

CHAPTER 11

Opening: stage 1 of labor

In this chapter:

What happens during stage 1 of labor..... 167

Labor patterns in stage 1. 168

When you first arrive..... 168

Helping the mother relax in stage 1 169

Touch 169 Breathing 170

Sounds 169

Signs for the midwife to check in stage 1 170

The baby’s position 170 Bleeding during labor 183

The baby’s heartbeat 172 Pain in the womb 183

The bag of waters. 174 Watch for signs of progress. 185

The mother’s pulse 178 Labor is too long. 186

The mother’s temperature. 178 Safe ways to encourage labor 191

The mother’s blood pressure 180

Opening: stage 1 of labor

CHAPTER

11

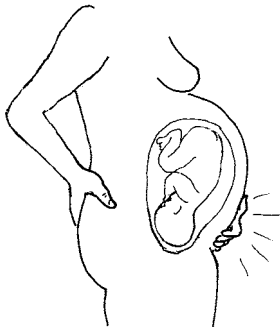
Stage 1 of labor (also called dilation) begins when contractions start to open the cervix. It ends when the cervix is completely open. Stage 1 is usually the longest part of labor, but it lasts a different amount of time at each birth. Stage 1 could be less than an hour or it could be a day and a night or more.

What happens during stage 1 of labor

Stage 1 has 3 parts: light labor, active labor, and late labor.

In **light labor**, the contractions are usually mild and short (about 30 seconds long) and come every 15 or 20 minutes. They are felt low in the belly or back. The contractions may hurt a little, like the cramps of monthly bleeding or mild diarrhea. Or they may not be painful at all — they may feel more like pressure or tightening. The mother can usually walk, talk, and work during these contractions.

As labor continues, contractions get longer, stronger, and closer together. They usually start coming 3 to 5 minutes apart. This is called **active labor**. For most women, the labor becomes very intense. The mother will usually need to stop everything and pay full attention during a contraction. She may feel tired and need to rest between contractions.



In **late labor**, the contractions may last up to 1 or 1 ½ minutes, with only 2 or 3 minutes between them. Sometimes the mother feels that the contractions never stop. But if you put your hand on her belly, you can feel the womb get soft and then hard again.



Labor patterns in stage 1

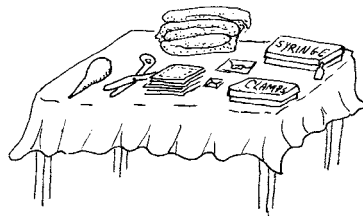
Labors can follow many different patterns:

- Some labors start with weak contractions and get strong slowly and steadily over several hours.
- Some labors start slowly and suddenly speed up.
- Some labors start strong, then get weaker or even seem to stop, and then become strong again.
- Some labors follow other patterns.

All these labors are OK as long as they get strong enough to open the cervix completely.

When you first arrive

When you arrive at a birth ask the mother how she is feeling. Make sure the birth area is clean and arrange your supplies. All the tools for the birth, and anything that will cut the skin, should be sterilized.



Talk to the woman and her family to be sure they can still get to medical help in an emergency.

Wash your hands well for 3 minutes (see page 53) and ask anyone who may touch your tools, the mother's genitals, or the baby to wash their hands in the same way.

—● **Note:** Clean hands do not stay clean for long. If you touch anything other than the mother's genitals, you must wash again.



The mother should bathe too. If possible, she should wash her genitals, hands, and body at the beginning of labor.

Talk to the woman and her family about what may happen during labor, and answer any questions they have. Choose a family member who can help in an emergency, and explain to that person what kind of help you might need.

Wash your hands and change your gloves after touching stool or anything else.

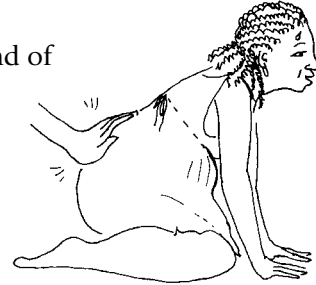
Helping the mother relax in stage 1

Labor can be more difficult when the woman is afraid or tense. Fear is common in labor, especially for first-time mothers. Reassuring the woman that the pain she has is normal can help lessen that fear. Sometimes the most helpful thing to do is to help a woman relax her body.

Touch

Touch can help a woman in labor, but find out what kind of touch she wants. Here are some examples of touch that many women like:

- A firm, still hand pressing on the lower back during contractions.



- Massage between contractions, especially on the feet or back. (Do not massage the belly. It will not speed labor and can cause the placenta to separate.)

- Hot or cold cloths on the lower back or belly. If the mother is sweating, a cool wet cloth on the forehead usually feels good.



Sounds

Making sounds in labor can help women to open. Not all women want to make noise, but encourage women to try.

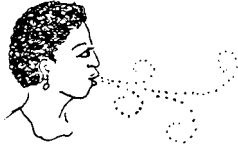
Low sounds, like growling animal noises or humming can be very helpful. Some women chant or sing. The woman can be as loud as she wants to be.



Some noises can make women feel more tense. High-pitched sounds and screams usually do not help. If she starts to make high, tense sounds, ask her to make low sounds. You can make low sounds yourself to guide her.

Breathing

There are many kinds of breathing that may make the first stage of labor easier.



Slow, gentle breathing: Ask the woman to take a long, slow breath. To breathe out she should make a kiss with her lips and slowly blow. Breathing in through the nose can help her breathe slowly.

Hee breathing: The woman takes a slow deep breath and then blows out short, quick breaths while she makes soft “hee, hee” sounds.



Panting: The woman takes quick, shallow breaths.

Strong blowing: The woman blows hard and fast.

Encourage mothers to try different ways of breathing throughout labor.

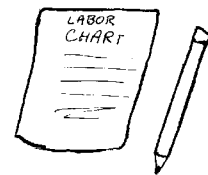
Signs for the midwife to check in stage 1

When you first arrive at a labor, or when the mother comes to you, you should check her and the baby thoroughly. Some signs usually only need to be checked once. Other signs must be checked more than once.

Signs to check during stage 1

- womb measurement when you first see the mother in labor
- baby’s position when you first see the mother in labor
- baby’s heartbeat every hour
- mother’s pulse every 4 hours
- mother’s temperature every 4 hours
- mother’s cervix dilation every 4 hours
- mother’s blood pressure every hour

Check all these signs more often if there are warning signs.
Write what you find on a chart like the one on page 165.



