

Having a baby is a natural event. Most mothers and babies go through labor and birth without serious problems. However, certain situations may arise near the end of your pregnancy, or in labor, that can affect the care you or your baby need. Some of those situations are described below. Here also are some common practices you might experience during your time at the hospital. If you have questions, be sure to ask your doctor.

#### Labor

- 1. A nurse will work with your doctor or midwife. Sometimes doctors training in obstetrics or anesthesia (residents) may help care for you.
- 2. Medical students, student midwives, nurses, or physician assistants may also help care for you. Students are always supervised by your doctor, midwife, or nurse.
- 3. You may have a blood test during labor to measure your blood count or for other purposes.
- 4. When you arrive at the hospital in labor, a nurse will usually put a fetal monitor on the outside of your abdomen to check the baby's heartbeat. This is an external monitor. If the heartbeat is normal, the monitor may be removed. The baby's heartbeat will be checked from time to time during the labor.
- 5. If the baby's heartbeat needs to be checked more closely, you will wear the external monitor for part or all of labor. Normal heart rate patterns are reassuring. However, even when the baby is fine there may be variations in his or her heart rate pattern that cause concern. Fetal monitoring does not prevent cerebral palsy or birth defects.
- 6. Sometimes, the external monitor does not give enough information about the baby's condition. If this happens, your doctor or midwife will place a monitor inside your uterus. This is an internal monitor. The end of the monitor, a wire called an electrode, is attached to the baby's head. Very rarely, this can cause an infection on the baby's scalp.
- 7. Sometimes, abnormalities in the baby's heart tracing can be corrected by an amnioinfusion. The doctor places a small plastic tube into the uterus and adds fluid to the amniotic fluid. In some situations, this may take pressure off the umbilical cord.
- 8. You may have an intravenous line (IV) in your arm during labor. An IV can be used to give you extra fluids or certain types of pain relief medications or antibiotics. Not all women need an IV.
- 9. The vast majority of women will have a vaginal delivery. However, there are reasons why a cesarean delivery may be necessary to protect the safety of the mother or baby. Your Obstetrical provider may recommend before or during labor that you should have a cesarean delivery. Risks of a cesarean delivery include, but might not be limited to:
  - bleeding that may require a blood component transfusion
  - infection that may be treated with antibiotics
  - damage to body parts that are near the uterus (the bowel, the ureters, or blood vessels).

Most often, one cesarean delivery does NOT make it impossible to have a vaginal delivery in the future, but your Obstetrical provider will discuss this in detail with you.

#### Pain Relief for Labor

1. There are many forms of pain relief for labor. These include walking, using the tub or shower, breathing and deep relaxation techniques, and massage. If you feel you need additional pain relief, your doctor or midwife can give you other choices that are safe for you and your baby.



These choices include:

- ❖ Medication: You can be given a medication as a needle in your muscle (a "shot") or directly through an IV line. You might get a little drowsy. It is possible you could have an allergic reaction.
- ❖ Epidural: An epidural is the most common form of pain relief for labor and birth. An anesthesia specialist will place a thin flexible tube in your back. This procedure will take about 20 minutes. You can then receive pain relief medication through the tube. This medication takes away most of the pain of labor.
- ❖ Spinal: Spinal anesthesia is one dose of medication that is placed in your back. It may be used in combination with an epidural, or may be used by itself for a cesarean delivery.
- 2. If your labor slows down, your doctor or midwife might give you the hormone-like drug oxytocin (**Pitocin**®) through an IV. This will make your contractions stronger and closer together.
- 3. Misoprostol: This is a tablet that may be used to help soften the cervix and begin the process of inducing labor. This is considered "Off-label" use by the Food and Drug Administration (FDA) and investigational (not proven).

# **Inducing Labor**

- 1. Sometimes, a woman's health or the health of her baby makes it necessary to induce labor (to give the labor process a "jump start"). In the United States, about a quarter of labors are induced. Some reasons to induce labor include:
  - \* a baby that is overdue by more than a week or two
  - infection
  - diabetes

- \* a baby which has not grown well
- high blood pressure
- \* a rupture of the bag of waters

Your doctor or midwife can help get labor started in various ways. If your cervix is soft and stretchy, you will usually be given oxytocin (Pitocin®) through an IV. If your cervix is not "ripe" (ready) you will probably receive a prostaglandins medication such as Misoprostol first. This is considered "Off-label" use by the FDA.

