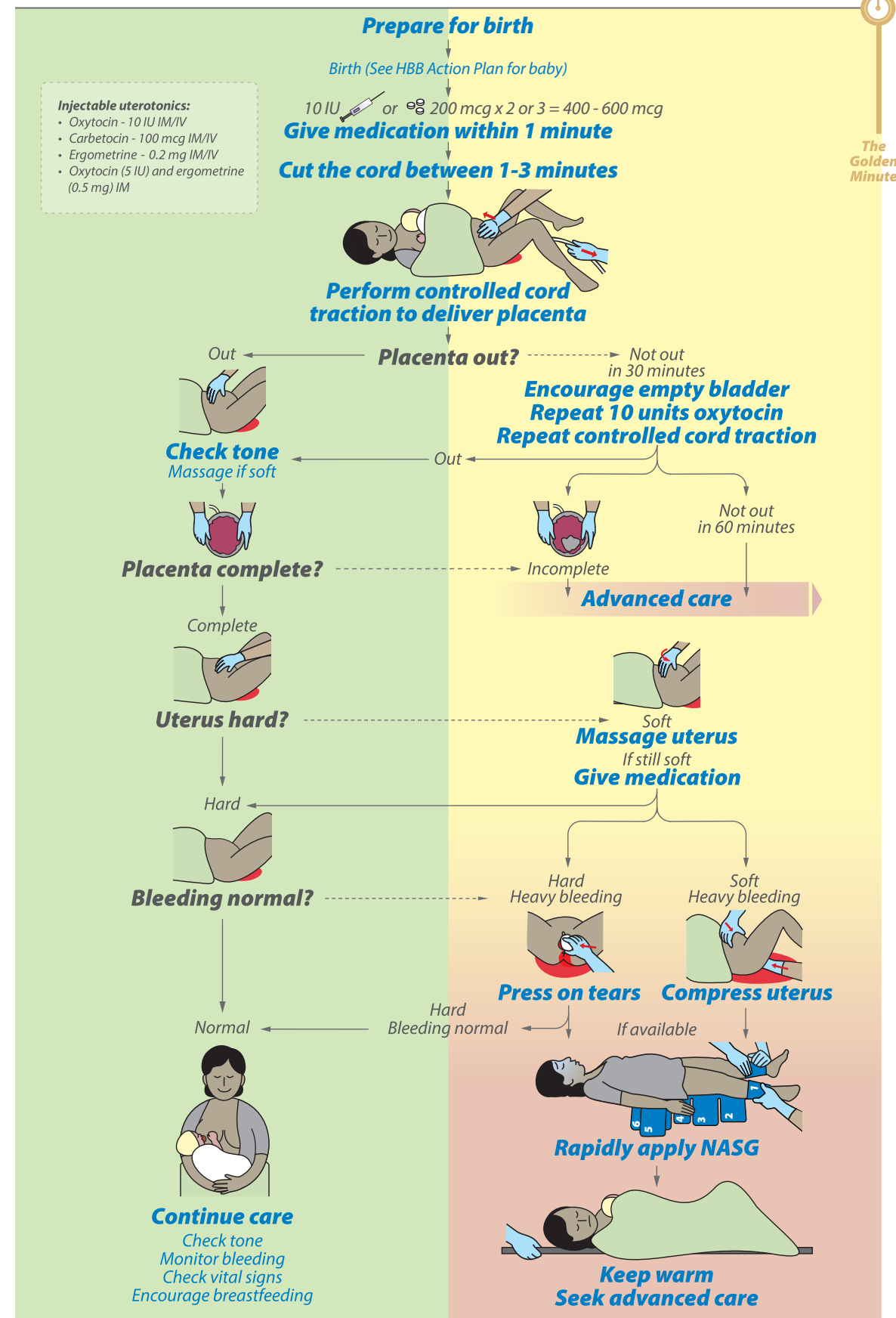
# LEARNING ACTIVITIES

## PPH integrated Role Play

Second Edition

### Helping Mothers Survive **Bleeding after Birth**

#### ACTION PLAN





# LEARNING ACTIVITIES

## PPH integrated Role Play

### Facilitation note

**Prepare these supplies in advance for demonstration, practice and simulation:**

- Action Plan
- Simulator
- Soap or alcohol hand rub, gloves, long gloves, apron, eye protection for provider
- IV infusion equipment
- Sterile surgical gloves (or make long gloves with sterile exam gloves)
- Urinary catheter and bag

### Integrated role play

Tell learners that they will now be experiencing a simulation. Participants should act as if they are providing care for a real woman. Observers should be ready to provide feedback after the simulation.

As facilitator, you will be Mrs. S. Wear the simulator with the baby delivered, and placenta attached. Keep the blood tank closed. Assign 2 learners to act as providers and any remaining learners to observe and give feedback after the role play. Allow 15 minutes for this activity.

**Read the following scenario to the group:**

*"I am Mrs. S, and I just delivered my second baby here in your facility with no problems. I received 10 IU of oxytocin within 1 minute of delivery. However, controlled cord traction failed to deliver my placenta. It has now 30 minutes since the birth of my baby. What will you do?"*

Providers should encourage you to empty your bladder and repeat a second dose of 10 IU of oxytocin.

*After repeat dose of oxytocin, tell providers that you are feeling a contraction. Allow the placenta to separate and deliver.*

Provider should perform CCT and deliver placenta. She should then check uterine tone.

*Open blood tank to start moderate flow of blood. Keep uterus soft.*

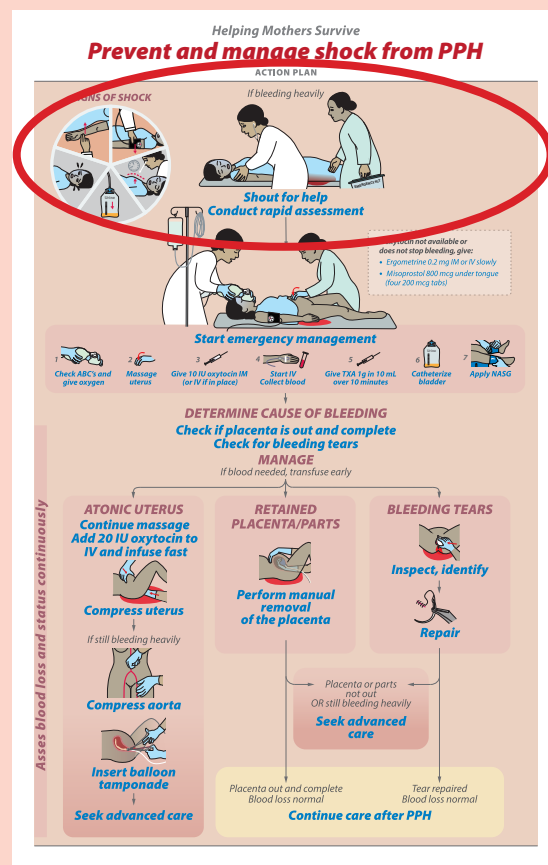
Provider should massage uterus and continue to assess bleeding. They should recognize this as PPH and give TXA.

*Slow and stop bleeding with continued uterine massage.*

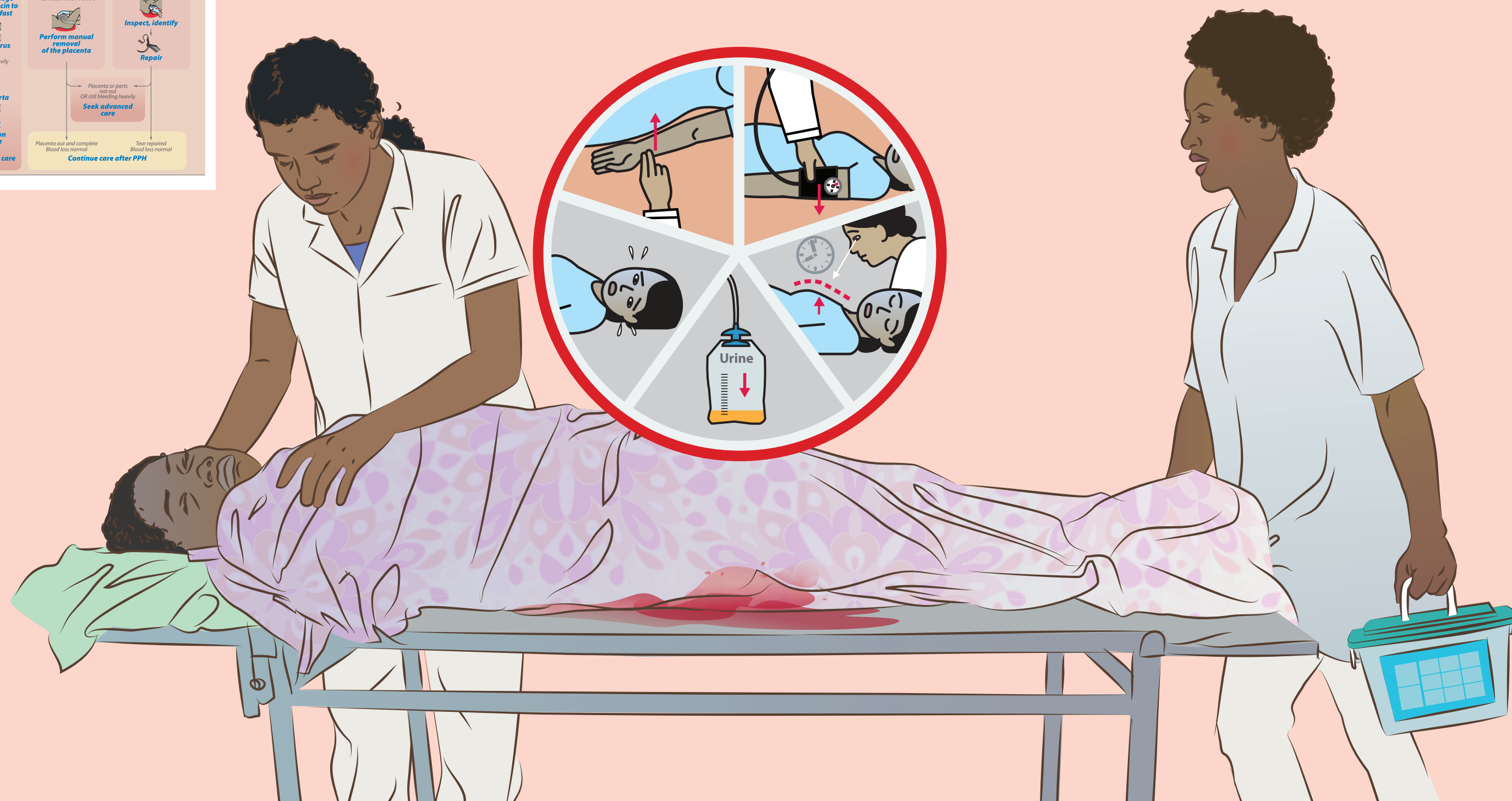
**Debrief:**

Upon completion of the role-play, begin structured debrief. Be sure to include feedback about communication and RMC. Include the following points:

