Helping Mothers Survive

Bleeding after Birth



PROVIDER'S GUIDE
Learning & Team Practice

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Jhpiego is an international, nonprofit health organization affiliated with The Johns Hopkins University.

For 40 years, Jhpiego has empowered frontline health workers by designing and implementing effective, low-cost, hands-on solutions to strengthen 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.

To those who care for mothers at birth

Bleeding after Birth training is a training package designed for teams of frontline health workers who provide care at birth for women and newborns. This training is appropriate for all health workers who attend births. These may include skilled birth attendants such as midwives as well as other workers (doctors, nurses, and others) who may be called on.

The BAB training has been designed to help learners achieve mastery of competencies needed to safely and effectively prevent, detect, and manage postpartum hemorrhage.

The materials for this training are the Action Plan, a graphic job aid to assist providers in management of the third stage of labor, the Flip Book, used for instruction, and this Provider's Guide. The Provider's Guide is for both facilitators and learners. It has the information needed to conduct ongoing practice as well as the background for the content.

This training module is designed to be delivered to facility providers on site in the time span of one day, using a model to facilitate practice. After training, the goal is for providers to continue practice on the model, led by an on-site peer, and to use new or reinforced skills during birthing care. Recognizing that any learner could potentially be coordinating peer practice on site after the initial training, this Provider's Guide contains material suitable for learners as well as facilitators.

It is important to note that in some countries only skilled birth attendants are authorized to perform certain interventions, e.g., controlled cord traction, episiotomy, manual removal of the placenta, and catheterization. The Advanced Care Notes highlight how best to engage those who are authorized to perform specific skills.

Saving lives at birth



Performance Expectation

- Provide active management of the third stage of labor (AMTSL), a series of three interventions recommended for every birth and proven to decrease PPH and maternal death.
- Detect and manage postpartum hemorrhage using simplified protocols.

Key points

- There are two people who need care, mother and baby.
- Survival of the baby can be dependent on survival of mother.
- Each training will build skills and knowledge to provide safe and effective care for mother and baby.
- Practicing the skills after the training is very important.

The provider needs to know

During pregnancy, labor, delivery, and the time after birth, there are two people who need care – mother and baby. The health and survival of both are connected. If the mother dies, the baby may not survive and her other children are at risk.

The Bleeding after Birth and Helping Babies Breathe training programs work together to build skills and knowledge for the care of both mother and baby during and after birth.

- Bleeding after Birth focuses on preventing, detecting, and managing postpartum hemorrhage.
- Helping Babies Breathe teaches routine care of babies at birth and how to help the baby who does not breathe.
- The actions of the birth attendant can make the difference between life and death for mother and baby.
- The skills taught in this training active management of the third stage of labor, quickly estimating blood loss, identifying the source of bleeding, and correct management of hemorrhage – can save lives.
- Both trainings will involve simulation, skill-building, and discussion.

Practice

Practicing skills learned in this training will help you save lives. Before any practice session or drill, have all supplies ready. See page 8 for list.

Communicate with the team members and mother



Performance Expectation

The provider will be able to effectively communicate with team members during an emergency.

Key points

- Good communication can save lives.
- Know whom to call for help.
- Assign each member a role.
- Have an emergency plan in place.
- Alert others as the birth approaches.

The provider needs to know Failure to communicate can have severe consequences for mothers and babies.

- Know whom to call and how if advanced care or referral is needed.
- Keep the mother and her family members informed.
- If you are alone, the mother and/or her family members may be your team.
- Team members include the people working with you at your facility, those at the referral facility, and the mother.
- Practicing roles regularly can make things go more smoothly and build confidence within your team.

- Having a plan before an emergency will make communication easier.
- Anxiety and fear are a natural reaction to an emergency, but can block communication.

- Alert others on your team as the birth approaches so they can assist if an emergency arises.
- Communicate actively by speaking confidently and clearly – do not assume that others understand what you are thinking.
- Active communication will ensure that everyone knows what needs to be done and will help to calm the mother and her family.

Prepare for clean and safe delivery



Performance Expectation

The provider will recognize features of clean and safe delivery.

Key points

- Make the birth area private, warm, and well lit.
- You must have the right, clean equipment ready for use before birth.
- For EVERY BIRTH, always have the uterotonic drawn up and ready to give.
- Test the function of the bag and mask.
- Handwashing and using sterile or highlevel disinfected gloves and equipment reduce the risk of infection.
- Note time of birth.
- Mother and baby should always be kept together.

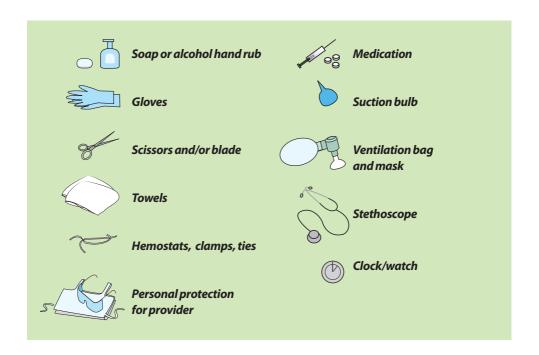
The provider needs to know
Be sure the area for birth is private, clean,
warm, and has good light. Certain equipment
is needed to give safe care. Knowing what
that equipment is, how to use it, and having
it ready, will reduce delays in care.

- Soap or alcohol hand rub Handwashing is critical to protect the mother, baby, and provider. It should be done before putting on gloves and after taking them off.
- Gloves sterile or high-level disinfected to reduce the risk of infection for provider, mother, and baby. If possible, double gloving reduces the risk of infection for the baby if you remove the first pair right before tying and cutting the cord.
- **Scissors and/or blade** sterile or disinfected for cutting the cord.
- Towels clean, dry towels or cloths to dry and keep the baby warm, clean the mother, and wipe away blood to check for tears.
- Hemostats, clamps, ties to clamp the cord, to apply controlled cord traction, and to cut the cord.
- Personal protection for provider apron, mask, eyeshield, and head covering keep the delivery area clean and reduce risk of infection.
- Medication before EVERY BIRTH oxytocin should be drawn up or misoprostol out and ready to give.
- Suction bulb to clear the baby's mouth and nose if needed.
- Ventilation bag and mask to help the baby breathe if needed.
- **Stethoscope** to check the baby's heart rate if help to breathe is needed.
- Clock/watch to monitor how long each stage of labor takes, marking the time of birth, and the first minute after birth.