- 2. Sometimes, labor may be induced for non-medical reasons after 39 weeks of pregnancy but before your due date. Inducing labor for non-medical reasons may not be scheduled before 39 weeks.
- 3. Inducing labor has certain risks including creating contractions that are too strong or too frequent. This can stress the baby. In almost all situations, this risk can be managed and the contractions can be decreased. Inducing labor may not be successful. This can increase the risk of a cesarean delivery, especially if this is your first baby and/or your cervix is not ripe (not ready for labor).

### Vaginal Birth

- 1. Labor contractions slowly open the cervix. When the cervix is completely open, contractions, along with your help, contract the baby through the birth canal (vagina). Usually, the baby's head comes out first, then the shoulders, followed by the rest of the body.
- 2. About 10 to 15 percent of mothers need some help getting the baby through the birth canal. A doctor or midwife may apply a special vacuum cup or forceps to the baby's head to help you contract the baby out. Large studies have shown that the vacuum cup and forceps are safe.



- 3. In about one percent of births, the shoulders do not come out easily. This condition is called shoulder **dystocia**. If this happens, your doctor or midwife will try to help free the baby's shoulders. Shoulder dystocia may cause a broken collar bone or arm for the baby or nerve damage to the baby's arm. Usually, these problems heal quickly. Shoulder dystocia may cause tears around the vaginal opening and bleeding after birth.
- 4. Many women will get small tears around the vaginal opening. Sometimes a doctor or midwife will cut some tissue to make the opening bigger (**episiotomy**).
- 5. Most women with tears or an episiotomy will need stitches. The stitches will dissolve over a few weeks as you heal. The area may be swollen and sore for a few days. Rarely, infection may occur. Sometimes, a tear or cut may extend to the rectum. Usually, after stitches, this heals with no problems.
- 6. Normally, the uterus will push out the placenta soon after birth. In about one percent of births, this doesn't happen. The doctor or midwife must reach into the uterus and remove the placenta (sometimes called the "afterbirth"). If this happens, you may need anesthesia.
- 7. All women lose some blood during childbirth. A woman is more likely to lose a lot of blood if:
  - the placenta doesn't pass on its own
  - she is having multiples as in twins or triplets
  - labor lasts a very long time
- 8. Pitocin® can help reduce bleeding after birth. If bleeding is very heavy, other medications may be used to help the uterus contract. Very few women (less than one percent) need a blood component transfusion after vaginal delivery.

#### Cesarean Birth

- 1. About one third of mothers give birth by cesarean. Some cesareans are planned. Others are unexpected.
- 2. During cesarean birth, a doctor delivers the baby through an incision (a cut) in the mother's abdomen (belly).
- 3. The most common reasons for cesarean delivery are:
  - the cervix doesn't open completely
  - the baby doesn't move down the birth canal
  - the baby needs to be delivered quickly because of a problem for mother or baby
  - \* the baby is not in a position that allows for a vaginal delivery
  - the mother has had a cesarean delivery before
- 4. Anesthesia is always used for a cesarean delivery. Most of the time, this means regional anesthesia such as a spinal, epidural, or combined spinal-epidural technique. The mother is awake during the birth. In other cases, general anesthesia is used and the mother is not awake during the birth.
- 5. Blood loss is greater with cesarean delivery than with a vaginal delivery. It is still rare (12 cases in 1,000) to need a blood component transfusion.
- 6. Infection is more common after a cesarean delivery. Often, doctors give antibiotics during the birth to help prevent infection.
- 7. A thin tube called a urinary (**Foley**) catheter will drain the bladder during the operation. It will usually stay in the bladder, for 12 to 24 hours afterwards.



- 8. In less than one percent of cesarean deliveries, the operation may cause damage to the bowel or urinary system. Most of the time, these problems will be recognized and corrected during the operation.
- 9. In less than one percent of cesarean deliveries, the baby might be injured during the birth. When this does happen, it is usually minor.