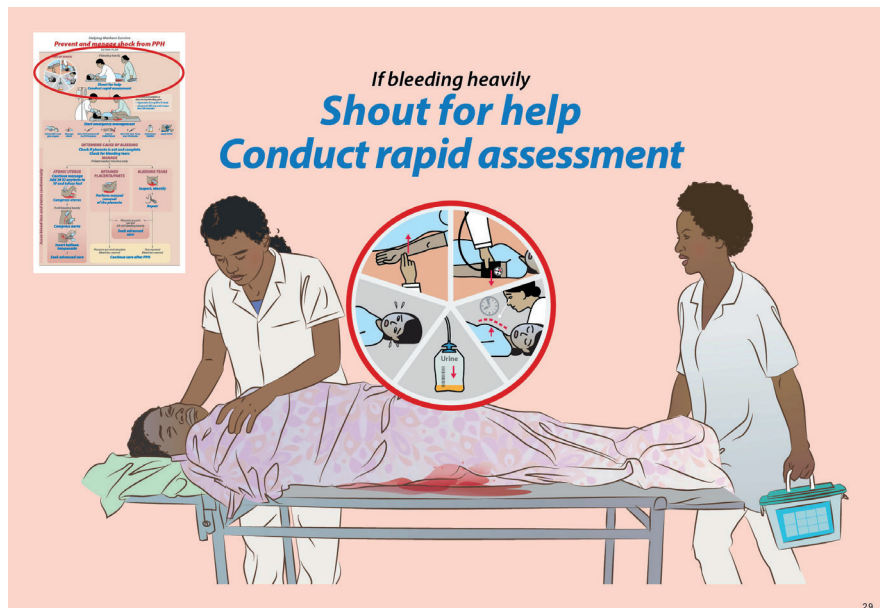
- What went well?
- Is there anything you would do differently next time?
- Provide constructive feedback if needed.



If bleeding heavily  
**Shout for help**  
**Conduct rapid assessment**



## Explain



Shock occurs when there is not enough blood flow to vital organs. This can happen from PPH.

Any time a woman has heavy bleeding, she must be closely watched for signs of shock. If you suspect shock, act quickly! Shout for help and do a rapid assessment!

**NOTE:** A provider may need to care for a woman bleeding heavily:

- Immediately after you've assisted with her birth
- After some time has gone by after birth,
- After a woman is brought to you after giving birth at home or in another facility.

Regardless of how she came to you, do a rapid assessment and begin treatment if either of these is present:

- **Fast or weak pulse of 110 beats per minute or more**
- OR**
- **Low blood pressure with systolic BP less than 90 mmHg**

Say, *"Let's take a 'quick pulse'. Can everyone look at the second hand on your watch or clock? Count your heart beat at your neck or wrist for 10 seconds. Take this number and multiply by 10 for the pulse rate."*

**A woman with shock may also have:**

- Rapid breathing - over 30 breaths per minute or more
- Pale skin, especially around the inner eyelids, mouth, or palms
- Sweating, or cold and clammy skin
- Changes in mental state: anxiety, confusion, or unconsciousness
- Scanty urine output - less than 30 ml per hour
- Communicate with the woman. Tell her what you are doing and why.
- Continuously assess for shock - check and record BP, pulse, and blood loss at least every 15 minutes until she is stable.

## Facilitation note

Open the Flipbook to this page at the start of Day 2. All supplies needed for the role play should be out before training (list on the next page, 30b).

As soon as the contents of this page are reviewed, co-facilitator(s) or informed learners should interrupt the session with this scenario:

Say, *"A woman and her companion come into the room asking for help. The woman is disoriented and dizzy. When she reaches the front of the room, she faints. Her companion explains that she delivered several hours ago at home and has been bleeding heavily."*

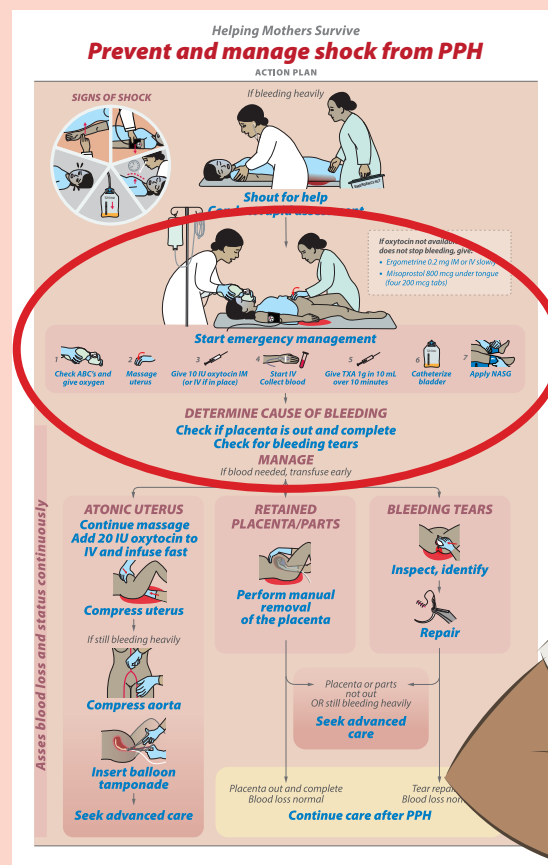
Treat this as if it is a true emergency and urgently ask learners to help. Allow volunteers to try and revive the woman. Encourage learners to use what they learned during Day 1. Based on management, you can decide whether the woman survives or dies of shock.

## Discuss

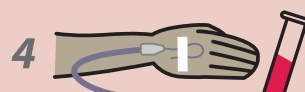
After the simulation, ask learners if they have ever had this experience.

Say, *"Today we will focus on advanced management skills for PPH."*





# Start emergency management





## Explain



Shock is a life-threatening emergency **Act fast!** Teamwork is essential to manage shock and save lives.

**When shock is suspected, act quickly as a team. Team members can perform several tasks at once as directed by the team leader.**

### Start emergency management:

1. Ensure the airway is open and woman is breathing. If not breathing, start resuscitation. If breathing, start oxygen at 6-8L/minute.
2. Check uterine tone. Massage if soft. Check BP, pulse and respirations.
3. Give oxytocin 10 IU IM. If an IV is in place, give by IV push injection.

4. If IV infusion is possible, start IV with 16 or 18 gauge needle. Collect blood for hemoglobin, hematocrit blood type, and bedside clotting test.
5. Give 1g TXA in 10 mL diluent per IV over 10 minutes if within 3 hours of birth. **Do not give if birth was more than 3 hours ago!**
6. Rapidly infuse IV fluids, either Ringers lactate or normal saline.
7. Empty bladder to help uterus contract. Catheterize if necessary.
8. Rapidly apply NASG if available. (Note that NASG may be applied earlier, depending on previous care and management options at your facility).

### Determine cause of bleeding

- Recheck for uterine tone
- Check if placenta is out and complete
- Check for bleeding tears

### Manage according to cause of bleeding

#### If blood needed, transfuse early

- If a woman is severely anemic with hemoglobin below 7 g/dl/ 4.3 mmol/l or

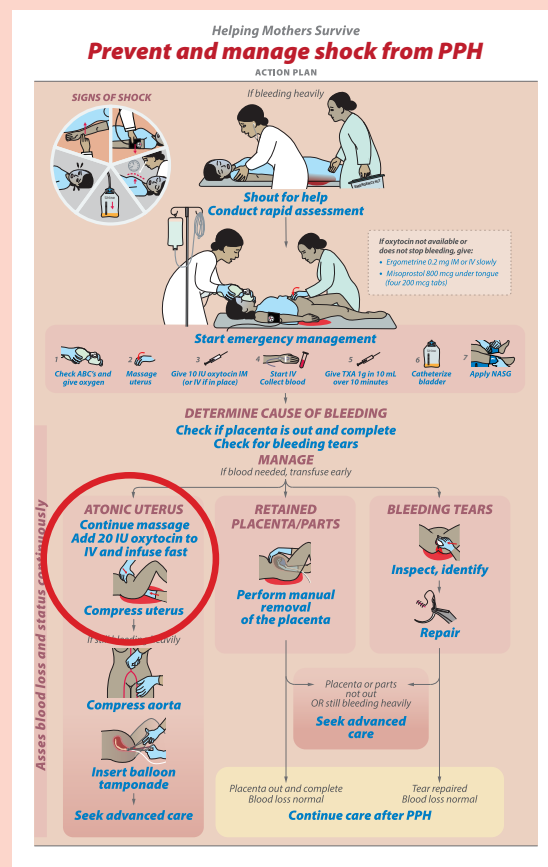
hematocrit below 20%, arrange a transfusion. Transfusion should take place as soon as the need for blood is identified, and resources are available.