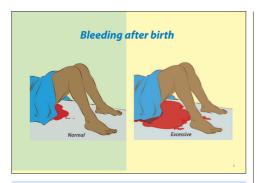
The provider needs to do

- Have all equipment available before a mother arrives.
- Use clean technique to set up the equipment and supplies.
- Use all equipment appropriately and safely.
- Improvise equipment and supplies with available equipment if needed.
- Wash hands or use hand rub and wear gloves.
- Dispose of all supplies and equipment appropriately. Put sharps in a stick-proof container. Sterilize scissors, clamps, and other instruments with sterilizer or for highlevel disinfection, submerge in 0.5% chlorine solution for 20 minutes.
- Communicate with the mother and the birth team.
- Keep mother and baby together after birth.

It is very important that oxytocin 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 is not breathing.



Bleeding after birth



Performance Expectation

The provider wil be able to recognize that all mothers are at risk for bleeding too much after birth and the importance of prevention and taking quick action.

Key points

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

The provider needs to know

- All women are at risk for hemorrhage.
- Bleeding after birth can be a slow, constant trickle, or a large gush. Both kinds can be life-threatening.
- Blood can be liquid or clots.
- Losing 500 ml or sometimes less can be life-threatening for the mother.
- Women who are sick, anemic, or underfed may become ill with even a small amount of blood loss.
- There are actions the provider can take to help decrease bleeding after birth.

Quick check

Are all women at risk for bleeding?

Causes for bleeding after birth

Uterus bleeds excessively until it contracts

Remains of placenta prevent uterine contraction

Tears can also cause bleeding



Performance Expectation

The provider will be able to identify the causes of too much bleeding after birth and manage them correctly.

Key points

- Poor tone, tears, and retained tissue are the three main causes of bleeding after birth.
- Most bleeding after birth is caused by a uterus that will not get hard (poor tone).
- Tissue from the placenta or membranes that stays inside the uterus can cause bleeding.
- Tears can also cause bleeding after birth.
- Episiotomies and female circumcision increase the risk for tearing.

The provider needs to know The vast majority of bleeding after birth is due to the uterus not contracting or getting hard after delivery.

- Blood vessels in the uterus supply the placenta during the pregnancy.
- The uterus must contract to close off the blood vessels.

- If the uterus does not contract, these vessels will continue to pump blood into the empty uterus.
- This is the most common cause of bleeding after birth.
- Checking frequently to see if the uterus is hard can help identify if this is the cause of bleeding.

Retained tissue from the placenta or amniotic sac can cause bleeding.

- If a piece of the placenta or amniotic sac is retained, the uterus cannot contract and the mother will bleed.
- Checking the placenta after it is delivered is important to be sure it is complete.

Bleeding can also be caused by tears. Tears can be big or small, inside or outside the vagina.

- Episiotomies will cause increased tearing and bleeding. They should be cut only for a specific reason and by a skilled provider.
- Women who have been circumcised are also more likely to tear.
- Gently wiping the blood away will help you look for tears.

The provider needs to do

- The provider must constantly assess the mother for changes in bleeding.
- The provider must assess uterine tone to determine if uterus is contracting.

Advanced Care Note

If learners have additional training and authorization to provide more advanced levels of care, they should act within their scope of practice. This may include cutting an episiotomy if the mother has been circumcised.

Actively make decisions for mother and baby



Performance Expectation

The provider will be able to recognize problems and make decisions quickly and effectively for mother and baby.

Key points

- Signs of changing conditions for mother and baby must be monitored.
- Signs like blood loss, fundal tone, and infant breathing should guide your decisions.
- Actively looking for signs, making decisions, and acting quickly are essential to helping mothers and babies survive.
- Act quickly to save lives!

The provider needs to know

- After birth, the condition of mother and baby can change quickly. Actively monitoring for these signs is critical.

The provider needs to do

For the mother

- Actively look for excessive bleeding beginning from the moment of birth, as you await the placenta, and every 15 minutes for the first two hours.
- Feel for the uterus to get hard like your forehead as it contracts to stop excessive bleeding.
- Observe the mother for signs that she may be losing too much blood, such as an increased pulse, dropping blood pressure, or pale, clammy skin.

For the baby

- Listen for crying as you dry the baby thoroughly.
- The first minute of life is critical for the infant. If the baby is not crying, keep him warm, stimulate to breathe. Follow guidelines for resuscitation from Helping Babies Breathe.

For both

- Keeping the infant on the mother's chest will help you to monitor both at the same time.
- Use what you see, feel, and hear to actively make decisions on what the best next steps are for mother and baby.
- Act quickly! Quick action can save lives.

Quick check

What routine checks should be carried out in the first two hours after birth on the mother?

Routine care for mother and baby



Performance Expectation

The provider will be able to provide routine care for the mother immediately after birth.

Key points

- Third stage of labor the time between the birth of the baby and the placenta.
- The three steps of active management are: give uterotonic, provide controlled cord traction if skilled birth attendant, check for tone of uterus.
- Active management of this stage can reduce bleeding after birth.
- The first minute is the critical time to be sure the baby is breathing well.

The provider needs to know

- During this time, the uterus contracts and gets smaller.
- This makes the placenta separate from the uterine wall.
- This process should take 8-9 minutes, but can take up to an hour.
- The World Health Organization recommends active management for all women to reduce risk of hemorrhage after birth by 60-70%.
- Between one and three minutes after birth, it is time to clamp or tie and then cut the umbilical cord.

The provider needs to do When both mother and baby are doing well, routine care for both can be done at the same time

Che	cklist
	Deliver baby onto mother's stomach.
	Dry baby thoroughly and assess for crying; cover with a dry cloth.
	Check for second baby; if none, proceed with third stage care while continuing to observe baby.
	Give oxytocin or misoprostol to mother within one minute of delivery.
	While awaiting the placenta, remove first pair of gloves if double gloved, or change gloves and cut the cord between one and three 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.
	Continue to closely observe mother and

Quick check

What are the three parts of active management of the third stage of labor?

baby and provide routine care.

When should a uterotonic medication be given to the mother?

Give medication to minimize bleeding -Oxytocin or Misoprostol





It is very important that oxytocin 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 is not breathing.

Performance Expectation

The provider will be able to safely and effectively give oxytocin or misoprostol after the baby is born.

Key points

- Oxytocin and misoprostol cause the uterus to contract.
- Check for a second baby before giving the medicine!
- Oxytocin is given in the muscle and must be kept at 25°C or less.
 Dosage: 10 units.
- Misoprostol is a tablet, and is taken by mouth. It does not need to be kept cold. Dosage: 600 mcg (three 200 mcg tablets).
- Give medicine within one minute of hirth.

Quick check

What drug needs to be kept at less than 25 °C?