Measuring the womb

Measuring the womb will let you know if the baby is fully grown or if the birth is early. See page 130 for how to measure the womb. See page 221 for how to care for a very small baby or a baby who is born early.

The baby’s position

Checking the baby’s position (see page 135 to learn how) can tell you:

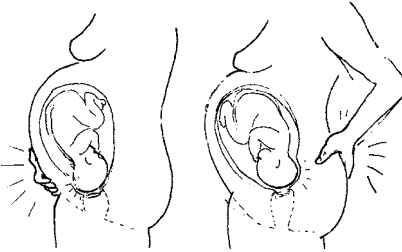
- if the baby is lying head down, and which way he faces.
- if the baby is moving down through the mother’s pelvis.

Is the baby lying head down? Which way does he face?

Most babies lie with their heads down, facing the mother's back or side. This is the best position for the baby, because the back of the baby's head presses on the cervix and helps labor get stronger.

If the baby is head down but faces the mother's belly, the labor may be longer. But babies in this position can usually be born without problems.

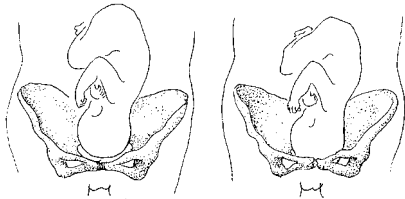
If the baby is facing the mother's side or back, the pain is usually felt in the front.



If the baby is facing the mother's front, she may feel pain in her lower back.

If the baby is not head down, see pages 190 and 191.

Is the baby moving down through the mother's pelvis?



This baby is still high.

This baby is low, or engaged.

The baby rests above the mother's pelvis during most of pregnancy. In late pregnancy or early labor, the baby's head usually starts to move down through the mother's pelvis. When this happens, we say the head is engaged. Engagement is a good sign, because it usually means the baby will fit through the pelvis.

Check if the baby is engaged in the mother's pelvis or if he is still high in the mother's belly:

1. Find the mother's pubic bone (just below her hair line).



2. Find the baby's head. If you can feel the curve of the head above the pubic bone, it is not engaged.



3. If the sides of the baby's head go straight down and you cannot feel where it curves, it is probably engaged.



If the woman is in active labor and the head stays high, the mother's pelvis may be small or the baby's head may be in a bad position (see page 189 for reasons a baby may not fit). Watch for signs of progress (see page 185), especially if it is a first baby and the head is not engaged. If the waters break while the head is high, the cord may be washed down in front of the baby's head (a prolapsed cord, see page 176). This is very dangerous for the baby.

The baby's heartbeat

Listen to the baby's heartbeat about 1 time every hour during labor, or more often if there is a problem. See page 139 to learn how to check the baby's heartbeat.

The best time to listen to the baby's heartbeat is soon after a contraction stops. Listening to the baby's heartbeat can tell you about his position and health.

Note: If you cannot hear the baby's heartbeat during a contraction, it usually does not mean the heart has stopped. It just means the wall of the womb is thicker during the contraction and hard to hear through, or that the contraction is moving the baby away from your ear. If you can hear the baby's heartbeat immediately after a contraction and it is normal, it was probably normal during the contraction too.

The baby's position

Finding the place where the heartbeat is loudest can help you know if the baby is head down, breech (bottom down), or sideways. See page 135.

The baby's health

HEALTHY SIGNS Most babies' hearts beat between 120 and 160 times a minute during labor. The heart may speed up or slow down. At times, the heart may be as fast as 180 beats a minute or as slow as 100 beats a minute. If a baby's heart beats faster than 180 times a minute or slower than 100 beats a minute, it should quickly come back to normal at the end of a contraction or with a change in the mother's position.

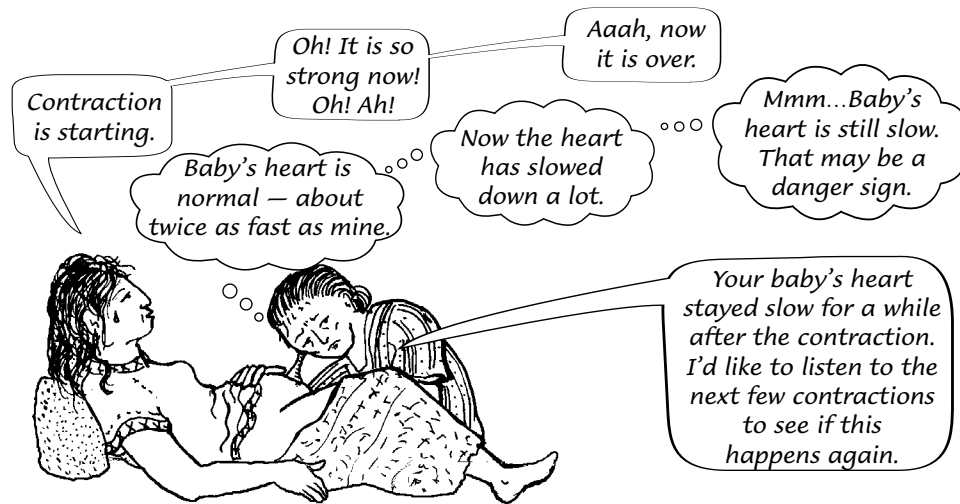
WARNING SIGNS Baby's heartbeat is slower than 100 beats a minute or faster than 180 beats a minute.

Slow baby heartbeat — slower than 100 beats a minute, or slower than 120 beats a minute for several minutes

These things can cause the baby's heartbeat to drop below 100 beats a minute:

- Cord is very short or is being pinched.
- The baby is not healthy.
- There is not enough amniotic water.
- Placenta does not work well, usually because the mother has high blood pressure or the baby is late.
- Placenta is separating from the womb.
- Contractions are too strong. (This is rare for a normal labor. But too-strong contractions can easily happen to a woman who is given medicines to strengthen labor.)

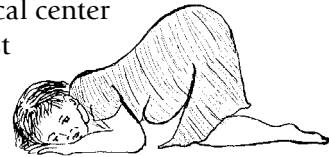
If you notice that the baby's heartbeat is slow after a contraction is over but then goes back to normal, the baby may be having trouble. Listen to several contractions in a row. If the heartbeat is normal after most other contractions have ended, the baby is probably OK. Ask the mother to change position to take pressure off the cord. Listen again after she moves to see if this helps, and keep checking the baby's heartbeat often during the rest of labor to see if it slows down again.