## ABOUT YOUR CARE AFTER THE BIRTH

- 1. After a vaginal delivery, the chance of uterine infection is 2 to 3 percent. After a cesarean delivery, the chance of uterine infection is 20 to 30 percent. Antibiotics can lower the risk, but cannot guarantee that you won't get an infection.
- 2. You may have cramps as the uterus returns to its normal size. This cramping gets stronger with each birth. You may notice it more when breastfeeding.
- 3. If you have had a vaginal delivery, you will probably have discomfort around the vaginal opening. If you had a cesarean delivery, you will have pain from the incision in your abdomen. Pain relief medication may given through the epidural or spinal. Oral or injectable pain medication may be used after the procedure. Ask your doctor or midwife for pain relief if you need it.
- 4. Vaginal bleeding is normal after birth. It will lessen over 1 to 2 weeks. About one percent of women have heavy bleeding and need treatment. Sometimes this type of bleeding can happen weeks after birth.
- 5. Most women feel tired and weepy after birth. For about ten percent of new mothers, these feelings don't go away or they get worse (postpartum depression). If this happens, ask your doctor or midwife for help.
- 6. Your health, your baby's health and the help and support you have at home will determine when you can go home from the hospital.

#### Newborn

- 1. At one minute after birth, and again at five minutes after birth, the baby will receive an **Apgar score**. This is an assessment of how healthy the baby is right after birth. The doctor will examine the baby's heart rate, breathing, color, muscle tone, and strength. These scores will help your pediatrician and the nursery staff plan the care of your baby.
- 2. We strongly encourage and support breastfeeding for babies, unless there is a medical reason that makes it unsafe.
- 3. About 3 to 4 percent of babies are born with birth defects. Many do not hurt the baby (such as extra fingers or toes). A few, such as some heart defects, can be serious.
- 4. Approximately 7 to 10 percent of babies are born before term (less than 37 weeks of pregnancy), or have a problem that will require some form of special care. This may mean that the baby will receive treatment in a Special Care Nursery or a Neonatal Intensive Care Unit. A small percentage of babies born after 37 weeks also may need some form of special care.
- 5. About 12 to 16 percent of babies pass **meconium** (the first bowel movement) into the amniotic fluid before delivery. If this happens, the baby's mouth and airway will be suctioned at the time of delivery to remove as much of the meconium as possible.



## ABOUT YOUR CARE AFTER THE BIRTH

- 6. After your baby is born, he or she will be given eye ointment to prevent infection of the eyes and an injection of Vitamin K to prevent bleeding. Using only a few drops of blood from his or her heel, blood tests will be done to screen your baby for 30 different diseases. The results will be sent to your pediatrician in the community. Your baby's hearing will be checked while in the hospital. You will also be encouraged to have your baby receive the first immunization against hepatitis B before going home.
- 7. Three to four of every 1,000 newborns have serious bacterial infections of the blood, lungs, and **in rare cases** the surface of the brain and spinal cord. To reduce the risk of infection to your baby, you may receive antibiotics during labor if:
  - you carry Group B Strep
  - you develop a fever during labor
  - ❖ your membranes (bag of waters) are ruptured for a long time
- 8. If your baby is at increased risk of infection or shows signs of infection, your pediatrician may decide to send blood or cultures to the laboratory for analysis. Your baby may also receive antibiotics.

# **Infrequent or Rare Events**

The following problems occur infrequently or rarely during pregnancy:

A few babies are born too early to survive, or they have serious medical problems.

## Of every 1,000 babies born:

- About 6 to 7 die in the uterus after 20 weeks of pregnancy (stillbirth or fetal death).
- ❖ About 4 to 5 die shortly after birth or within one month of their birth.

# Of every 100 mothers who give birth:

- About 3 mothers develop blood clots in their legs after giving birth and need treatment. This is more likely to happen after cesarean delivery than after vaginal delivery.
- ❖ In about 1 to 2 cases, a doctor must remove the uterus (hysterectomy) to stop heavy, uncontrollable bleeding. This means a woman cannot become pregnant again.
- ❖ About 6 women receive a blood component transfusion after giving birth. The risks associated with a blood component transfusion include an allergic reaction, fever, or infection. The chance of contracting hepatitis from a blood component transfusion is 1 in 100,000; the chance of contracting HIV is less than 1 out of 1,000,000.

Very rarely (less than 1 in 10,000), mothers don't survive childbirth. Causes might include extremely severe bleeding, high blood pressure, blood clots in the lungs, and problems caused by other medical conditions.

# **Summary**

Most babies are born healthy. Most mothers go through labor and birth without serious problems. You should realize though, that pregnancy and childbirth have some risks. Many of the possible problems sound very frightening. Remember, most of these problems are uncommon, and the most serious events are quite rare. Your healthcare team will watch carefully for signs of possible problems. They will do their best to identify them early, explain them, and offer you treatment. Your healthcare team looks forward to caring for you during labor and birth, and to delivering a healthy baby.