## Demonstrate & Practice

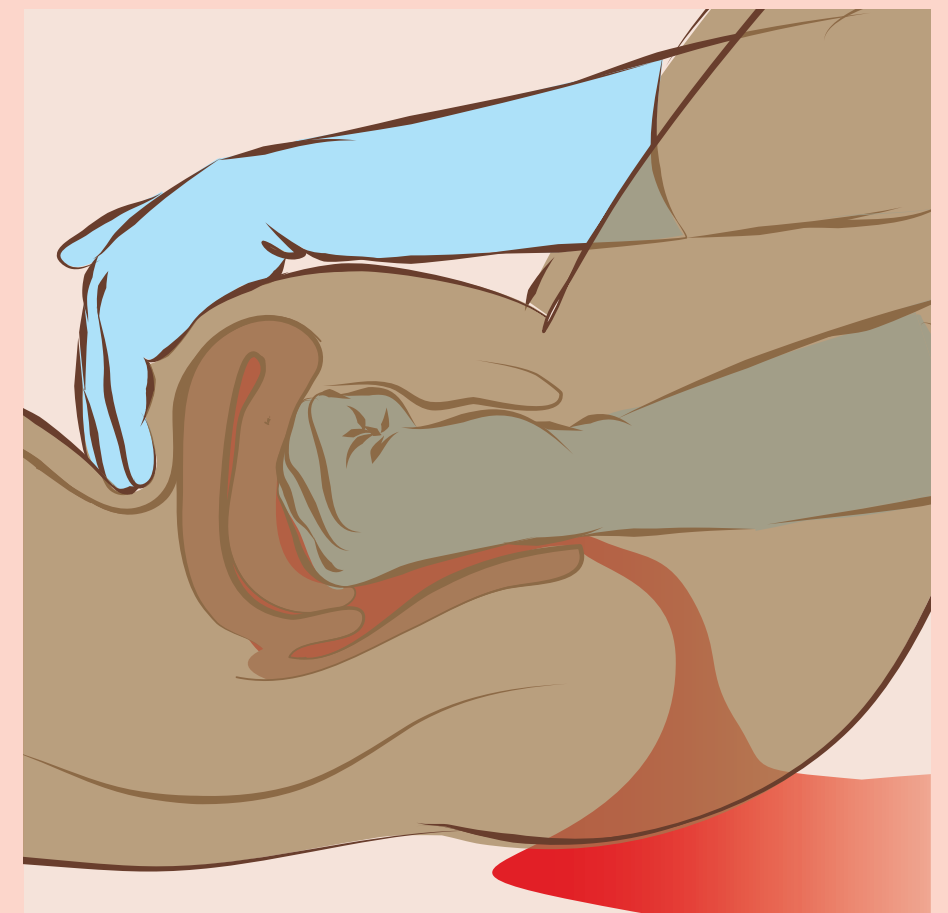
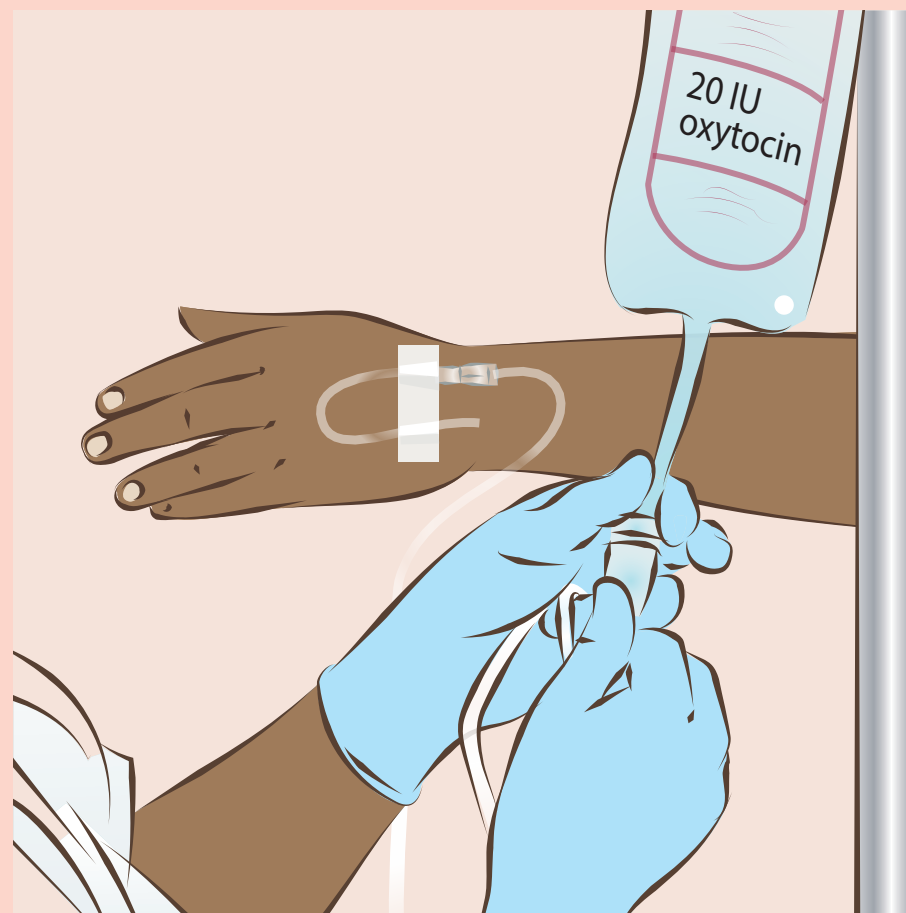
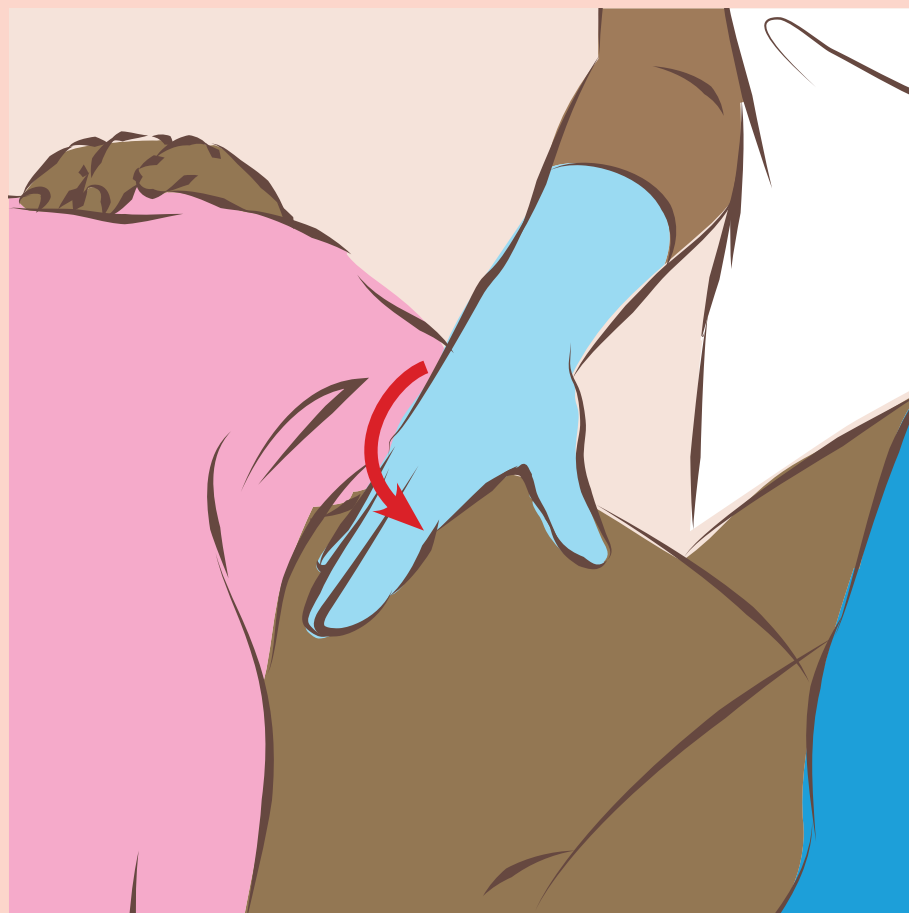
Act as team leader and demonstrate emergency management on a volunteer using the 8 steps. Speak each action aloud while you are performing it. Then request three volunteers to repeat the simulation.

These supplies should be out for demonstration and practice:

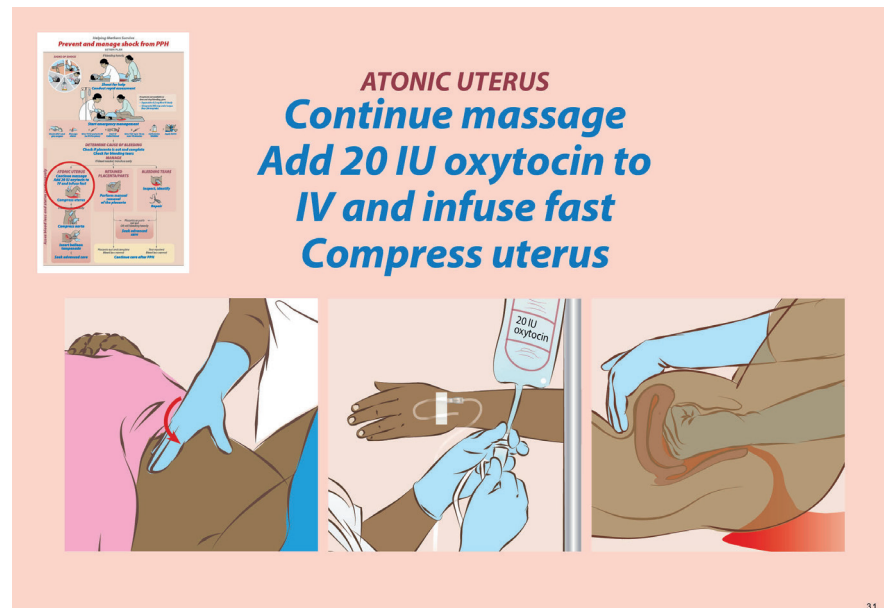
- Personal protective equipment
- BP cuff
- Stethoscope
- NASG
- IV infusion equipment
- Oxygen cylinder, mask, and tubing
- Syringes and vials
- Sims vaginal retractor
- Sponge forceps
- HLD or sterile surgical gloves
- Urinary catheter and bag
- Blanket



**ATONIC UTERUS**  
**Continue massage**  
**Add 20 IU oxytocin to IV and infuse fast**  
**Compress uterus**



## Explain



A uterus that does not contract causes the majority of PPH. Check uterine tone quickly to see if this is the cause so you can begin treatment.