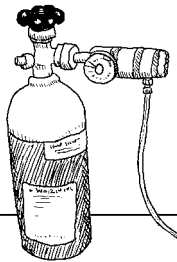
If the baby's heartbeat is slower than 100 beats a minute and stays slow until the next contraction or almost to the next contraction, the baby is in danger. This is especially true if there are other warning signs, like green waters or a long labor. The baby could be very weak at birth or have brain damage.

You must think about how far you are from a medical center and decide how soon you think the mother will give birth. If the birth is near and the mother is ready to push, it may be better to stay home and deliver the baby quickly.

Otherwise, take the mother to a medical center for help. Have her get in the knee-chest position, with her head on the floor and her hips up. This can help bring more blood and oxygen to the baby.



If you can, it may help to give the mother oxygen.



- give 8–10 liters (L) oxygen each minute

Fast baby heartbeat — faster than 180 beats a minute

These things can make the baby's heartbeat speed up to more than 180 beats a minute:

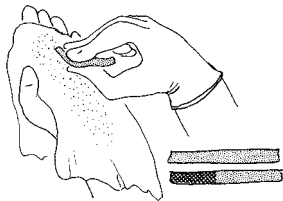
- The mother is dehydrated (see page 159).
- The mother or baby has an infection (see page 179).
- The mother is bleeding (see page 183).
- The mother has been in labor for too long (see page 186).
- The mother's womb is tearing (see page 184).

If the baby's heartbeat stays fast for 20 minutes (or 5 contractions), get medical help.

The bag of waters

The bag of waters usually breaks late in stage 1. But it may break at any time — before labor starts or not until the baby is born. Sometimes the waters break with a great gush. Sometimes they just leak a little.

When you arrive at the birth place, ask the mother if her waters have broken. If she is not sure, check to see if her genitals and underclothes are wet. Since this wetness could be waters or urine, smell the pad to see if it smells like urine.



If the paper turns blue or purple, the wetness is waters.

Or, if you have nitrazine papers, put the paper into the wetness. If the paper stays orange, the wetness is urine. If it turns blue or purple, the wetness is probably waters. (Waters and urine can be mixed together. If the paper stays orange or the liquid smells like urine, but you still think the waters have broken, wait and test again later.)

Listen to the baby's heartbeat right after the waters break. If the baby's heartbeat drops below 100 beats a minute, get medical help.

Check the color of the waters

When the waters break, they should be clear or a little pink. It is also OK if there are white dots in the waters. But yellow or green waters are a warning sign. They mean the baby has probably passed stool inside the womb. Sometimes the waters have clumps of stool that you can see.

Stools begin to form in the baby's body during pregnancy, but the baby does not usually pass stool until after birth. A baby's first stool is tarry and sticky. It is called meconium.

Stool in the waters may be a sign that the baby is having problems. There is also a danger that the stool can get in the baby's mouth and nose. Then, when the baby begins to breathe, the sticky stool can get into his lungs. This can make it hard for him to get enough air, and sometimes causes a lung infection, brain damage, or death.

What to do

Look at the waters. If they are a very light yellow or green and there are no other warning signs, the stool is old, and the baby is probably OK. Listen to the baby's heartbeat throughout the labor and watch for other warning signs.

If the waters are darker, thick, or have lumps of meconium in them, get medical help. A medical center should have tools to clear the baby's mouth and lungs when he is born, and can treat him if there is a problem with his lungs.

If you cannot get medical help, be prepared to help the baby breathe after the birth (see page 241).

Note: If the baby is breech, it is normal for him to pass stool while he is being born. This stool will not usually cause problems.

Think about how long the waters have been broken

Once the bag of waters breaks, germs can move quickly into the womb. To avoid infection, the baby should be born within one day and one night (24 hours) after the waters break. This means that labor should start within 12 hours after the waters break.

While waiting for labor, help the mother keep germs out of her vagina:

- Do not put anything into the mother's vagina.
- Make sure the mother does not sit in water to bathe.
- Make sure the mother does not have sex or put anything in her vagina.
- Ask the mother to clean her genitals from front to back after urinating or passing stool.
- Regularly change the woman's underclothes or the bedding she is lying on.



You can try a home method to help labor start or get stronger (see page 191). **Do not give the mother medicines like oxytocin or misoprostol at home to start labor.** These medicines should only be used in a medical center.

When to get medical help

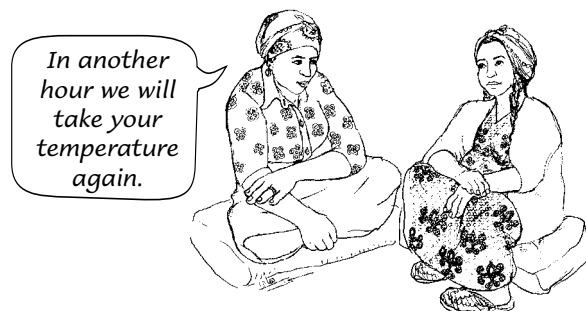
Get help if labor has not started in 12 hours, or if it starts but stays weak **and** any of the following are true:

- The baby is early (less than 8 months).
- There are signs of infection (see page 179).
- The woman is at risk of having a sexually transmitted infection (see Chapter 18) or she recently had a bladder or vaginal infection.
- The mother has put something in her vagina since her waters broke.

You might want to go to a medical center or hospital even if there are no warning signs. At a medical center, medicines can be given to safely start the labor.

Think about the time it takes to get to the medical center. If the medical center is less than 12 hours away and it is a safe time to travel, and labor has not started 12 hours after the water broke, you should start on your way to the medical center. If the medical center is more than 12 hours away, give the mother antibiotics to prevent infection (see page 179) and start on your way there right away.

If you decide to stay at home

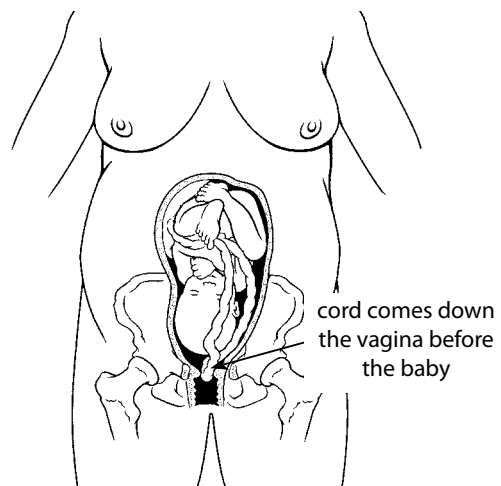


Watch the mother closely for signs of infection. If you have a thermometer, take her temperature every 4 hours. If any signs of infection develop, get medical help. See page 179 for more on infection in labor and how to treat it.