The provider needs to know

- Oxytocin and misoprostol are both medicines that cause the uterus to get hard or contract.
- When the uterus contracts, it squeezes the blood vessels and stops bleeding.
- Oxytocin is given as an injection into the muscle. It should be kept at 25°C or less.
- Oxytocin is the World Health Organization's first choice.
- Misoprostol is given in pill form for a total of 600 mcg (200 mcg tablets x 3) and works well even when stored in a warm and light place.
- Before giving either medication, be sure that there is not another baby to deliver. Tell the mother that she will receive either an injection or tablets.
- Give within one minute of the birth of the baby so that the uterus will contract and expel the placenta. This will prevent excessive bleeding.
- Ergometrine is more sensitive to light and heat and increases the risk of retained placenta. It must not be given to women who have high blood pressure! It also has serious side effects for some women such as vomiting and high blood pressure. Therefore, it should not be used for prevention of hemorrhage where oxytocin is available.

OXYTOCIN

- Give the right dose: Make sure that 10 units of oxytocin is drawn up before delivery.
- Keep oxytocin at less than 25°C.
- Tell the woman she will receive an injection to reduce bleeding.
- Inject the medication into a large muscle (usually the woman's thigh).

MISOPROSTOL

- Give the right dose: Have three pills of 200 mcg each for a total of 600 mcg out and ready before delivery.
- Make sure the mother swallows the pills.
- Counsel on side effects of misoprostol.
 Shivering, nausea, diarrhea, and fever may happen but are not harmful.

The provider needs to do

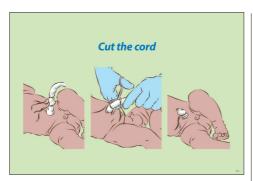
- Before the baby is born, have medication prepared and ready to give within one minute after birth.
- Check for a second baby.
- Give the right amount of the right medication within one minute of birth.

Ouick check

What is the correct dose of oxytocin?

What is the correct dose of misoprostol?

Cut the cord



Performance Expectation

The provider will be able to appropriately cut the cord at the right time in a manner that reduces risk of infection to the baby.

Key points

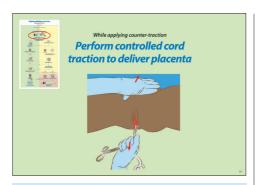
- If the baby is breathing well, cut the cord between one and three minutes after birth.
- Before cutting the cord, remove your first pair of gloves if doubled gloved, or change gloves.
- Place two ties or clamps and cut between them.

The provider needs to know

- Timing of cutting the cord depends on the condition of both mother and baby. Waiting at least a minute to clamp and cut the cord allows time to give the medication to prevent bleeding and time for blood to move from the placenta to the baby.
- Cleanliness is important to prevent infection of the cord. All supplies should be sterile or disinfected.

- Cut the cord between one and three minutes after birth if both mother and baby are doing well. If the mother is bleeding heavily or the baby is not breathing well, cut the cord sooner and call for help.
- To cut the cord place 2 clamps or ties around the cord. Place the first clamp or tie around the cord about 2 fingerbreadths from the baby's abdomen. Place another clamp or tie about 5 fingerbreadths from the abdomen.
- Double glove before birth so that one pair can be removed before cutting the cord.
- When cutting the cord, shield your face from blood splashing by covering the area with a thin piece of sterile gauze.

Perform controlled cord traction to deliver placenta



Performance Expectation

The skilled birth attendant will be able to safely provide controlled cord traction.

Key points

- Controlled cord traction should be done only by skilled birth attendants.
- Controlled cord traction must be gentle.
- Only provide controlled cord traction during contractions.
- Always stabilize the uterus when providing controlled cord traction.
- Never pull on the cord if you feel resistance.
- Pulling hard or when you feel resistance can harm the mother.
- Only pull the cord in a steady, downward direction. Do not pull suddenly or in other directions.

The provider needs to do

- Clamp the umbilical cord close to the perineum.
- Wait for the woman to feel a contraction, or for the uterus to get hard.
- Watch for a small gush of blood or the cord get longer; this is a sign of a contraction or that the placenta is coming loose.
- Use one hand to stabilize the uterus by placing it just above the mother's pubic bone and pressing upward to provide counter pressure.
- During the contraction, use the other hand to gently pull down on the cord. Keep counter-pressure on the uterus from above the pubic bone.
- If resistance is felt, stop and try again with the next contraction.
- Release traction on the cord between contractions.
- Continue to provide controlled cord traction during contractions until the placenta appears at the opening of the birth canal.
- It may take several contractions to deliver the placenta.
- DO NOT pull when resistance is felt or when there is no contraction because you can tear the cord or pull the uterus out. This can kill the mother.

Advanced Care Note

Learners should act within their scope of practice. This may include performing controlled cord traction described here.

How to deliver placenta



Performance Expectation

The provider will be able to deliver the complete placenta and membranes.

Key points

- Tissue left inside can cause hemorrhage and infection.
- Gentle twisting of the placenta as it comes out helps keep the membranes whole.

The provider needs to know

If tissue from the placenta or membranes stays inside the uterus, the mother will bleed too much and can become infected.

- When the placenta separates from the uterus, it moves into the vagina.
- In removing the placenta, it is important to take steps to reduce the risk of tearing the placenta or membranes.
- If the provider uses both hands to hold the placenta and gently turns it, the membranes will twist like a rope, which is stronger and less likely to tear.
- If a small piece of membrane does get torn or stuck in the cervix, it can often be removed by twisting the piece into a rope and pulling gently.

- As the placenta delivers, use both hands to cup it and gently turn the placenta to prevent tearing of membranes.
- The placenta and membranes should be placed in a bowl/basin to be looked at later.
- Immediately check the tone of the uterus and massage if soft.

Check tone



Performance Expectation

The provider will be able to assess the fundal tone and massage uterus when needed.

Key points

- A soft uterus is the number one cause of bleeding after birth.
- Massaging the uterus when it is soft will make it contract or get hard.
- Massaging the uterus when it is soft is an IMPORTANT step in stopping hemorrhage.

The provider needs to know

- Uterine atony, or a uterus that stays soft after the placenta delivers, causes the vast majority of postpartum hemorrhage.
- The vessels that bring blood to the placenta and the baby during pregnancy will keep bleeding until the uterus contracts around them.
- When the uterus contracts, the vessels will be pinched off; this will stop the bleeding.
- Feeling the top of the uterus (fundus) is the best way to tell if the uterus is hard or soft.
- Massaging the uterus can make a soft uterus get hard and stop the bleeding.
- Clots may come out, which will also help the uterus contract.

- Check to see if the uterus is soft.
- Locate the fundus by pressing the side of the hand firmly into the mother's stomach, just above the navel.
- Curve the hand downward to feel the top of the uterus or fundus.
- Check if the uterus is hard like your forehead or soft like your nose.
- If it is soft, massage firmly in a circular motion until the uterus feels hard like a forehead and watch for the bleeding to slow.
- Teach the mother how to massage her uterus.

Check placenta for completeness



Performance Expectation

The provider will be able to deliver the complete placenta and membranes.