Use massage and medication to make the uterus contract and stop bleeding.

TXA should also be given quickly and within 3 hours of birth **in all cases of PPH, if PPH regardless of cause.**

### Act fast!

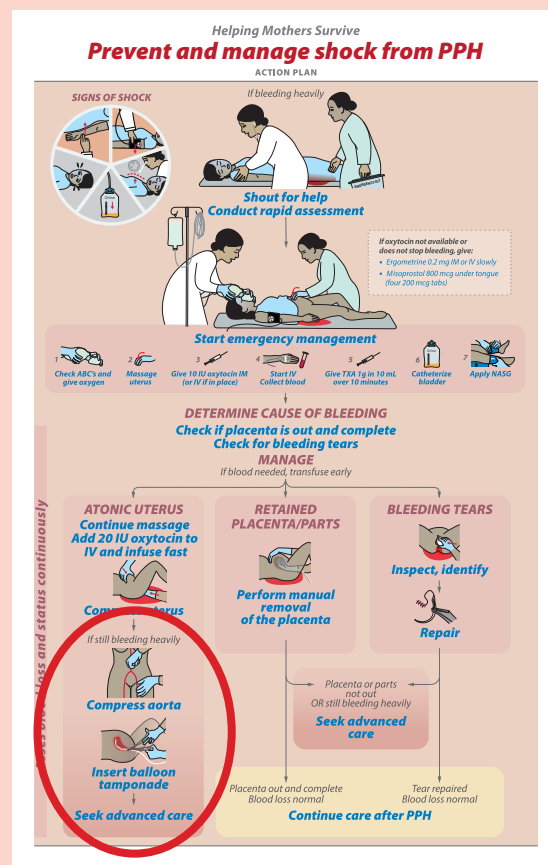
Do the following regardless of AMTSL:

- Confirm you have given through emergency management 10 units oxytocin IM or slow IV push.
- Put 20 IU oxytocin in 1 L normal saline or Ringer's lactate and infuse as fast as possible in the IV you just started.
- Continue IV at 20 UI in 1L at 40 drops minute in second bag. Do not give more than 3 L of IV fluid with oxytocin.
- Give 1g TXA in 10 mL diluent per IV over 10 minutes if within 3 hours of birth. **Do not give if birth was more than 3 hours ago!**
- Give a second dose of TXA if bleeding continues 30 minutes after the first dose OR if bleeding restarts within 24 hours.
- If IV oxytocin is not immediately available, or fails to stop bleeding, give:
  - 0.2 mg ergometrine IM or IV slowly.  
**Do not give if BP is high, placenta is retained or woman has heart disease!**
  - OR
  - 800 mcg (four 200 mcg tabs) of misoprostol under the tongue
- Continue checking uterine tone and bleeding. Massage the uterus as needed.

**If the woman is still bleeding heavily, perform bimanual compression. This can be performed by one provider while another is providing other PPH care and/or preparing referral. If these interventions do not stop bleeding, surgery may be required.**

## Discuss

- Ask, *Can you always start IV infusions at the facility? If not, what to do if you do?*
- Encourage the following:  
After giving 10 IU oxytocin IM to treat PPH, if bleeding does not respond, you can use 0.2 mg ergometrine IM or 800 mcg misoprostol under the tongue. If you don't have these, repeat 10 IU oxytocin IM 20 minutes after initial IM treatment dose. If heavy bleeding persists, do not wait! Perform bimanual compression, use the NASG if available, and arrange for transport.
- Ask, *Does your facility stock TXA?*  
If so, who is authorized to use it? Can anyone share experiences with TXA?

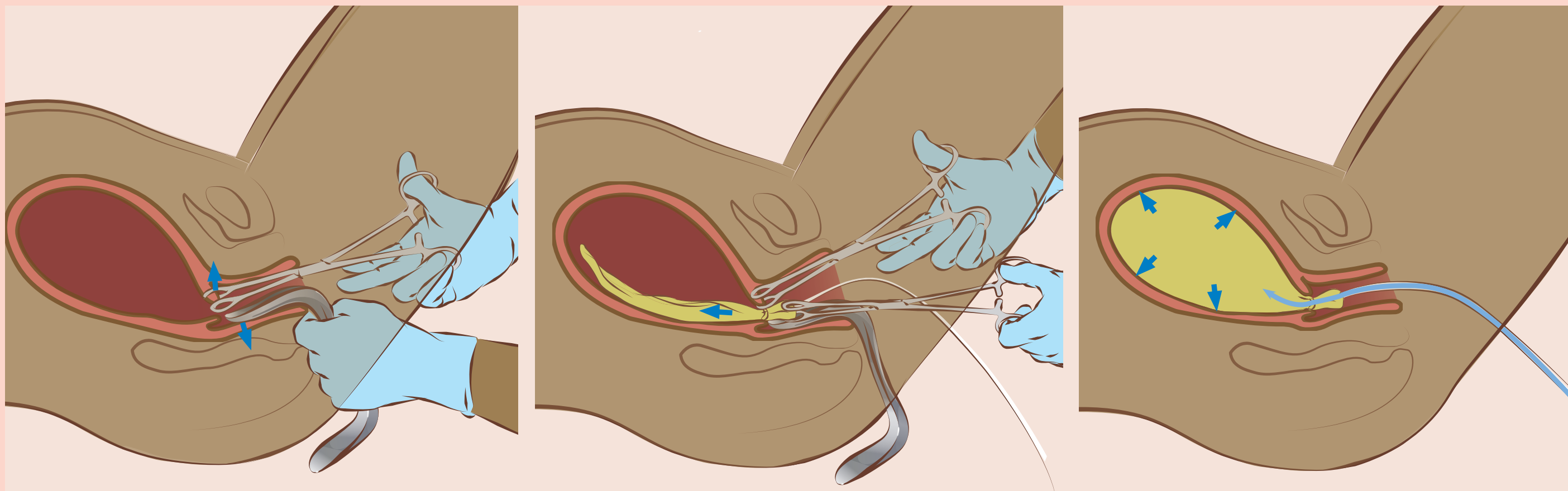


*If still bleeding heavily*

# Compress aorta

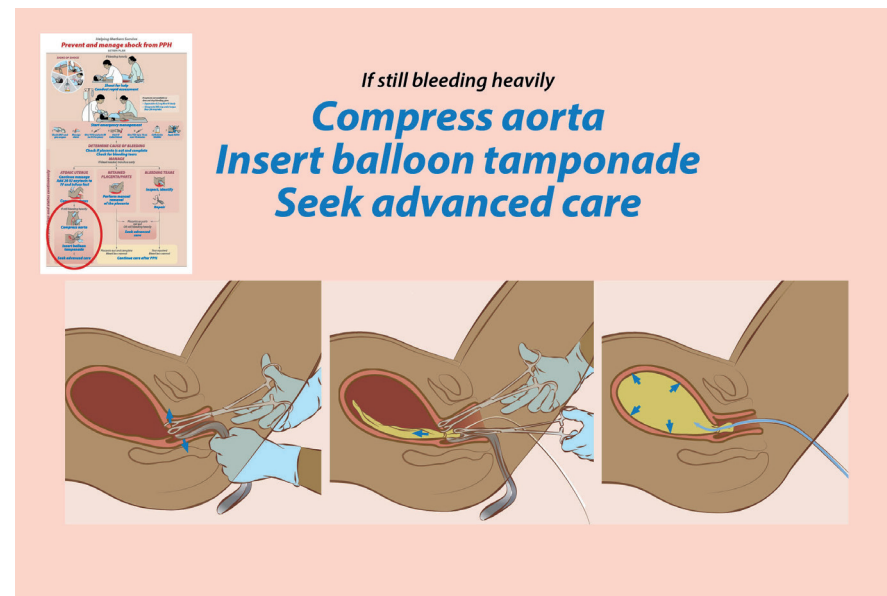
# Insert balloon tamponade

# Seek advanced care





## Facilitation Note



**Before teaching uterine balloon tamponade (UBT), be sure that its use is within local guidance and standards of care. The WHO says UBT should only be used in settings with immediate access to surgery and blood and where first line treatment includes uterotonics, TXA and IV fluids. If these conditions are not met, UBT should not be used.**

## Explain

If heavy bleeding and atony persist despite massage, uterotonics, TXA, and bimanual compression, insert a UBT. When referral is needed, UBT can be placed before transfer. Supplies for UBT should be kept in a PPH emergency kit.

Before UBT insertion, ensure no retained placental pieces or bleeding lacerations.

**Once UBT is in place, if bleeding is not controlled within 15 minutes, seek surgical care immediately!**

Record insertion time and amount of fluid used and monitor the woman closely. Keep UBT in uterus for 12-24 hours once bleeding is controlled and woman is stable. To remove UBT:

- Once stable for at least 12 hours, deflate UBT by 200 ml every hour. Reinflate if bleeding re-starts.
- After removal, monitor closely for 6 hours. Record BP, pulse, urine output, pallor, amount of bleeding and check tone: every 15 minutes for the first 2 hours; then every 30 minutes for the next 2 hours; then every hour for the next 2 hours.