Watch for the cord coming down in front of the baby (prolapsed cord)

Rarely, when the bag of waters breaks, the cord comes down the vagina in front of the baby's head. The cord is more likely to slip past the baby's head if:

- there is a lot of water.
- the baby is small or less than 8 months.
- the baby is in a difficult position.
- the baby was high in the pelvis when the water broke.



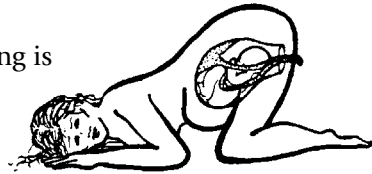
If the cord gets caught in front of the baby's head, or on the side of his head, it can be squeezed between the head and the mother's bones. This can slow or stop the flow of blood through the cord. The baby may not get enough oxygen which can lead to brain damage or death.

WARNING SIGNS

- The cord comes out of the vagina.
- The baby's heartbeat suddenly slows — especially right after the waters break — and does not return to normal.
- The baby's heartbeat gets very slow (fewer than 100 beats a minute) during each contraction.

What to do

If the baby is alive, you must act fast. The best thing is usually to keep the head off the cord and get the mother to a hospital for a cesarean surgery as soon as possible.

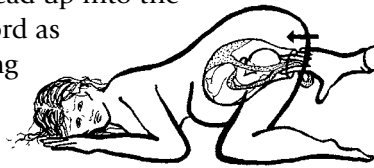


If you cannot see the cord, wash your hands well and put on very clean gloves. Then feel inside the vagina for a cord in front of the baby's head. Touch the cord gently to feel for a pulse.

If you can see the cord coming out of the vagina, touch it gently to feel for a pulse.

If the cord has a pulse, the baby may survive, but only if you get medical help right away. The mother will need a cesarean to save the baby. While you travel, put the mother in the knee-chest position with her hips up and hold the baby's head off the cord.

With a gloved hand, gently push the baby's head up into the mother's body, away from the cord. Touch the cord as little as possible, but if some of the cord is coming out of the vagina, try to put it back in so it will stay warm and wet (if you cannot get it back in, wrap it in a clean cloth).



If medical help is many hours away **and** if the birth is going to happen very soon, you may need to help the woman push the baby out as quickly as she can at home. If the baby is born alive, he may need rescue breathing (see page 242).

If the cord has no pulse, the baby has already died. Stay at home to deliver the baby.

The mother's pulse

Check the mother's pulse every 4 hours, or more often if there is a problem. See page 120 to learn how to check the pulse.

During labor, a woman's pulse should be about the same as it was during pregnancy — between 60 and 100 beats a minute between contractions. It can be faster during a contraction.

A fast pulse can be caused by different problems:

- infection (see page 179)
- blood loss (see pages 183 and 184)
- dehydration (see page 159)
- fear (see page 169)



A fast pulse can be normal in labor, especially in second stage. This can be OK if it goes back to its usual rate after the birth.

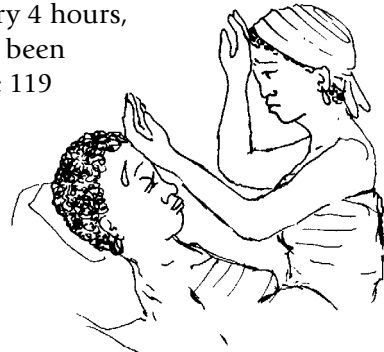
A very slow pulse or a pulse that keeps getting slower can be a sign of severe blood loss and shock. Look for signs of bleeding inside the body (see page 184).

The mother's temperature



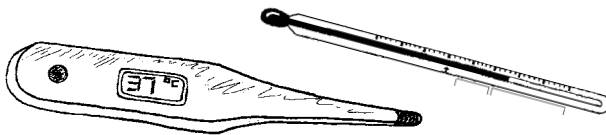
Check the mother's temperature every 4 hours, or more often if her temperature has been high or her water is broken. See page 119 to learn how to check the mother's temperature.

If the mother feels warm, or if her temperature is between 37°C (98.6°F) and 38°C (100.4°F), she may be dehydrated. Have the mother drink more fluids and check her temperature often to see if it goes up more.



WARNING SIGNS Mother has a fever — a temperature of 38°C (100.4°F) or above — or she feels hot to the touch.

It can be normal for a woman to get very warm in labor, but a fever above 38°C (100.4°F) is usually a sign of infection.



If the mother has a fever, check for these other signs of infection:

- The baby's heartbeat is more than 180 beats a minute.
- The mother's pulse is more than 100 beats a minute.
- The mother's vagina smells bad.
- The mother has pain when she urinates.
- The mother's belly is sore or tender to the touch.
- The mother has pain in the sides or kidneys.

What to do

Because all infection in labor is dangerous, you should treat fever right away. Begin by giving the woman lots of fluids, like water, rehydration drink (see page 160), or herbal teas that lower temperature. Giving the mother a sponge bath with cool (not cold) water also may help.

It can be difficult to know what is causing a fever and infection. If you think the woman is seriously dehydrated, give rectal fluids (page 342) or IV fluids if you know how (page 350).



Check for signs of bladder or kidney infection (see page 128) and malaria (see page 98). If she does not seem to have one of those infections, she may have an infection of the womb or amniotic sac. Go to a medical center for antibiotics. If medical help is more than an hour away, give one of the following antibiotics on the way.

For womb infection in labor**On the way to the hospital**

- inject 2 g ampicillin in the muscle, then reduce the dose to 1 g, 4 times a day

and

- inject 80 mg gentamicin..... in the muscle, 2 times a day

and

- give 500 mg metronidazole by mouth, 3 times a day

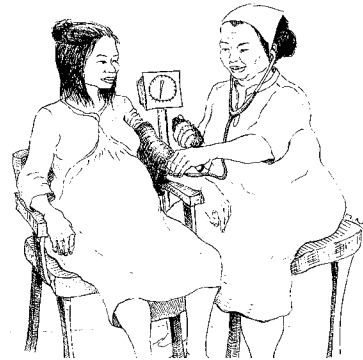
Stop giving these antibiotics 24 hours after birth, if the woman has no fever.