Key points

- Both sides of the placenta and membranes must be checked for completeness.
- Tissue left inside the mother can cause hemorrhage and infection.

The provider needs to know

Tissue left inside the uterus can make a mother bleed too much. It can also lead to an infection in the uterus, which can make the mother very sick. Both bleeding and infection can cause a mother to die.

- The side of the placenta that is against the mother is dark red and meaty looking. It is made up of lobes.
- The other side is shiny and grey, covered by membrane.
- When complete, the lobes of the placenta fit together like a puzzle.
- The membranes should also be checked for missing pieces.
- When tissue from the placenta or the membranes is left in the uterus, the uterus cannot contract well and the mother may bleed too much.

- Look at both sides of the placenta for completeness.
- Hold the shiny side in the palm of both gloved hands, cupped so that the placenta looks like a bowl.
- Look to see if all the sections are complete or if any pieces are missing.
- Hold the placenta up to see if the membranes are complete.
- Check for blood vessels trailing off the edge of the placenta as this may indicate that a piece is still inside.
- If it looks like pieces are missing, check mother's bleeding and fundal tone and get advanced help.
- If everything is normal, this is a good time to check the perineum for tears.

Check if uterus is hard



Performance Expectation

The provider will be able to check fundal tone and identify why it might be soft.

Key points

- The uterus can change from soft to hard or hard to soft.
- Checking and re-checking the uterus and the bleeding are critical for the first 24 hours, and should be done every 15 minutes for the first two hours.
- A full bladder can make the uterus get soft.
- Have the mother tell you if she notices a qush or constant trickle of blood.

The provider needs to know

- A soft uterus causes the vast majority of postpartum hemorrhage.
- The uterus can be soft immediately after delivery of the placenta, or it can be hard and then get soft later.
- Any time the uterus gets soft after delivery, the mother will bleed more.
- A full bladder can cause the uterus to get soft even if it was hard before.
- Feeling the uterus is the best way to tell if it is hard or soft.
- Mothers who are not checked every 15 minutes may die from hemorrhage because no one noticed.

The provider needs to do

- Check the tone of the uterus every 15 minutes for the first two hours.
- If the uterus is soft, massage until firm.
- If the uterus was hard, but is now soft, check the bladder for fullness.
- Help the mother to empty her bladder if it is full.
- Tell the mother to alert you if she notices a gush of blood or a trickle that doesn't stop.

Advanced Care Note

If learners have additional training and authorization, they should act within their scope of practice; this may include catheterizing the mother's bladder if she is unable to empty it.

Is bleeding normal?



Performance Expectation

The provider will be more confident in assessing whether bleeding after birth is normal or excessive.

Key points

- Bleeding can be slow or fast.
- Any bleeding, if excessive, is lifethreatening.
- Blood can be soaked up in cloths or spilled on the floor.
- Checking and rechecking uterine tone and blood loss are critical for the first two hours.
- Have the mother alert you if she notices too much bleeding.

The provider needs to know

- Heavy bleeding that pours out and won't stop is obviously life-threatening.
- A smaller stream of bleeding that trickles out but doesn't stop can be life-threatening too.

- Look at the bleeding while checking uterine tone.
- Look for blood on the bed, the mother's clothes, and the floor.
- If the uterus is contracted and the bleeding is a small amount, continue to watch closely.
- Tell the mother to alert you if she feels blood streaming out in a large gush, or a trickle that won't stop.

Continue routine care for mother and baby



Performance Expectation

The provider will be able to provide routine care to mother and baby after delivery.

Key points

- Always keep mother and baby together.
- Start breastfeeding early.
- Checking and re-checking mother and baby are critical during this important time.
- Check fundal tone and bleeding every 15 minutes for the first two hours after birth.

The provider needs to know

- Keeping mother and baby together and warm is important for the health of both.
- If mother and baby are healthy, breastfeeding should be started as soon as possible after delivery.
- Breastfeeding also releases oxytocin, and might help the uterus contract.
- Checking and re-checking the mother's uterine tone and bleeding are an important part of routine care for the first 24 hours.
- If the mother's bladder gets full, it can stop the uterus from contracting.

- If the baby is crying and breathing normally, place the baby against the mother's skin as soon as possible.
- Help the mother and baby to start breastfeeding.
- Keep mother and baby warm.
- Check and re-check mother and baby for the first 24 hours.
- Check fundal tone and bleeding every 15 minutes for the first two hours after birth.
- $\,$ Encourage the mother to empty her bladder.

LEARNING ACTIVITIES

Key points

- Remember that the loss of blood may be quick in a large gush, or slow in a constant trickle, and both types can be dangerous.
- Visual estimation of blood loss is a difficult skill.
- Decision-making should be guided based on the mother's signs.
- Practicing normal third stage care is important to help remember all the steps.

Estimating blood loss

- It is easy to underestimate blood loss.
- Postpartum hemorrhage is blood loss greater than 500 ml.
- It is important to assess how the woman is doing. Even with smaller amounts of blood loss, signs that it is too much for a mother include sweating, panting, and feelings of anxiety, thirst, and dizziness. In addition, a pulse greater than 110, or systolic blood pressure less than 100 are signs of shock and advanced help is needed.

PRACTICE

Practice in teams of six or less with one facilitator per group. Practice delivering the baby and proceed through third stage care OR set up the simulator with the baby on the operator's stomach with the cord still attached. Practice normal third stage of labor as you would for real birth. Each learner will take turns managing a normal third stage of labor. Provide guidance as necessary and talk the learner through the steps pointing to the action plan. Be sure to give feedback to each learner about what they have done well, and what could be done better.

Facilitation note

Have everything set out in advance of practice. These items will be used during demonstration and simulations.

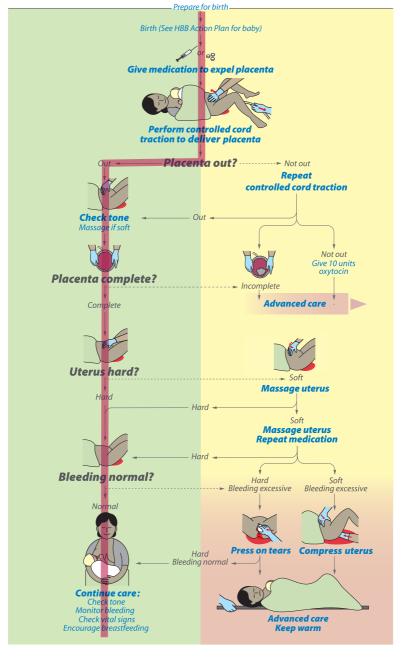
Supplies for practice

- Delivery supplies (page 9)
- Towels
- Gauze bandage
- Simulated blood
- Simulators

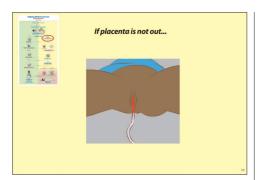
Helping Mothers Survive

Bleeding after Birth

ACTION PLAN



If placenta is not out...