## Demonstrate & Practice

**Turn to Provider's Guide page 57 for supplies needed for UBT practice.**

Use a postpartum uterus model OR an empty 500 mL water bottle.

If possible, show videos [Aortic compression](#) (2:50 min) and [UBT](#) (6 min).

**If no video, demonstrate assembly and insertion:**

- Place foley catheter into condom and tie with suture. Do not inflate catheter balloon.
- Ensure privacy. Tell woman what you will do and why.

- Administer a single dose of antibiotics: 2 g ampicillin IV OR 1 g cefazolin IV.
- Ensure empty bladder.
- Put on personal protective equipment, wash hands, and put on sterile gloves.
- Expose cervix with Sims speculum and hold with forceps. Insert UBT through cervix and high into uterus.
- Connect catheter to IV giving set and IV bag. Inflate condom with IV solution (300-500 mL) until bleeding stops.
- Fold and tie the catheter to retain fluid.

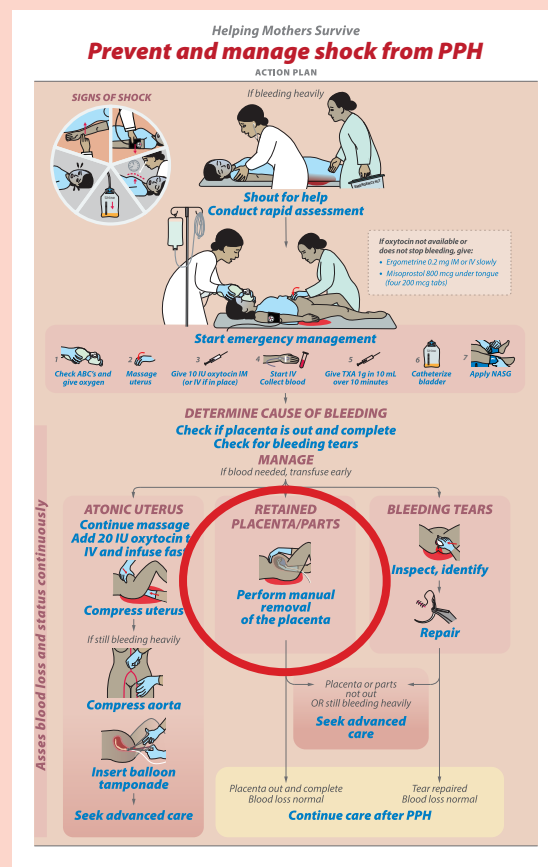
Have learners practice in pairs performing assembly and insertion of UBT. Walk among the pairs and provide supportive guidance.

## Aortic compression

If using bimanual uterine compression to stop bleeding while an intrauterine balloon tamponade is prepared, you will need to switch to aortic compression immediately before the balloon is inserted to minimize blood loss.

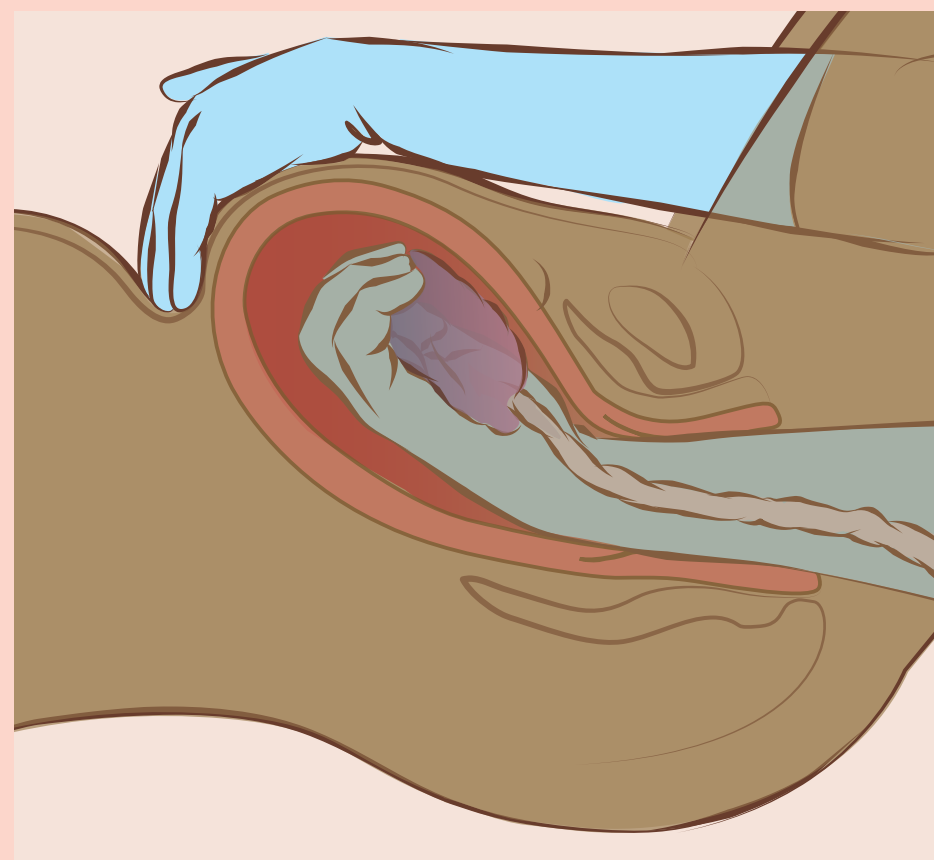
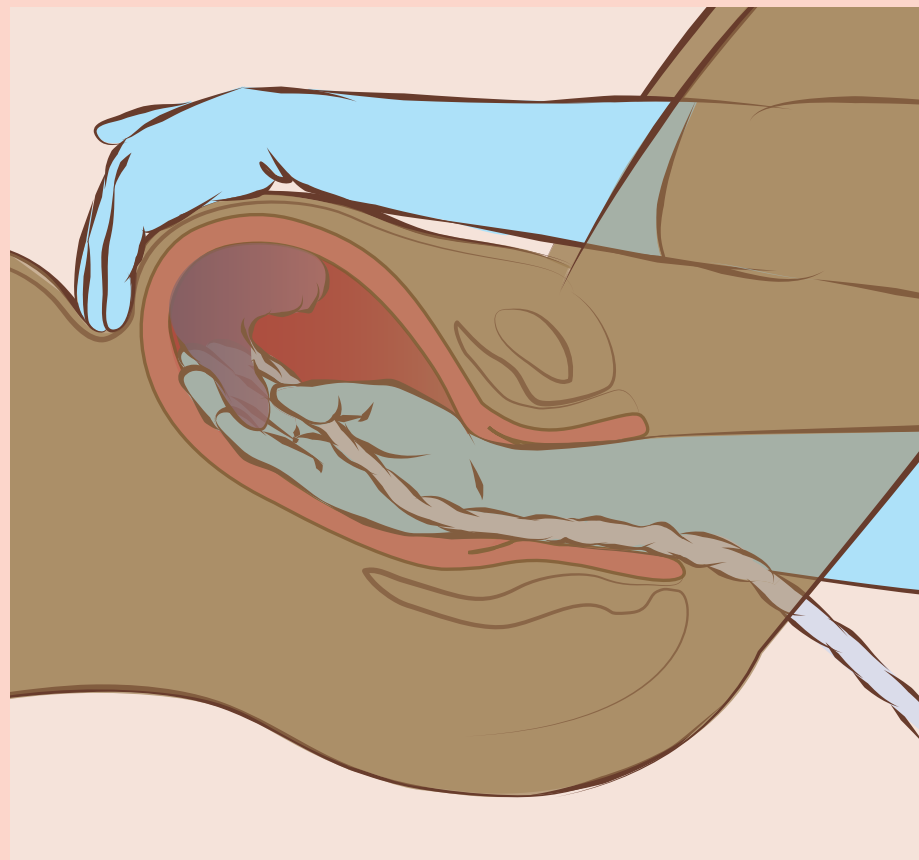
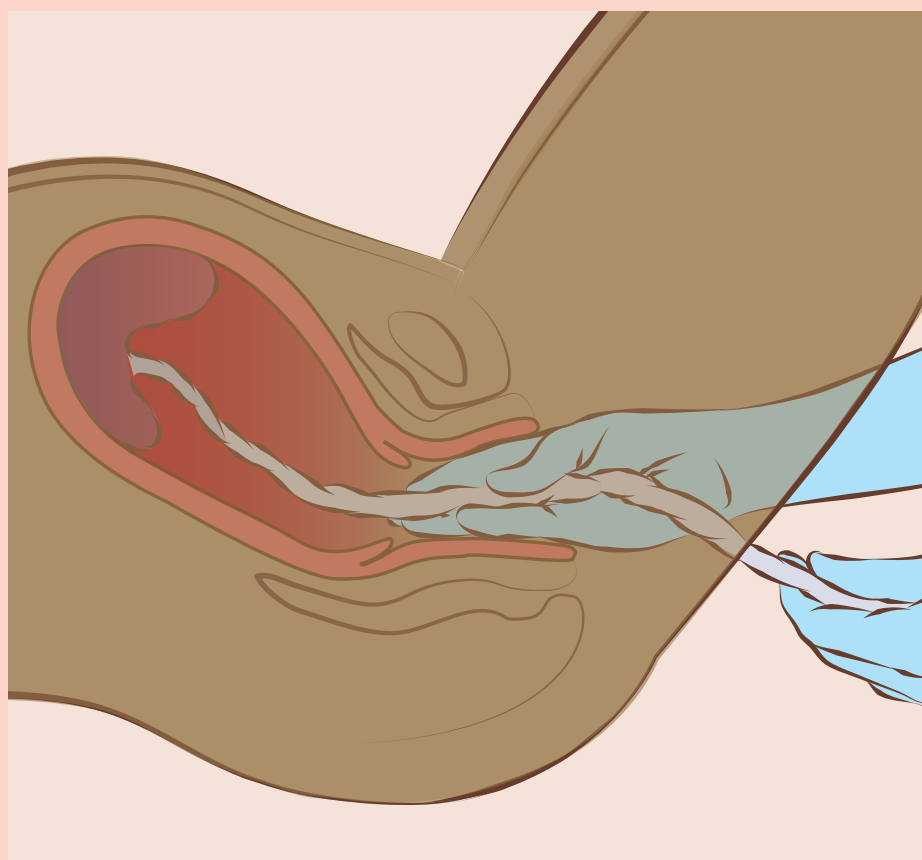
**To apply aortic compression:**

- Ensure the woman is on a firm surface. A soft mattress may not be firm enough.
- Tell the woman what you are about to do.
- Feel for the femoral pulse.
- Apply downward pressure with a fist on the abdominal aorta through the abdominal wall. Compress just above and to the left of the umbilicus.
- With the other hand, palpate the femoral pulse to check effectiveness of compression. You should not feel a pulse.
- If bleeding continues, keep applying pressure while seeking advanced care.