The mother's blood pressure

If you have a blood pressure cuff and stethoscope, check the mother's blood pressure once every hour, between contractions (see page 122). Each time you check her blood pressure, write it down. This way you can watch for changes over time.

As long as her blood pressure stays below 140/90 and is close to the blood pressure she had during pregnancy, checking it every hour is enough. If you notice her blood pressure going up, even just a little, check it every 30 minutes.



WARNING SIGNS

Blood pressure goes down

If blood pressure suddenly drops 15 points or more in the bottom number, this is a dangerous warning sign. This usually means that the mother is bleeding heavily. If you do not see any bleeding, her placenta may have detached (see page 184) — she needs medical help now.

Blood pressure goes up

Blood pressure of 140/90 or higher is a warning sign. The woman may have pre-eclampsia. Pre-eclampsia can cause convulsions (eclampsia), detached placenta, bleeding in the brain, or a severe hemorrhage. The baby may die, and the mother may die as well. Page 125 explains more about pre-eclampsia.



If the mother has blood pressure of 150/90 or higher and protein in her urine, she already has pre-eclampsia. Get medical help right away.

If a woman has rising blood pressure, but you are not sure yet that she has pre-eclampsia, check for these other signs:

- strong headaches
- blurred or double vision
- sudden, steady pain in the top of the belly
- overactive reflexes (see page 125)

All of these can be signs of serious pre-eclampsia — get medical help. If she ever has blood pressure of 150/110 or higher, it does not matter if she has any other signs — get medical help immediately.

On the way to a medical center, the woman should lie on her left side and stay quiet and calm. If possible, the inside of the vehicle should be dark. Her labor may happen very fast. Stay by her side while you travel in case the baby is born or she has a convulsion.

Mother has convulsions

Pre-eclampsia can lead to convulsions. This is called eclampsia.

When a woman has a convulsion, she may have some or all of these signs:

- rolling eyes
- twitching hands and face
- stiff, rigid, or shaking body
- blue skin
- loud, bubbly sound while breathing
- unconsciousness



She may bite her tongue, urinate, or pass stool. She may have several convulsions in a row. Then she may sleep for a while. When she wakes up, she may be confused and not know what happened.

A convulsion may last anywhere from a few seconds to many minutes. Some convulsions are stronger than others, but **all convulsions are very dangerous**. More than half of the women who have convulsions in labor will die, or their babies will die, or both. Get medical help as soon as possible when the convulsion is over.

What to do

1. Stay calm.
2. Do not put anything in the mother's mouth. She must be allowed to breathe freely.
3. Put the mother on her side, so she does not breathe in her spit or vomit.
4. Remove hairpins or other sharp objects which could harm the mother.
5. Give the mother oxygen, if you have it (see page 173).
6. Give the mother medicine.

Medicines for eclampsia

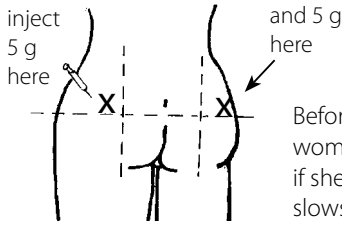
Medicines for eclampsia are best used in a medical center because they have many dangerous side effects. These medicines can cause the mother to have trouble breathing, or cause the baby to have trouble breathing after he is born, especially if the mother is given more than the recommended doses. We explain how to use these medicines on the next page because in an emergency they can save a woman's life. But you should use them only if you have been trained and you are on the way to a hospital or medical center.

If the mother is having a convulsion, give her magnesium sulfate. If you do not have magnesium sulfate, give diazepam.



Magnesium sulfate for convulsions

- give 10 g magnesium sulfate 50% solution..... 5 g injected deeply in each buttock. Then inject 5 g magnesium sulfate 50% solution every 4 hours for the next 24 hours, if needed, alternating buttocks.



Before giving magnesium sulfate, count how many breaths the woman is taking each minute. Do not give magnesium sulfate if she is taking fewer than 12 breaths a minute. If her breathing slows to fewer than 12 breaths a minute after giving her magnesium sulfate, get medical help immediately.

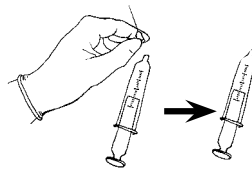
Diazepam for convulsions (if you do not have magnesium sulfate)

During a convulsion, diazepam must be given rectally. It will not work well injected in the muscle, and the woman will not be able to swallow pills.

To prepare the medicine:

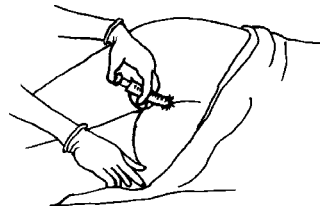
Wash and dry your hands and then put on plastic gloves.

Fill a syringe with the injectable drug and **take the needle off the barrel.**



Put the whole barrel of the syringe through the anus and push the plunger in to empty it inside the mother's rectum.

Keep the barrel of the syringe in the rectum for at least 5 minutes. It will act as a plug to keep the medicine from coming out.



Injectable diazepam

- give 10 mg injectable diazepam..... in the rectum, after the first convulsion.
then if there are other convulsions
- give 10 mg injectable diazepam..... in the rectum, one time only; wait at least 20 minutes after the first dose.

If you cannot get injectable diazepam

- crush 20 mg of diazepam pills into a fine powder and mix them with clean, cool water (the pills will not dissolve, but mix them with water anyway).

First take the needle off of a syringe barrel. Then fill the barrel with the crushed pills and water and put the whole barrel of the syringe up into the rectum — the same as above.

(If some fluid leaks out of the rectum, it is OK to give 5 mg more diazepam.)

Bleeding during labor



Some blood from the mother's vagina is normal. The mucus plug can be very red and bloody looking. But blood clots, bright red blood, or losing more than 200 milliliters (1 cup) of blood during labor are warning signs.

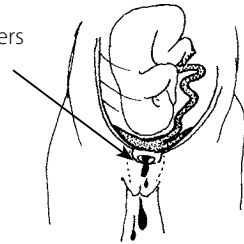
Bleeding without pain (placenta previa)

If a mother is bleeding and has no pain between contractions, she may have placenta previa, which means the placenta is covering the cervix (see page 112). There are usually signs of placenta previa in late pregnancy, but sometimes the first sign is bright red bleeding (enough to soak a pad) while the mother is in labor.