Performance Expectation

The provider will be able to recognize a retained placenta and take actions to access advanced help.

Key points

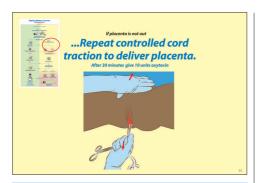
- The placenta usually delivers within 10 minutes, but can take one hour.
- If the placenta is not out in 30 minutes, repeat 10 units of oxytocin IM or IV.
- If the placenta is not out in one hour OR the mother is bleeding heavily at any time, get advanced help

The provider needs to know

- The placenta should deliver eight to nine minutes after the baby, but can take up to an hour.
- If the placenta has not delivered in 30 minutes, repeat 10 units of oxytocin.
 DO NOT repeat misoprostol.
- It may take several contractions for the placenta to deliver.
- If the placenta does not deliver in one hour, the risks for hemorrhage and infection are increased.
- If the mother is bleeding heavily at any time, advanced help is needed immediately whether the placenta is delivered or not.
- If the placenta has not delivered in 30 minutes AND the mother's bleeding is normal, the provider may continue to wait for an additional 30 minutes, but should begin contacting advanced help.
- A retained placenta may not cause heavy bleeding at first, but it can be very dangerous for the mother.

- Determine if the mother's bleeding is normal or heavy.
- If the mother is bleeding heavily, seek advanced help.
- If the mother's bleeding is normal and less than an hour has passed since the delivery of the infant, contacting advanced help should be considered.
- Help the mother change position, breastfeed, and empty her bladder, all of which can help the placenta deliver.

Repeat controlled cord traction to deliver placenta



Performance Expectation

The skilled birth attendant will be able to use controlled cord traction to deliver a retained placenta to minimize bleeding after birth.

Key points

- Continue controlled cord traction during each contraction, but never when there is not a contraction.
- Controlled cord traction must be gentle.
- Always stabilize the uterus when providing controlled cord traction.
- Never pull on the cord if you feel resistance.
- Pulling too hard or when you feel resistance can tear the cord off or pull the uterus out.
- If the placenta has not delivered after 30 minutes, repeat 10 units of oxytocin IM or IV.

The provider needs to know

- If the placenta does not deliver in one hour, the risks for hemorrhage and infection are increased.
- Pulling harder on the cord or pulling when resistance is felt is dangerous! You can pull the uterus out or tear the cord, making it difficult to get the placenta out and causing more bleeding.
- If bleeding increases, advanced help is needed.
- If the placenta has not delivered in one hour, advanced help is needed.

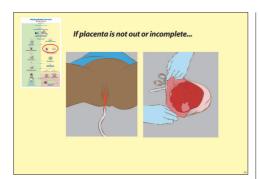
The provider needs to do

- Watch for the cord to get longer; this is a sign of a contraction or that the placenta is coming loose.
- During the contraction, gently and carefully pull the cord downward with each contraction to help deliver the placenta.
- Stabilize the uterus with one hand above the pubic bone.
- If resistance is felt, stop and try again with the next contraction.
- Continue to provide controlled cord traction with counter-traction during EACH contraction until the placenta appears at the opening of the birth canal.
- Continue to watch the mother's bleeding and contact advanced help for possible assistance.
- Contact advanced help if the placenta does not deliver in one hour or if the mother is bleeding too much.

Advanced Care Note

Learners should act within their scope of practice; this may include providing controlled cord traction as outlined here.

If placenta is not out or incomplete



Performance Expectation

The provider will be able to use active decision making skills to identify a retained or incomplete placenta and respond appropriately.

Key points

- An incomplete or retained placenta will need advanced help.
- Advanced care is needed for any mother who has not delivered her placenta within one hour even if she is not bleeding.

The provider needs to know

- If the mother is bleeding heavily at any time, advanced help is needed immediately whether the placenta is delivered or not.
- If the placenta has not delivered in one hour, advanced help is still needed even if the mother is not bleeding.
- A retained placenta may not cause a lot of obvious bleeding, but it can be very dangerous.
- Incomplete placentas can be difficult to identify.
- Constant, red trickling or lots of bright red

- bleeding could mean that a piece of the placenta remains inside the uterus and is causing bleeding to continue.
- If the uterus rises above the navel, it could mean clots are forming inside of it.

The provider needs to do

- Keep track of how long it has been since the baby was born.
- Examine the delivered placenta for missing lobes or pieces.
- Check mother's uterus for tone and height, while monitoring the mother's bleeding.
- Monitor the mothers pulse and blood pressure to watch for shock (pulse >110, systolic BP <100).
- Contact local providers able to give advanced help.
- If advanced help is not available, transport to a higher care facility will be needed.

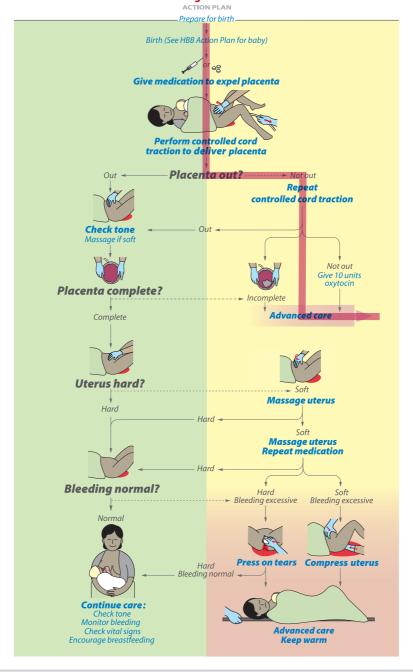
Advanced Care Note

If learners have additional training and authorization to provide more advanced levels of care, they should act within their scope of practice. This may include repeating oxytocin and manual removal of the whole or parts of the placenta.

- If the placenta is manually removed, the mother will require antibiotics to reduce the risk of infection.
- Manual removal should NEVER be attempted without proper training and authorization.
- Manual removal is very uncomfortable for the mother and can be dangerous.
- Proper advanced training is required to do this safely and effectively.

Helping Mothers Survive

Bleeding after Birth



Get advanced care



Performance Expectation

The provider will be able to develop a plan to get advanced help when needed.

Key points

- Quickly getting advanced help can save the mother's life.
- Never leave the mother to get help.

The provider needs to know

- Knowing when and where to get help is very important. It saves lives.
- Advanced help providers could be from the local community, or be able to get to the facility quickly.
- Advanced help providers have additional training and skills in things such as IV insertion and manual removal of the placenta.
- It is important to identify who can give this type of care before an emergency.
- Advanced health providers may include midwives, some physicians, nurses, and nonphysician clinicians.
- Contact information for advanced help providers should be available.
- If advanced help is not immediately available, the mother should be transported to a higher level of care.