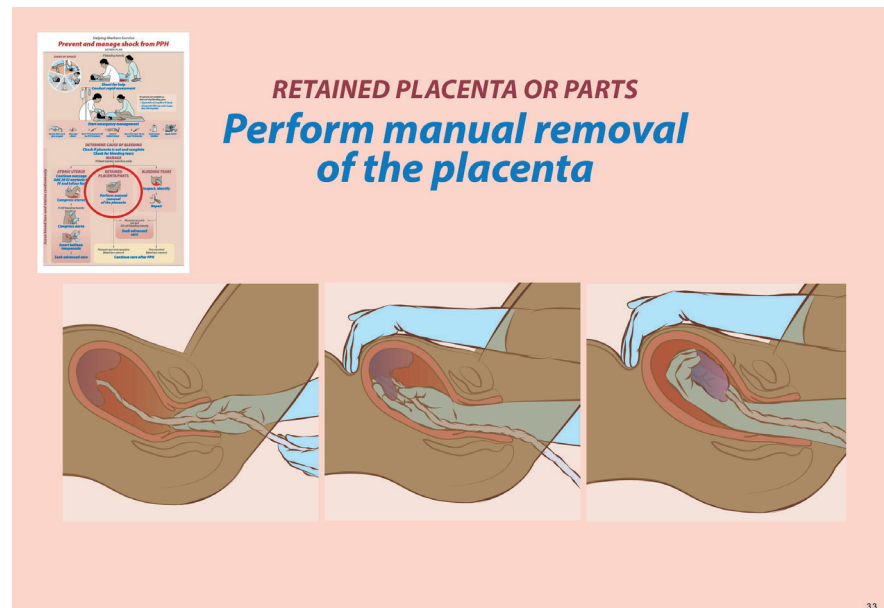


# RETAINED PLACENTA OR PARTS

## Perform manual removal of the placenta



## Explain



Retained placenta or fragments can cause bleeding and infection. The uterus cannot contract if it contains the placenta, fragments, or clots.

- **If the placenta is not delivered in 30 minutes and the woman is not bleeding,** ensure that she has an empty bladder, repeat 10 IU oxytocin IM, continue controlled cord traction, and encourage her to bear down, squat, or breastfeed.  
**Do NOT repeat misoprostol!**
- **If the woman is bleeding heavily,** OR if the placenta is not complete OR treatment at 30 minutes fails to work by one hour, remove placenta and fragments manually.  
**Do not delay!**
- If you are unable to remove the placenta or parts remain, surgery may be required.  
**Seek advanced care!**

## Demonstrate

If possible, show video ▶ [Manual removal of the placenta](#) (5 min).

**If video is not available, demonstrate manual removal of placenta using the birthing simulator:**

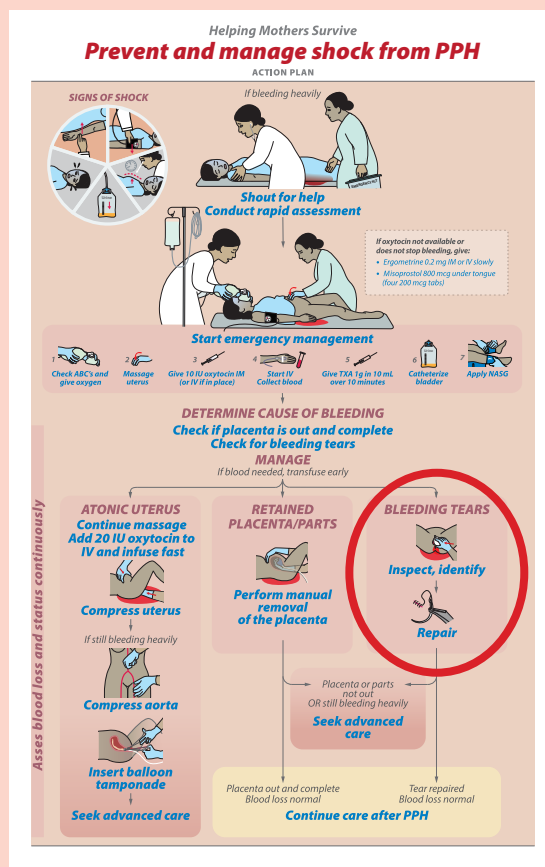
- Ensure privacy. Explain what you will do and why.
- Ask the woman to void or catheterize bladder.
- Start IV if not in place.
- Give diazepam 10 mg IM/IV (if woman is not in shock). Depending on local preference and clinical situation, you may use pethidine or ketamine.
- Give a single dose of antibiotics: either 2 g ampicillin IV or 1 g cefazolin IV.
- Put on personal protective equipment, wash hands, and put on long, sterile gloves.
- Hold umbilical cord with a clamp. Gently pull, using the cord to guide your other hand into uterus.
- Place fingers into uterus following cord to locate placenta. Identify the rough surface behind the placenta and carefully separate it from the uterine wall by smoothly sweeping fingers back and forth.

- Withdraw hand, bringing placenta with it and provide counter-traction to the uterus abdominally.
- Check uterine tone. Massage if soft.
- Give 20 IU IV in 1 L normal saline at 40 drops/minute.
- Examine placenta for completeness.
- Monitor bleeding, take vital signs, and ensure the uterus is well-contracted (every 15 minutes for two hours, and then every 30 minutes for the next 4 hours).

## Practice

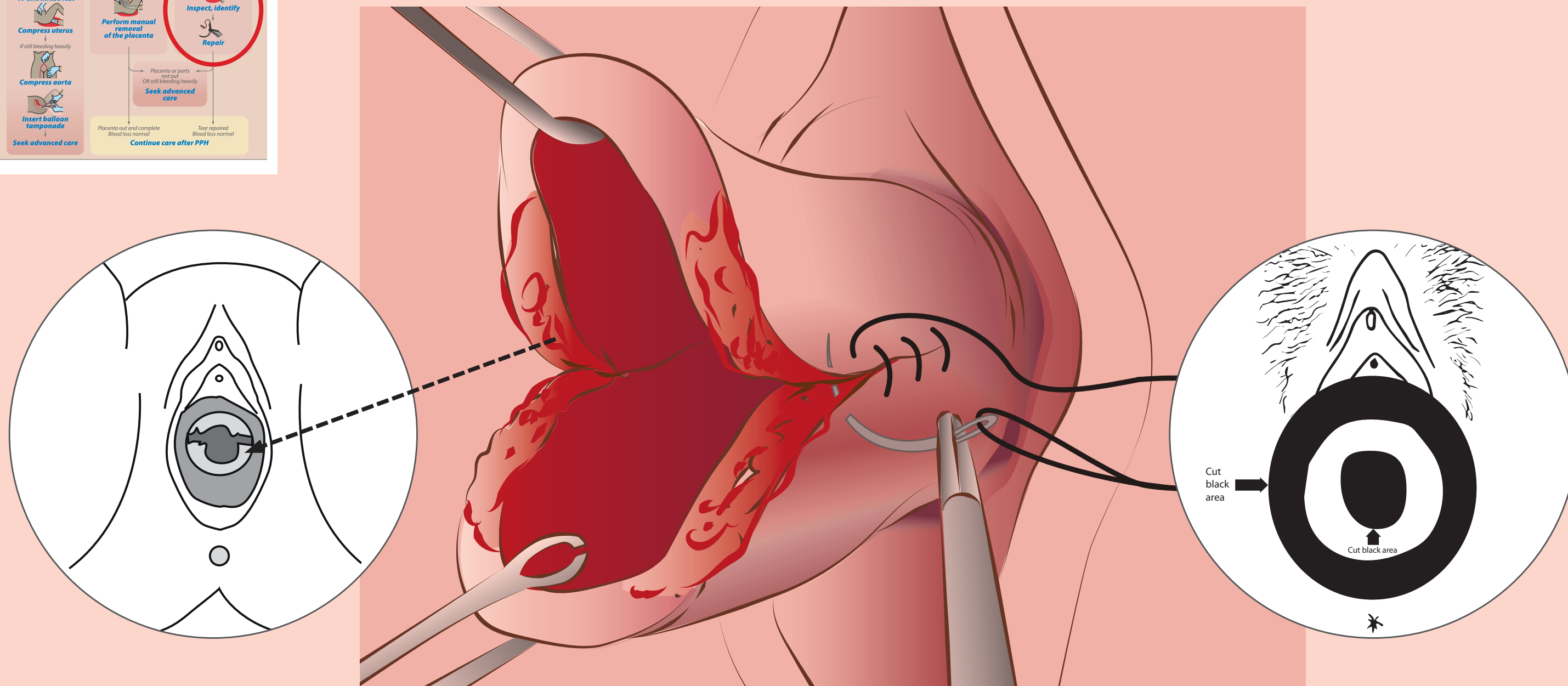
Have all supplies ready in advance. If video was not available, begin practice with a learner holding the placenta in one hand. Demonstrate how to use the cord as a guide into the uterus and how to feel for the edge of the placenta. Show how to begin separating it with the side of your fingers and hand. Then prepare a simulator of the uterus with placenta in place. Have learners take turns practicing.