Get medical help immediately.

A woman with placenta previa can bleed to death very fast once the cervix is open, so it is not safe to wait and see if the bleeding gets worse. Treat for shock on the way to a medical center (see page 239).

A placenta that covers the cervix, like this, will bleed fresh red blood when the cervix opens.



WARNING! Never do a vaginal exam if there is unusual bleeding. You could poke a hole in the placenta with your finger and make the bleeding much worse.

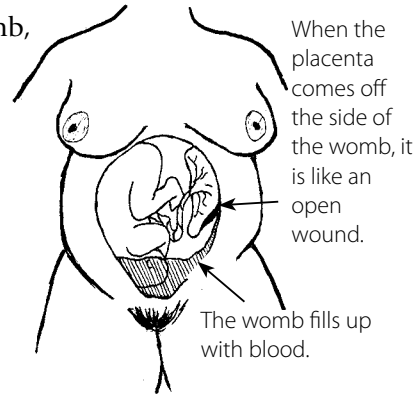
Pain in the womb

If the mother feels pain between contractions and the womb stays hard, or she feels unusual pain during contractions, it could mean that:

- the placenta is detached from the wall of the womb.
- the womb is torn.
- the womb is infected.

Detached placenta (abruption)

If the placenta separates from the wall of the womb, both the mother and baby are in serious danger. The mother may die from loss of blood because the place where the placenta was attached starts to bleed. The womb cannot squeeze this place closed while the baby is inside. The baby may die or have severe problems because she cannot get enough oxygen from her mother.



WARNING SIGNS

- The mother may have bleeding from the vagina, but **sometimes no blood comes out**.
- The mother has pain between contractions. The pain may be very mild at first, so pay close attention to any unusual pain. The danger is greatest if the pain gets worse and worse.
- The womb is hard between contractions, or hard all the time.
- The mother's belly is sore and tender to the touch.
- The mother has signs of shock (see page 239).
- The baby's heartbeat can be very fast (faster than 180 beats a minute) or very slow (slower than 100 beats a minute), or the baby could be dead (no heartbeat).
- The baby moves less or not at all.

If you see these signs of detached placenta, get medical help now.

Do not wait! On the way to the hospital, treat the mother for shock (see page 239).

Torn womb

Any of these things can cause a torn womb:

- The mother had a cesarean surgery in a past birth.
- The mother has had 5 or more babies.
- The baby is lying in a difficult position.
- The mother's labor is very long and strong.
- The mother has a deformity of the pelvis.
- Someone has been pushing on the mother's belly, or her belly has been hit or injured.
- The mother has been given medicine (either by mouth or by injection) like oxytocin to start labor or make it stronger.

If you see signs of a torn womb, get the mother to the hospital right away — even if it is very far away! She can bleed to death very quickly, and the baby will also die. On the way, treat the mother for shock (see page 239). The mother will need an operation to stop the bleeding, blood to replace what she has lost, and antibiotics to prevent infection.

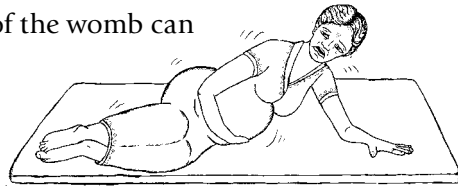
Because a torn womb is inside the mother, you cannot see it. But these signs tell you that the womb may be torn:

WARNING SIGNS

- The mother has very bad pain between contractions, then a tearing feeling in her belly, then less pain.
- The mother's contractions stop.
- The mother may bleed from the vagina (although sometimes no blood comes out).
- The mother has signs of shock (see page 239).
- The baby feels loose (and sometimes higher) in the belly and has no heartbeat.

Infected womb

Pain in the womb can also be caused by infection. An infected womb happens when harmful germs get inside the womb and make the mother sick. The signs of an infected womb are similar to the signs of other infections (see page 179). During labor, an infection of the womb can cause pain in or above the womb between contractions. An infected womb can also cause shock. See page 179 for what to do for an infection of the womb.



Watch for signs of progress

Labors are all different. Some are fast, some are slow. This is normal. But in a healthy labor, there should be progress. Progress means that labor should be getting stronger and the cervix should be opening.

As labor gets stronger, you should see more and more of these signs:

- Contractions get longer, stronger, and closer together.
- The womb feels harder when you touch it during a contraction.
- Amount of show increases.
- Bag of waters breaks.
- The mother burps, sweats, and vomits, or her legs shake.
- The mother wants to push. This may mean that stage 2 is near or starting. Do not encourage the mother to start pushing until you are certain stage 2 is beginning (see page 195). Usually, if she cannot stop herself from pushing, she is already in stage 2.





WARNING! Do not tell the mother to push before her cervix is completely dilated!

Forcing a mother to push in stage 1 — before the cervix is open — can make it rip or swell, and then it cannot open. This is very dangerous. Even if the mother avoids injuring the cervix, all the extra pushing will not bring the baby faster, it will only make the mother very tired, and make the birth more difficult.

Pushing too soon can also damage the mother's muscles and cause her to have less control of her bladder and bowels after the birth.



Pushing before the cervix is open is like trying to put on a shirt that is too small.

When to do a vaginal exam

The only way to be sure the cervix is opening is to do a vaginal (internal) exam. If labor is progressing well, you can do a vaginal exam to check the cervix every 4 hours.

After you have been trained, use the instructions on page 339 to help you to do a vaginal exam. Because vaginal exams increase the risk of infection, do not do these exams more often unless there is a good reason. These include:

- a prolapsed cord. In a vaginal exam, you can push the baby's head away from the cord (see page 176).
- any medical emergency. A vaginal exam can tell you if there is time to get medical help before the birth.

Do not start a vaginal exam during a labor contraction, and never do a vaginal exam if there is heavy or unusual bleeding from the vagina (see page 112).

Labor is too long

WARNING SIGNS Labor is too long when strong contractions last more than 12 hours.

Sometimes a long labor is fine, and there is no danger as long as the mother rests between contractions, drinks liquids, and urinates regularly. But a long labor can cause serious problems, including fistula (a hole in the vagina that can leak urine — see page 273), torn womb, or the mother or baby dying. When a mother is having a long labor, watch her closely for warning signs. Are the pains getting further apart? Does she have any signs of infection? Is she getting exhausted? Is the baby's heartbeat normal?

If there are no signs of progress, or if the labor lasts longer than 12 hours, something may be wrong.