- Only give care that you have been trained to provide. Giving care without appropriate training is dangerous.
- Have contact information (mobile phone number and/or address) for local providers available.
- Assign a family member or an assistant to get advanced help.
- NEVER leave the mother.
- If advanced help is not available, quickly put transport plan into action.

Transport to advanced care



Performance Expectation

The provider will be able to develop a sitespecific transport plan.

Key points

- Notify the referral facility that the mother is coming.
- It is better to transport the mother while she is stable than to wait.
- Mother and baby should be kept together.
- Checking mother for status changes throughout transport is important.

The provider needs to know

- A delay in getting needed care is one of the most common reasons women die from hemorrhage.
- Knowing where the mother should be taken and how to get her there will reduce this delay.
- Make every effort to call the facility to which you are transferring the mother so they will be prepared for the emergency.
- Transporting a mother while she is stable is safer than waiting until it is an emergency.
- Having a back-up transportation plan is important in case cars are broken or roads are bad.
- Mother and baby should always be kept together.

The provider needs to do

- Make site-specific plans for transporting to higher levels of care.
- Plans should include alternative modes of transportation, routes, contact people, and facilities when possible.
- Keep mother and baby together and warm during transport.
- Monitor for changes in bleeding, vital signs, or placental delivery during transport.

Facilitation note

As part of ongoing practice, review the transportation plan at your facility with your team and be sure everyone knows the plan. This must include back up plans in the event of closed roads or broken vehicles. If there is no plan, create one now.

Check for tears



Performance Expectation

The provider will be able to check the mother for tears and determine the appropriate course of action to manage bleeding from tears.

Key points

 If the uterus is hard and mother is still bleeding, tears are likely even if they cannot be seen. Get advanced help immediately.

The provider needs to know

- Lacerations or tears are the second most common cause of hemorrhage.
- A mother may bleed after birth for more than one reason, such as a tear and a soft uterus.
- A mother who has been circumcised or had an episiotomy is at increased risk for bleeding from tears.
- Episiotomies should not be cut on any mother unless there is a need such as if the mother has been circumcised.
- Episiotomies should only be done by an advanced care provider.
- If the tear is high in the vagina or in the cervix, you may not be able to see it.
- If the uterus is hard and the mother continues to bleed, but you can't see any tears, advanced help or transport is needed.

The provider needs to do

- To reduce risk of infection, maintain clean or sterile technique while checking the mother for tears
- Gently wipe away blood from the perineum to look for tears.
- Gently separate the labia of the vagina to look for tears.
- Continue fundal checks every 15 minutes for the first two hours after birth whether there is bleeding from tears or not.
- Get advanced help if the uterus is hard, and you cannot see the tears, but the mother is bleeding heavily.

Advanced Care Note

If learners have additional training and authorization to provide more advanced levels of care, they should act within their scope of practice; this may include checking the cervix for tears.

Apply pressure to tears



Performance Expectation

The provider will be able to manage bleeding from visible tears.

Key points

- Apply firm, steady pressure to slow bleeding from tears.
- Apply pressure with a clean or sterile cloth to reduce the risk of infection.

The provider needs to know

- Firm, steady pressure helps blood to clot and slows bleeding.
- Lacerations or tears increase the risk of infection for the mother. Clean or sterile technique can reduce this risk and protect the mother.

The provider needs to do

- Wear gloves and maintain clean or sterile technique to reduce the risk of infection for the mother.
- Press the clean cloth firmly against the tear.
- Hold pressure until the bleeding slows or stops.
- When the bleeding slows or stops, leave the cloth in place and turn the mother to her side.
 Her closed legs will continue to keep pressure on the tear.
- If the bleeding soaks through the cloth, do not remove it. Place another cloth over the soaked one, continue to hold steady pressure, and call for advanced help.

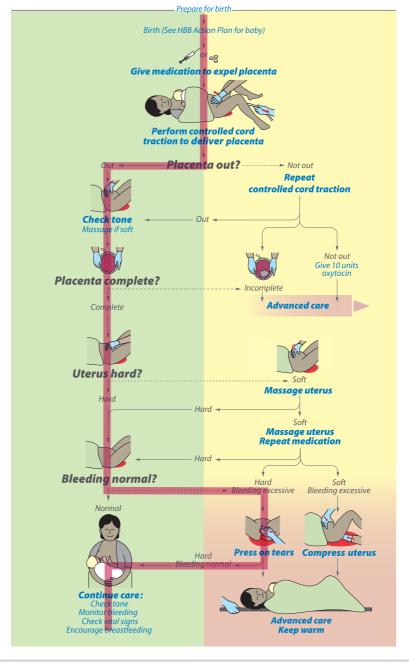
Advanced Care Note

If learners have additional training and authorization, they should act within their scope of practice; this may include stitching lacerations.

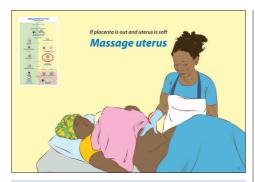
Helping Mothers Survive

Bleeding after Birth

ACTION PLAN



Massage uterus



Performance Expectation

The provider will be able to assess uterine tone and massage the soft uterus to make it hard.

Key points

- A soft uterus is the #1 cause of bleeding after birth.
- Massaging the uterus will make it contract.
- The uterus may be hard, but then get soft. Checking and re-checking is important.
- A full bladder can make the uterus aet soft.
- Massaging the uterus and checking the bleeding should be done every 15 minutes for the first two hours after birth.

The provider needs to know

- Uterine atony, or a uterus that will not contract after the placenta delivers, causes the vast majority of bleeding after birth.
- The uterus can be hard after delivery, but then get soft.
- The uterus and bleeding should be checked every 15 minutes for the first two hours after birth, and regularly for the first 24 hours.
 This is very important!
- If the mother's bleeding was normal but then increases, her uterus should be checked for firmness.
- Massaging the uterus can make a soft uterus get hard; it can also make blood clots come out, which can decrease bleeding.
- Watching the mother's bleeding while massaging the uterus is important to see if the bleeding slows as the uterus gets hard.
- A full bladder can make a uterus get soft, too.

The provider needs to do

- Check to see if the uterus is soft, and if bleeding is excessive.
- Press firmly into the mother's stomach, just below the navel to feel for the uterus.
- If soft, massage firmly in a circular motion until the uterus feels like a hard ball and the bleeding slows. It should feel hard like your forehead.
- If the bladder feels full, have mother empty it.
- Have the mother alert you if she feels her bleeding increase.

Advanced Care Note

If learners have additional training and authorization, they should act within their scope of practice; this may include catheterizing the mother's bladder if she is unable to void.