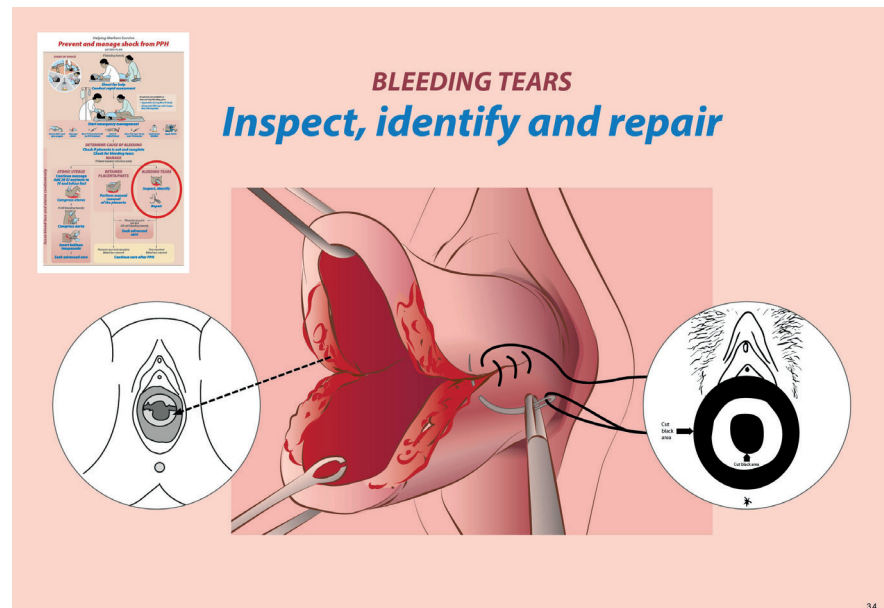
# BLEEDING TEARS

## Inspect, identify and repair





## Explain



Tears that cause PPH are most often deep vaginal or cervical tears. Only tears that are large and continue to bleed need to be repaired.

Bleeding from a tear may be slow, heavy, or spray from an artery. If repair does not stop bleeding, surgery may be required. **Seek advanced care!**

## Demonstrate

If possible, show video  [Cervical tears](#) (5 min).

**If video is not available, demonstrate repair.**

Cervical tears often occur at 3 and 9 o'clock using a clock as the reference for the cervix.

### To identify tears:

- Ensure privacy and good lighting.

- Tell the woman what you are doing.
- Ensure bladder is empty or catheterize.
- Give IV pethidine and diazepam, or ketamine, if tears are high and extensive. Do not give if woman is in shock.
- Wash hands. Put on sterile gloves.
- Clean perineum, vulva, and vagina with antiseptic solution.
- Separate the labia and examine peri-urethral area, perineum, and vaginal opening. Wrap fingers in gauze and press on the back wall of the vagina to look to the back.
- Press against the vaginal wall and move gauze-wrapped fingers up the side. Repeat on other side. Move up the vaginal wall to the cervix.
- Have assistant provide fundal pressure to help visualize cervix.
- Use sponge forceps to grasp cervix at 12 o'clock position and another to grasp cervix at 3 o'clock. Inspect between the forceps for any tears. Then move the first forceps to 6 o'clock and inspect the area between the forceps again. Continue rotating forceps and inspecting in this manner until full cervix is inspected and tears are identified.

### To repair cervical tears

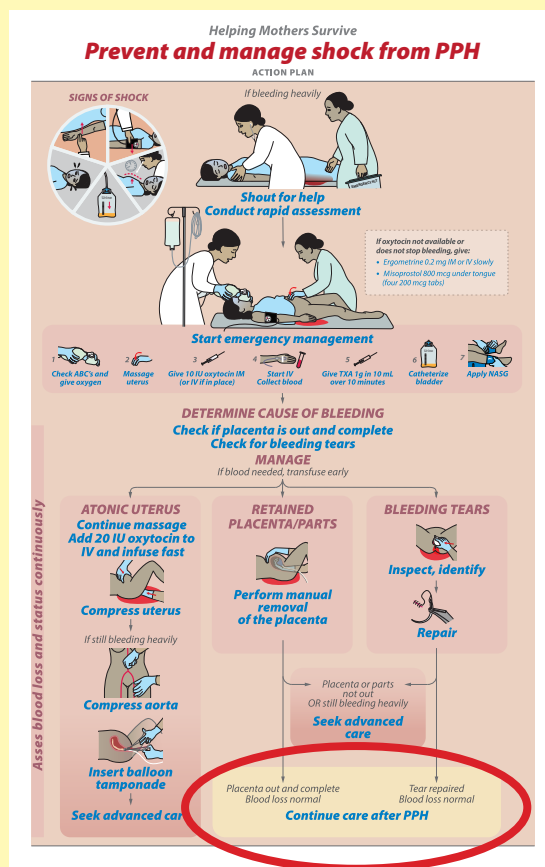
- After identifying cervical tear, put both forceps in one hand.
- Use size 0 chromic or polyglycolic suture. Place first suture above the tear. Close tear with continuous suture.

### To repair deep vaginal tears

- Draw 10 ml of 0.5% lignocaine into syringe. Insert the needle from the bottom and to the side of the tear to the top of the tear.
- Withdraw plunger to ensure needle is not in a blood vessel. Inject as needle is withdrawn. Wait 2 minutes for effect. Place continuous 2-0 chromic or polyglycolic sutures for length of tear, starting just beyond the apex. Close deep space first, then reapproximate vaginal tissue. Repair in 2 layers if tear is deep.
- Review wound care and hygiene.

## Facilitation note

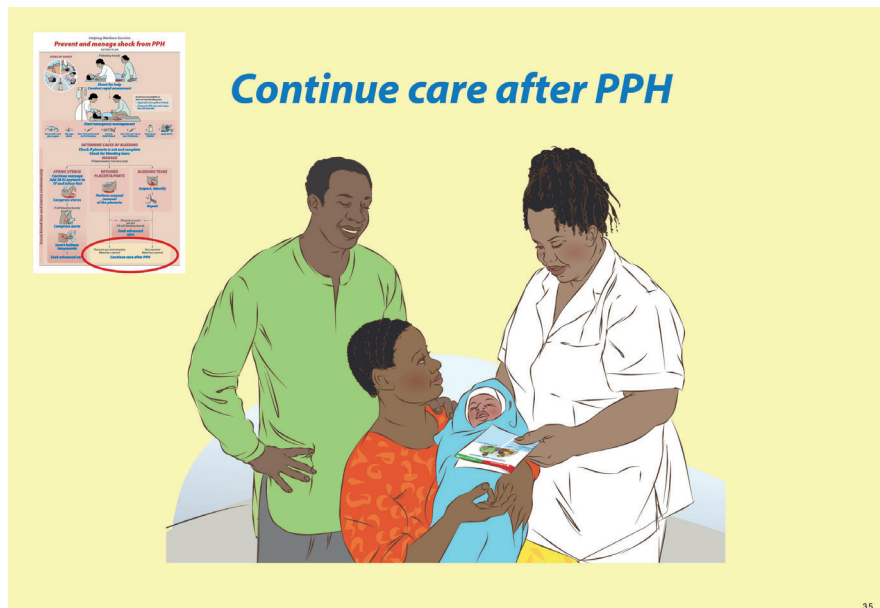
See Provider Guide page 74 to see how to make simulators out of foam blocks or towels for practicing repair of tears. Watch video or demonstrate then have learners practice. Circulate to give guidance. Tell learners that practicing this skill will be part of ongoing practice after training day so they will want to learn how to create their own simulators.



# Continue care after PPH



## Explain



A woman who has experienced PPH needs close monitoring and special care to recover and to support breastfeeding.

### **A woman recovering from PPH must be monitored closely until she is stable:**

- Maintain oxygen at 6–8 L/minute. Closely monitor her condition: take vital signs every 15 minutes until she stabilizes.

### **Once she is stable**

- Adjust IV infusion rate to 1 L in 6 hours.
- Begin decreasing oxygen per local protocol.
- Perform laboratory tests including repeat hemoglobin.

### **To decide if she can return home**

- The woman's vital signs, urine output, and mental state must return to normal.

- She must be able to walk around without dizziness and care for herself and her baby.
- If the woman had manual removal of her placenta OR insertion of UBT, observe closely for infection. Continue or begin antibiotics per local protocol and do not discharge if she has symptoms of infection.

### **Discharge instructions after PPH**

- A woman who has experienced PPH and her family should be counseled about her need for rest and good nutrition as she recovers. Teach her warning signs of anemia, increased bleeding, infection, and to seek care if she experiences these.
- If hemoglobin was less than 7 g/dl or 4.3 mmol/l: Give iron tablets – ferrous sulfate or ferrous fumarate 120 mg. After 3 months, continue supplements with either preparation at 60 mg orally for 6 more months. Give folic acid tablets, 400 mcg once daily for 9 months.
- If hemoglobin is 7–11 g/dl (4.3 to 6.8 mmol/l): Give ferrous sulfate or ferrous fumarate 60 mg by mouth plus folic acid 400 mcg by mouth once daily for 6 months.
- Provide all other routine postpartum care instructions and family planning counseling.

- Have her follow up for care in 48 hours, 10 days and again in 6 weeks.

### **If the woman has tears**

- Teach the woman to wash perineum at least twice a day (always after bowel movements), change pad frequently, and wash hands after self-care.