Note: Never make a woman feel guilty if her labor is long or hard. Encourage her — do not blame her.

Some causes of slow or stuck labor in stage 1 are: the mother is afraid, upset, or tense, or she has become exhausted (or dehydrated). Labor will also slow down or get stuck if the baby is in a difficult or impossible birth position, or if the baby cannot fit through the mother's pelvis.

Mother is afraid, upset, or tense

Fear and tension can slow labor. Here are some common causes of tension during labor:

- The physical pain of labor is frightening.
- This is a first baby.
- The mother's last baby was born dead, or died later.
- The mother does not want this child.
- The mother has no husband, partner, or family to help her.
- There are family problems.
- The mother was abused sexually as a child or as an adult.

Unfriendly family members or neighbors can also make women much more tense and afraid, and should not attend the birth.

Good labor support and companionship can often reduce fear and tension and help labor to pick up. Try talking with the mother. Complicated feelings, like loneliness or not wanting a baby, can slow a labor. Compassion and letting her talk about her fears can help a mother find comfort.

Help the mother relax her body. If her arms, legs, and face are relaxed, it will help her cervix open, and help labor move forward. You can give her a massage, or a warm bath, or apply warm cloths to her body.

Remember to treat the woman with care and respect.

Find other ways to help her feel calm and safe:

- Help her welcome the contractions. When each contraction begins, ask her to take a deep breath and let her muscles relax (see page 170 for ideas about breathing).
- Tell her what good work she is doing. Remind her how strong she is.
- Ask her to picture the cervix or the womb opening up and letting the baby out. Some women imagine other things opening — like flowers blooming.
- Remind her that every contraction helps bring the baby.





It is very common for mothers to get tense or afraid when labor starts to get strong. Reassure the mother that pain during labor is normal and helps bring the birth closer. If you think it will help the woman to relax, explain that when she resists, labor may be longer. But do not threaten or shame her.



Mother is exhausted

It is normal for a mother to get very tired during labor. But if a mother gets exhausted, she may have a longer, more dangerous labor, or labor may stop. If the mother is very tired, give her weak tea with lots of sugar or honey, fruit juice, or rehydration drink (see page 160). Find out which part of stage 1 labor she is in: light, active, or late labor.

Light labor

Light labor can go on for many hours or several days. If it does, the mother can get very tired and discouraged. If you think the birth is still a long time away, the mother should rest or sleep between contractions. Help her get comfortable and relaxed. Give her liquids, encouragement, and maybe a massage and a bath (if the bag of waters has not broken).

There may be traditional medicines or plants in your area that midwives use to help women sleep — for example, hops (*Humulus lupulus*), passion flower (*Pasiflora*), valerian (*Valeriana*), or kava root (*Piper methysticum*). If you know sleep plants that will not harm the baby, she can try them now.

Active labor

If the mother is in active labor but is not making progress, and the birth seems many hours away, help her eat, drink, and relax. But you should also try to get labor moving (see page 191). If she has been in active labor for more than 12 hours and birth is not near, take her to a medical center. Go sooner if the medical center is far away.

Late labor

If the mother is in late labor, she can probably make it to the end of the birth even if she is very tired. She needs encouragement and patience.

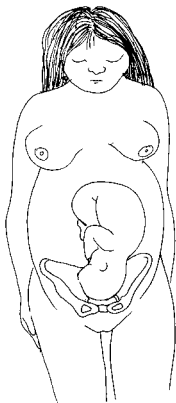
If the mother is exhausted, and contractions stop for more than 1 hour, or if they start but she does not make progress, take her to a medical center.

Baby does not fit through the mother's pelvis

If the baby is in a difficult position, or is too big to pass through the mother's pelvis, the baby cannot come out. The mother will labor until the womb tears and she dies of bleeding inside, or until she and the baby die of exhaustion. Even if she does give birth eventually, she may have serious damage to her vagina, bladder, or bowel (fistula, see page 273).



A baby is less likely to fit when:



- the mother is very young and her pelvis is not fully grown.
 - the mother did not get enough good food when she was a child (this can make her grow up to be unusually small or to have a small pelvis).
 - the mother has a deformity of the pelvis.
 - the mother has diabetes.
 - the baby is big, or grew unusually fast during pregnancy.
 - the baby's head was still high and could be felt above the pubic bone when labor started.
 - the mother had a hard time pushing out her last baby, and this one is bigger.
- the mother has been in labor for 8 to 12 hours with no progress.

Because you cannot know for sure if the baby is too big to fit, let the mother labor a few hours and see what happens. Most of the time, even a very big baby comes out fine. But if the woman has been in strong labor for more than 12 hours without signs that the birth is near, get medical help. (If medical help is far away, go sooner.) She may need to have a cesarean surgery for the baby to be born.

You have been in labor all day and this baby feels even bigger than your last. I think we should go to the hospital.



Baby is in a difficult or impossible birth position

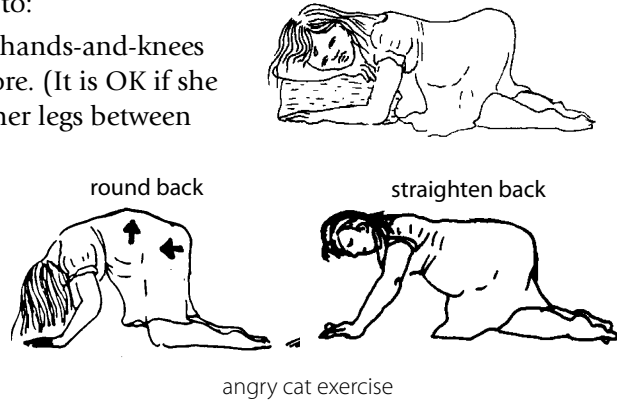
Labor is usually shortest when the baby is head down, facing the mother's back. If the baby is in another position she may be difficult or impossible to deliver.

Baby faces the mother's stomach (posterior)

If a baby faces forward, she can often be born without problems, but the labor is usually longer. You may want to use gentle methods to make the labor stronger (see page 191). It may also help to:

- ask the mother to rest in a hands-and-knees position for an hour or more. (It is OK if she needs to walk and stretch her legs between contractions.)
- have the mother do the angry cat exercise between contractions.

These positions can help the baby to turn and face the mother's back.



Baby comes face first or forehead first

The way the baby holds her head can slow or prevent the birth.