Massage uterus. Repeat medication



Performance Expectation

The provider will manage bleeding after birth due to uterine atony.

Key points

- Uterine massage and repeated 10 units oxytocin help the uterus to contract.
 If oxytocin is not available, you can give 200 mcg = 1 pill of misoprostol.
- If the uterus does not contract with massage and medication, immediate transport will be needed.

Dosages for 2nd round of medication OXYTOCIN 10 units IM OR

if oxytocin is NOT available
MISOPROSTOL 200 mcg = 1 pill by mouth

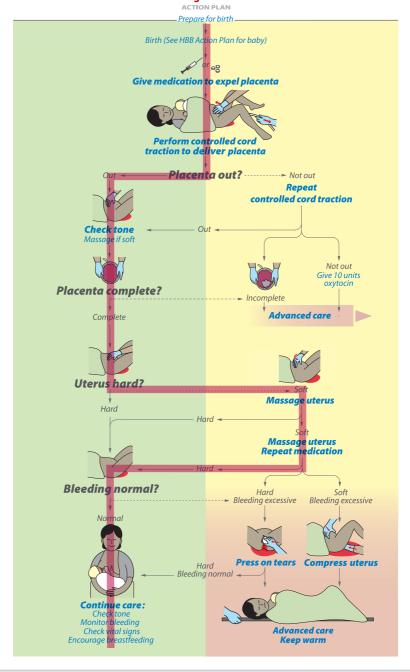
The provider needs to know

- When the uterus cannot contract, the mother is at risk for bleeding.
- If the uterus stays soft, the mother will keep bleeding because the blood vessels will continue to flow.
- Giving a second dose of medicine can help the uterus get hard, which will squeeze the blood vessels, slowing or even stopping the bleeding.
- Continuing to massage the uterus helps it to contract.
- If the mother is not responding to the massage and medication, immediate transportation to a higher level of care will be needed.

- Watch the mother's bleeding while massaging the uterus.
- Determine if massage is effective.
- If the uterus is not getting hard and the bleeding is not slowing, give second dose of medicine.
- Continue to massage uterus and watch bleeding.
- A soft uterus that is bleeding constantly is an emergency! While you are waiting to see if the second dose of medicine and massage are working, think about the transportation plan. If the woman is bleeding heavily, whether or not the uterus is contracted, she will need advanced care quickly.

Helping Mothers Survive

Bleeding after Birth



Compress uterus



Performance Expectation

The provider will be able to safely and effectively apply bimanual compression to the uterus that is bleeding excessively.

Key points

- Compressing the uterus is done in emergencies when bleeding does not stop with other measures.
- Putting anything into the vagina after birth can cause an infection.
- Handwashing and sterile gloves that reach to the elbow are important to reduce risk of infection.
- Squeeze the uterus between the fist in the upper vagina and the hand on the abdomen, until the bleeding is controlled and the uterus gets hard at least 5 minutes.
- Afterwards, transportation is required!

The provider needs to know

- Sometimes the uterine muscles do not respond to medicine or massage.
- The uterus may stay soft and bleed excessively.
- You must move quickly to decrease the amount of blood loss.

- Squeezing the uterus between your hands applies pressure to the vessels and may help the uterus contract and stop bleeding.
- Uterine compression can increase the risk of infection.
- The provider must have very clean hands and sterile, long gloves to prevent causing an infection inside the woman's uterus.
- Mothers who need this intervention have already lost a lot of blood and are more likely to bleed again.
- These mothers need to be watched even more closely and for longer than mothers who do not have this much bleeding.
- These mothers need to be transported to a higher level of care due to increased risk of infection and blood loss.

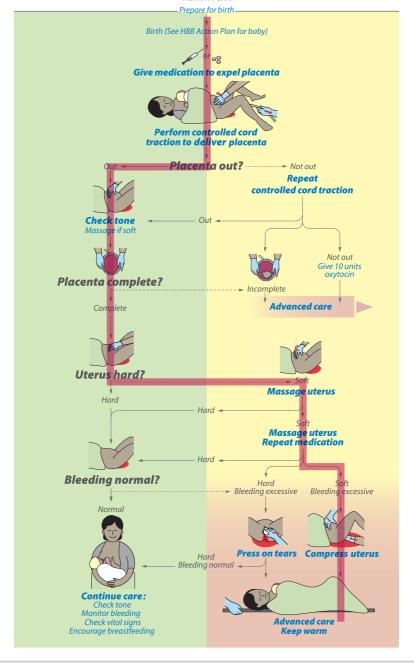
The provider needs to do

- Wash hands and put on sterile gloves that reach to the elbow. Use hand rub if water is not easily accessible.
- Explain briefly to the mother what you need to do.
- Gently insert hand into the vagina. All movements should be gentle but firm, as this is painful for the mother.
- Move your hand to the back of the vagina in front of the uterus. Do not put your hand into the uterus.
- Place your other hand on the mother's abdomen and squeeze the uterus between your hand and fist.
- When the uterus starts to contract and the bleeding stops, slowly release the pressure from your abdominal hand.
- Release the fist and slowly remove your hand from the vagina, bringing any clots with it.
- If possible, ask someone to arrange for transport while you are caring for the mother.

Helping Mothers Survive

Bleeding after Birth

ACTION PLAN



Emergency care and transport



Performance Expectation

The provider will be able to transport the mother safely.

Key points

- If the mother continues to bleed, emergency transport is necessary.
- If bimanual compression has been done, transport to advanced care is needed even if bleeding has slowed or stopped!
- Mother and baby should be kept together.
- Checking mother for status changes throughout transport is important.
- Back-up transport plans should be available in case of road closures or broken vehicles.

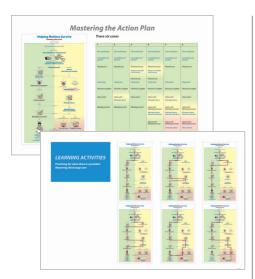
The provider needs to know

- A delay in getting needed care is one of the most common reasons mothers die from hemorrhage.
- Knowing where the mother should be taken and how to get her there will reduce this delay.
- Making contact with the hospital or clinic before arriving can reduce delay in treatment on arrival.
- Having a back-up transportation plan is important in case cars are broken or roads are bad.
- Mother and baby should always be kept together.
- Keeping mother and baby warm and monitoring for any changes in vital signs or bleeding are important during transport.
- Continuing to massage uterus throughout transport is important to slow bleeding.

The provider needs to do

- All providers should be able to describe sitespecific transportation plans for the next level of care.
- Plans should include alternative modes of transportation, routes, contact people, and facilities when possible.
- Keep mother and baby together and warm during transport.
- Monitor for changes in bleeding, vital signs, or placental delivery during transport.