	Beth Israel Deaconess Medical Center
(R)	Boston, MA 02215

CONSENT	FOR	<b>OBSTETRICAL</b>	CARE
	1. ( ) 1 (		

PATIENT'S NAME
MED. REC. #
DOB

has explained that I will receive care



and treatment for pregnancy and delivery (birth) at Beth Israel Deaconess Medical Center.

(Name of Healthcare Provider)

- I have read "About Your Care During Labor and Birth" and I understand what it says.
- No one has made any guarantees or promises about the expected results of this pregnancy.
- I am aware that there may be other risks and complications, not mentioned on this form.
- I understand that during the rest of my pregnancy, or during labor, we may find conditions that we don't yet know about. If so, I may need other procedures, including cesarean delivery.
- By signing this form, I give permission for care I will receive for labor and delivery, whether my baby is born vaginally or by cesarean delivery.
- By signing this form, I give consent for cesarean delivery, if it is recommended in order to protect the safety of my baby or myself.
- I understand that cesarean delivery has special risks, including bleeding, infection and damage to body parts that are close to the uterus.
- I understand that I will have the chance to discuss this and ask questions before any procedure.
- I have the right to refuse any specific treatment.
- I understand that my care will include ongoing discussion(s) about my health and recommended treatment.

My doctor has also explained that there may be other risks or complications. In particular these risks may
include but are not limited to:

**Blood Component Transfusion:** I may also need a blood component transfusion. If a blood component transfusion is required, I understand that there are risks, even when all safety measures are taken. The risks include but are not limited to:

- fever
- chills
- allergic reactions
- red urine
- shock

- hemolysis (destruction of the transfused red blood cells)
- chest pain
- heart failure

- respiratory failure (transfusion related acute lung injury)
- death
- transmission of infectious agents including bacteria, hepatitis virus or HIV (Human Immunodeficiency Virus)

**Disposal of Tissues:** I give permission to Beth Israel Deaconess Medical Center to dispose of my tissue, fluid, or bone that may be removed during my treatment. I understand that this tissue, fluid, or bone may be used, saved, or transferred to others for scientific or teaching purposes.

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®	Boston, MA 02215

PATIENT'S NAME	
MED. REC. #	
DOB	

CONSENT FOR OBSTETRICAL CARE	DOB			
CONSENT FOR OBSTETRICAL CARE	Patient Identification			
<ul> <li>Industry Representative: I understand that an industry representative(s) may be present during my procedure.</li> <li>My doctor has explained the reasons why the industry representative(s) may be present.</li> <li>I do not agree to the presence of an Industry Representative(s).</li> </ul>				
<b>Tracking Medical Devices:</b> Some surgical treatments include putting in (implanting), or taking out (removing) a medical device. The hospital is asked, by law, to track this device. This means that the hospital is asked to give my name, address and social security number to the medical device manufacturer, and/or the Food and Drug Administration (FDA). It is my decision whether the hospital can give out this information.				
☐ I do not agree to let the hospital give my pers	onal information to the manufacturer and/or the FDA.			
<b>The Healthcare Team:</b> I understand that treatment and care will be provided by a team of healthcare providers headed by a staff doctor. I understand that this healthcare team may include resident doctors, nurses, and clinical students / staff. These healthcare team members may also watch or take part in my treatment and care.				
I have read this form and I understand what it says. I have had the opportunity to talk with my doctor. All of my questions have been answered in a language that I understand. I agree to receive treatment and care as described in this form.				
X	OR			
Patient's Signature	Print Name			
XSignature of Person authorized to sign for patient	Print Name and Relationship to patient			
	The second secon			
Date: _  ☐ Telephone Consent Obtained:				
Date: _  ☐ Telephone Consent Obtained:				
Date: _  Telephone Consent Obtained:  Discussed with:				
Date: _  Telephone Consent Obtained:  Discussed with:				
Date: _  Telephone Consent Obtained:  Discussed with:	Relationship to Patient:			
Telephone Consent Obtained:  Discussed with:  Contact Telephone Numbers: ( )  Significant Aspects of Conversation:  X  Witness - Signature & Credentials  I have obtained either face-to-face or telephone consent	Relationship to Patient:			

INTERPRETER (if applicable) - Name and/or ID Number \_\_\_\_\_

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