If the baby is either face first or forehead first, it may be possible for her to be born normally, but the birth will be much harder. Get medical help. Do not try to change this baby's position.

Most babies tuck their heads in like this:

This makes it easier for the head to fit through the mother's pelvis.



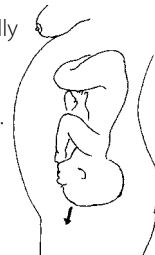
But sometimes the baby is face first:

This makes it much harder to fit through the mother's pelvis.



This baby is forehead first:

This baby usually cannot fit through the mother's pelvis.



Baby is breech

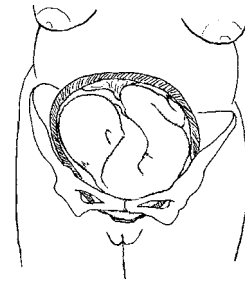
Breech babies (bottom or feet first) often take longer to be born but if the baby is early or small, the labor may go quickly. A breech position can be more dangerous for the baby than head first. It may be possible to turn the baby (see page 369). If you cannot safely turn the baby and you are not experienced with breech birth, get medical help.

See page 215 to learn more about breech birth.

Baby lies sideways

A baby that lies sideways in her mother's womb cannot be born in this position.

The baby may turn easily (see page 369). But only try to turn a baby if the mother has had babies before, her contractions are more than 15 to 20 minutes apart, her bag of waters has not broken, and you are skilled at turning babies. If it is not safe to turn this baby, or if the baby cannot be turned, **get medical help immediately!** The baby must be born by a cesarean surgery.



A baby who lies sideways will not fit through the mother's pelvis.

Safe ways to encourage labor

If labor is taking too long, or needs to be started, there are some safe ways to encourage it. These methods found here through the end of the chapter will not hurt the mother or baby, and they may help strengthen labor.

Try encouraging labor when:

- the bag of waters has broken, the head is engaged, and labor has not started or the birth is not near.
- the mother has been in active labor for several hours, but the birth is not near.
- the mother has been in light labor for many hours. The labor is active enough to keep her from resting but it is not strong enough to open the cervix.

Do not try to encourage labor if there are warning signs that mean you should take the mother to a medical center. Especially do not encourage labor if the baby is sideways in the womb, if there is unusual bleeding, or if the baby's heartbeat is less than 100 beats in a minute. Encouraging labor at these times can endanger the baby and waste time. If there are warning signs — **get medical help!**

Try any of these methods to encourage labor, but if they do not seem to work after an hour or 2, think about bringing the woman to a medical center. Waiting too long for a birth can be dangerous. If you see no signs of progress after 8 to 12 hours of active labor, or if progress stops for several hours, take the mother to a medical center quickly. This is especially important if the medical center is more than 1 hour away.

(There are more ways to start or strengthen labor starting on page 341. Those methods have more risk, so should only be used if there are no other options.)



WARNING! Never use medicines to start labor at home (such as oxytocin or misoprostol). These medicines can cause contractions strong enough to kill the baby or the mother.

Walking and moving

Labor often gets stronger if a mother stands or walks. This is because the baby's head presses down on the cervix and causes stronger contractions. Some women also get stronger contractions just by changing positions. See page 162 for ideas about positions.



Nipple stimulation

When a baby sucks on a woman's nipples, her body makes the hormone oxytocin. Oxytocin causes stronger contractions.

If the woman has older children who are breastfeeding, ask her to let them suck. If she does not have nursing babies, her partner can try sucking. Suck for 10 minutes, then wait for 10 minutes, then suck again.



If the woman does not want anyone to suck her nipples, she can squeeze and massage them. She should keep squeezing and massaging until her contractions get strong. Her contractions should start to get stronger within about half an hour. If they do not, nipple stimulation probably will not help.

Acupressure (pressure on certain parts of the body)

Massage sometimes helps start a labor or make a weak labor stronger. One kind of massage is called acupressure. It is based on a Chinese method of healing. In acupressure, you press strongly on certain points on a person's body. If you know other kinds of massage that help start labor, use these methods! (But do not firmly massage the woman's belly. This can cause the placenta to separate from the womb.)

Before you give acupressure, help the woman relax her body. Rub her feet or massage a little oil into her lower back. When her body is relaxed, you can start the acupressure massage.

Press your thumb on the places listed below and on the next page. Find the general area, and then move your thumb around a little until you find a place that feels sore to the woman. When you find the sore spot, press for about a minute.

If the method is working, the woman may feel a tingling sensation or soreness around the point. She may also feel the baby start to move, or she may feel energy or an ache in her lower belly.

Inside the legs, 4 fingers above the ankles

First put four fingers above the ankle bone on the inside of the leg. Then press the spot just above your fingers. Press on the back of the bone.



Move your thumb up and down a little, or in small circles.

The hand, between the thumb and finger

Put your fingers into her palms and your thumbs on the outsides of the hands. Rub your thumbs in small circles. This is also a good place to press to help a woman in labor feel less pain.



The foot, near the big toe

If the first 2 methods (the leg above the ankle and the hand) do not work after about 5 or 10 minutes, or if the mother is especially tense or angry, try putting pressure near the big toe. Rub your thumb in small circles. **Do not use this point if the mother is bleeding.**



These are some other spots that sometimes work:

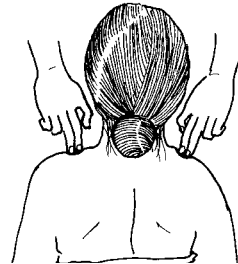
Between the eyes

Gently stroke upwards on the forehead, especially if the mother is very tense.



The top of the shoulders

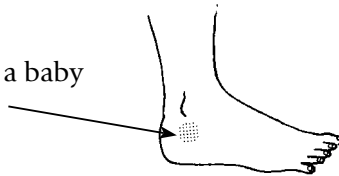
Press hard for about half a minute (or count to 30). Stop for 2 or 3 minutes and then press again. Keep trying like this for a while.



This point is also good to press after the birth if the mother has a breast infection.

Below the ankle bone

Press this point to bring down a baby who is very high in the pelvis.



The bottom of the foot

If nothing else works, press in here, very hard. This point can help a woman who is very afraid.



Watch the labor closely. If acupressure massage is going to work, you will usually see contractions start or get stronger within the first 10 minutes. If it does not work right away, the woman should walk around a little and you can try again. As long as acupressure is helping the labor, keep doing it until the labor stays strong on its own. This may be a few minutes or a few hours.