LEARNING ACTIVITIES



Key points

- Postpartum hemorrhage can be effectively prevented and managed by mastering these scenarios.
- Following steps in the Action Plan will lead to everyone's ability to prevent and treat hemorrhage.
- Regular practice is the responsibility of the entire team.
- Regular practice will result in strong and automatic skills.

PRACTICE FOR WHEN THERE IS A PROBLEM

Practice in teams of six or fewer with one facilitator per group.

Retained placenta:

Begin simulation after the cord has been cut. The facilitator does not release the placenta during contractions but reports time since delivery to the provider (30 and 60 minutes).

Hemorrhage due to atony:

With the placenta out, tighten the cervical ribbon on the simulator. Begin the simulation after the mother has received routine third stage care with uterotonic and the placenta delivered. The facilitator will open the blood tank and leave the uterus soft.

PRACTICE ALL POSSIBLE SCENARIOS

While still in groups of six or fewer, practice random scenarios. The facilitator will choose a scenario and not tell the learners but will operate the simulator to show normal third stage, or retained placenta, or atony of various stages. Learners who are not participating in the scenario should trace what is happening on the Action Plan in their Provider's Guides and provide feedback to the learner who is practicing.

Facilitation note

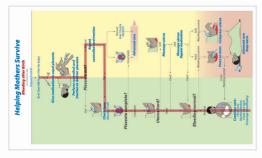
- As part of ongoing practice, review the transportation plan at your facility and be sure everyone knows the plan and back up plan. If there is no plan, create one now.
- Practice with a childbirth simulator is important for learners to develop this skill.
 During practice with the simulator for bimanual uterine compression, tightening of the cervical ribbon is essential.
 See page 9 of the birthing simulator "Directions for use" manual.
- At the facility, providers working in the team have a responsibility for leading regular practice schedules using:
 The simulator, Flipbook, Action Plan, delivery supplies, simulated blood.

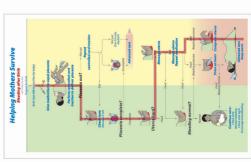
Trace six cases

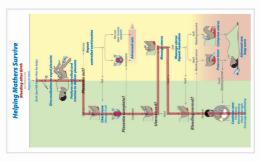
1	2	3	4	5	9
Give medication	Give medication	Give medication	Give medication	Give medication	Give medication
Controlled cord traction	Controlled cord traction	Controlled cord traction	Controlled cord traction	Controlled cord traction	Controlled cord traction
Placenta out	Placenta out	Placenta not out Repeat controlled cord traction	Placenta not out Repeat controlled cord traction	Placenta out	Placenta out
Check tone	Checktone	Placenta out Check tone	Placenta out Check tone	Check tone	Check tone
Placenta complete	Placenta complete	Placenta complete	Placenta complete	Placenta complete	Placenta complete
Uterus hard	Uterus soft Massage uterus	Uterus hard	Uterus soft Massage uterus	Uterus soft Massage uterus	Uterus hard
Bleeding normal	Bleeding normal	Bleeding normal	Uterus soft Bleeding excessive Massage uterus Repeat medication	Uterus soft Bleeding excessive Massage uterus Repeat medication	Uterus soft Bleeding excessive Massage uterus Repeat medication
			Uterus hard Bleeding normal	Uterus soft Bleeding excessive Compress uterus	Uterus hard Bleeding excessive Press on tears
Continue care	Continue care	Continue care	Continue care	Advanced care Keep warm	Continue care

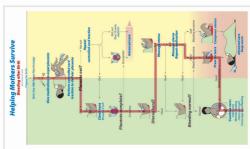
Provider needs to do

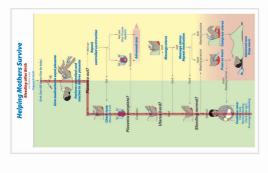
- Before practice with the simulator, trace these scenarios on the Action Plan. Make up other scenarios that you might encounter and trace those, too.
- While your team members are practicing, trace the scenario they are managing on the Action Plan.
- Provide assistance to them as they request it.
- Provide supportive feedback.

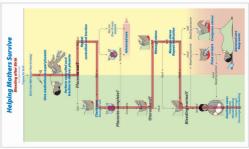












Glossary

Active communication Active communication occurs when team members are able to listen

and speak to each other in a clear and direct way, so that everyone

understands and works together.

Amniotic The amniotic sac is the clear, thin tissue that holds the baby and is attached to the

placenta. Amniotic fluid is the liquid that fills the sac. Amniotic fluid is what leaks

out of the mother after the sac is broken.

Anxiety Anxiety is a feeling that people have when they are worried, nervous, or

scared. Providers may have anxiety about caring for a mother who is

bleeding heavily if they do not know what to do.

Authorization Authorization is permission from the government or an employer that allows

a provider to perform a given skill or action.

Bladder The bladder is the part of the body where urine is stored.

Circumcised A mother has been circumcised when parts of the opening to her vagina

have been removed.

Contract To contract means to get smaller. When a uterus contracts, it gets smaller

and harder.

Contraction A contraction is what makes the uterus get smaller, when the muscles get

tight and hard.

Controlled cord traction Controlled cord traction is the act of helping to deliver the placenta by

gently pulling the cord in a downward direction during contractions and

while stabilizing the uterus.

Episiotomy An episiotomy is when the opening of the vagina is cut to make a larger

opening during childbirth.

Excessive Excessive means too much, a lot, or more than is normal. If a woman has

excessive bleeding she has a lot of bleeding or more than normal.

Fundus The fundus is the top of the uterus. The fundus is the best place to check if

the uterus is hard.

Laceration A laceration is a tear in tissue or skin.

Massage To massage is to firmly rub a part of the body. After delivery we massage the

uterus by rubbing the fundus, which helps the uterus get hard.

Perineum The perineum is the area between the opening of the vagina and the opening

of the rectum.

Placenta The placenta is an organ inside of the mother's uterus that feeds the baby as

it grows inside.

Referral facility A referral facility is any hospital or clinic where more advanced care can be

given to the mother.

Resistance Resistance is any force that pushes against you as you apply force in the

other direction.

Retained To retain means to keep, or not let go. A placenta is retained when the

uterus will not let it go.

Route for administration The route for administration is the way a medication is given to a patient.

The route for administration of oxytocin is an injection into a big muscle.

Stabilize To stabilize is to make sure that something will not move. When providing

controlled cord traction, we stabilize the uterus by using one hand to press

upwards against it so that it will not move.

Tone The hardness or softness of something. To check uterine tone means to see

how hard or soft the uterine muscle is.

Uterotonic A uterotonic is a medication given to make the uterus contract and get hard.

Uterus The uterus is the organ inside of a woman where the baby grows. It is also

called the womb.

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Notes

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ACTION PLAN