## Facilitation note

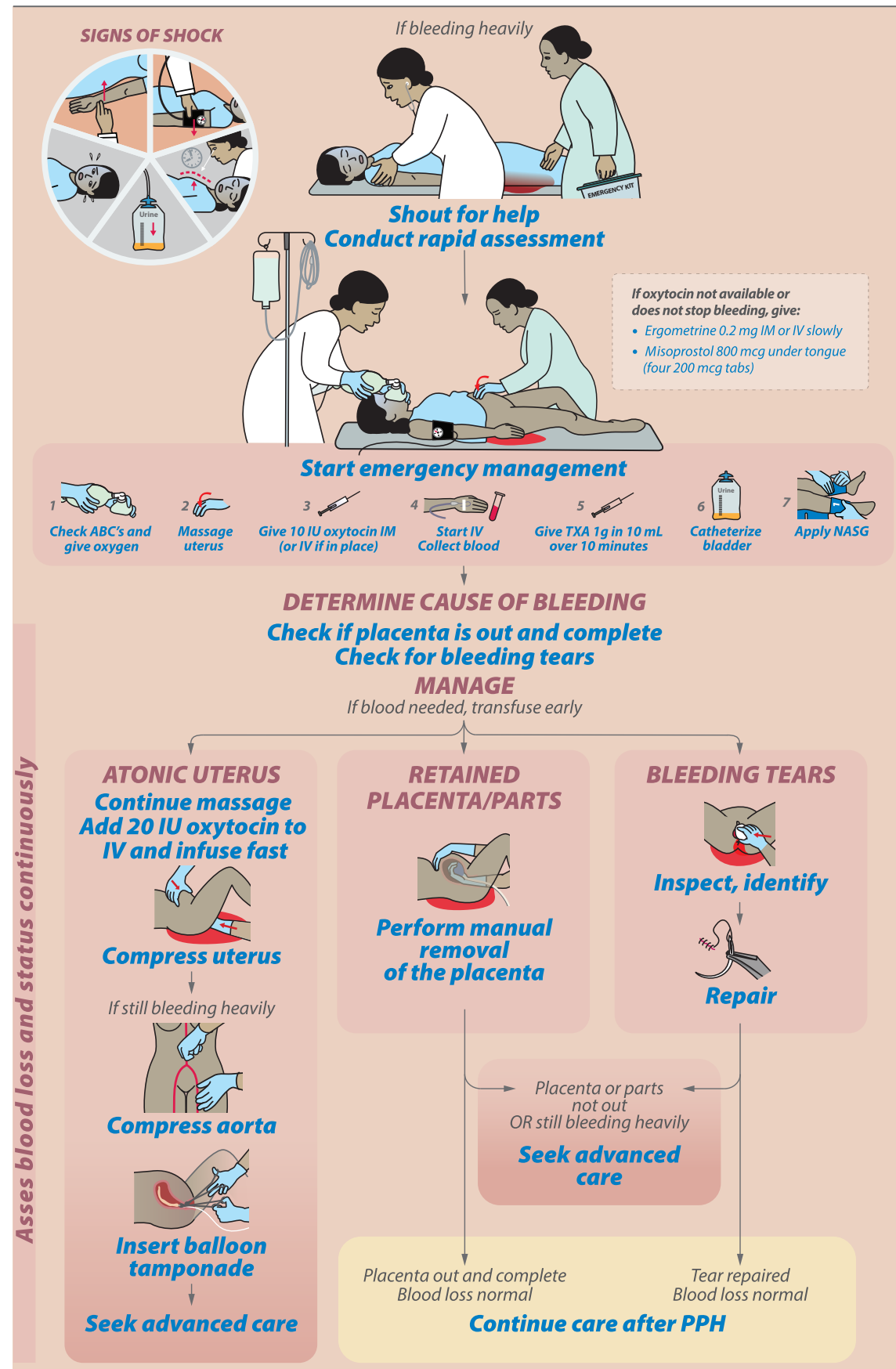
Request two learner volunteers – one to play the provider, and one to play a woman recovering from PPH and shock. Request that the provider determine if the woman is stable enough to go home, and, if she is, the provider should role-play all necessary care and counseling.

# LEARNING ACTIVITIES

## Role play

### Helping Mothers Survive **Prevent and manage shock from PPH**

#### ACTION PLAN





## LEARNING ACTIVITIES

Role play - Simulation

### Facilitation note

If you can show videos, have learners watch video

▶ [Managing Severe Bleeding After Birth](#)

Point out that external uterine “squeezing” is not recommended in WHO guidelines. Ask learners to pay particular attention to team work and the order of interventions for managing PPH.

Tell learners that they will be experiencing a simulation to practice problem-solving and decision-making as a team. Participants should act as if they are caring for a real woman. Observers should be ready to provide feedback. If there are more than 3 participants, do a second simulation so all learners can participate. Use the most realistic setting possible, preferably on the labor ward.

As facilitator you will be Mrs. L. and wear the simulator. Select one learner to play the role of provider who will lead the team. Other learners may be called on to assist the provider. Allow 15 minutes for this activity. The goal is for learners to diagnose shock and rapidly initiate treatment.

**Read the following scenario to the group:**

*“I have just delivered a healthy baby 2 hours ago. The nurse gave me AMTSL, delivered my placenta and then left. I have been losing a lot of blood and I do not feel well so I called you.”*

**Start simulation with blood tank open fully.**

**Ask learners:** *“Please begin your assessment and tell me what you are doing. If you choose to assess something, please do so and I will give you the results. Afterwards we will debrief as a team.”*

**Simulate/give the following but only if assessed:**

- BP 86/60, pulse 120, respirations 24
- Skin color - pale
- Uterine tone - soft. Placenta - complete. No tears
- Mental state and symptoms - confused, nauseate
- Estimated blood loss - 1500 mL

**Note whether they do the following:**

- Shout for help to urgently mobilize the team.
- Do a rapid assessment including measurements above.
- Provide RMC and explain to Mrs. L. what is happening.
- Massage uterus.
- Give oxytocin 10 IU IV/IM
- Start oxygen at 6–8 L/minute.
- Start IV infusion (collect blood for hemoglobin, blood type and cross-match) with normal saline or Ringer’s lactate 1 L with 20 IU oxytocin infusing fast.
- Give 1g TXA in 10 mL of diluent over 10minutes
- Catheterize bladder.
- Check placenta for completeness. Check for tears.
- Apply NASG if available.
- Continue to check uterine tone.
- Continue to monitor BP, pulse, and blood loss.

**After these interventions, keep uterus soft and bleeding heavy. If needed, prompt learners:**

*“What will you do now?”*

**Note whether they do the following:**

- Perform bimanual uterine compression while another learner prepares for UBT insertion.
- Repeat TXA 1g in 10 mL diluent over 10 minutes if bleeding continues 30 minutes after the first dose.
- Prepare and insert UBT if being used:
  - Prepare UBT: tie condom to foley catheter
  - Administer antibiotics: 2 g ampicillin OR 1 g cefazolin IV
- Switch from bimanual to aortic compression
- Expose cervix, hold with forceps, insert UBT high into uterus

- Inflate UBT to 300-500 mL (until bleeding stops), then clamp catheter. Have bleeding stop after they have infused about 400 mL.
- Continue oxytocin 20 IU in 1 L IV fluids at 40 dpm
- Check bleeding, take vital signs and ensure uterus is well contracted
- Organize urgent referral if facility cannot administer blood and perform surgery.

### Debrief

Upon completion of the role play, begin structured debrief. Be sure to include feedback about communication and RMC:

Ask, *“What is the diagnosis?”* Shock from PPH due to atony. Ask, *“Why this diagnosis? What went well? Did you miss anything?”*

Discuss with learners anything you noted that they missed. Ask the following: *“How did the team function? What did you learn that you will remember for next time?”*

Be sure to address any communication gaps. Were all team members comfortable working together and delegating? As the client, share how you felt. Did they delegate, communicate, provide RMC?

**Ask learners:** *“What if Mrs. L’s uterus had been well contracted at the start of this case, but she was bleeding as heavily; what would you do?”*

### Key learner responses

- Manage for shock as for the first case
- Examine the cervix, vagina, and perineum for tears and repair.
- Examine placenta for missing pieces and manually remove if needed.

# Acknowledgments



## Helping Mothers Survive Bleeding after Birth Complete

*Facilitator Flip Chart*

### Authors

Susheela Engelbrecht, CNM, MPH, MSN  
Cherrie Lynn Evans, DrPH, CNM  
Laura Fitzgerald, MPH, CNM  
Jhpiego

### Reviewers

Jen Breads, MSN, MPH  
Kayla Britt, BA  
Peter Johnson, PhD, CNM  
Sheena Currie, RM, MEd  
Gaudiosa Tibaijuka, MEd, RN, RM  
Rosemary Kamunya, MA, DN/M  
Bonnie Dowling, MPH, MSN  
Barbara Deller, CNM, MPH  
Jhpiego

Nester T. Moyo, MScN, SCM, RN  
International Confederation of Midwives

Ida Neuman, BPol, MMedSci, MHP  
Laerdal Global Health

### Helping Babies Breathe Editorial Board

Susan Niermeyer, MD, MPH, FAAP  
William J. Keenan, MD, FAAP  
George A. Little, MD, FAAP  
Nalini Singhal, MD, FRCPC, FAAP

### Evaluation and Data Analysis

Cherrie Lynn Evans, DrPH, CNM  
Eva Bazant, DrPH, MPH  
Jhpiego

### Educational Design Editor/Art Director

Anne Jorunn Svalastog Johnsen  
Laerdal Global Health  
Stavanger, Norway

### Illustrator

Bjørn Mike Boge  
Laerdal Global Health  
Stavanger, Norway

*Jhpiego is an international, nonprofit health organization affiliated with Johns Hopkins University. For more than 40 years, Jhpiego has empowered frontline health workers by designing and implementing effective, low-cost, hands-on solutions to strengthen the delivery of health care services for women and their families. By putting evidenced-based health innovations into everyday practice, Jhpiego works to break down barriers to high-quality health care for the world's most vulnerable populations.*

*The Helping Mothers Survive Bleeding after Birth Complete module was conceived and developed by a team in the Technical Leadership Office of Jhpiego and uses the module design created for Helping Babies Breathe (HBB), a module developed by the American Academy of Pediatrics.*

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