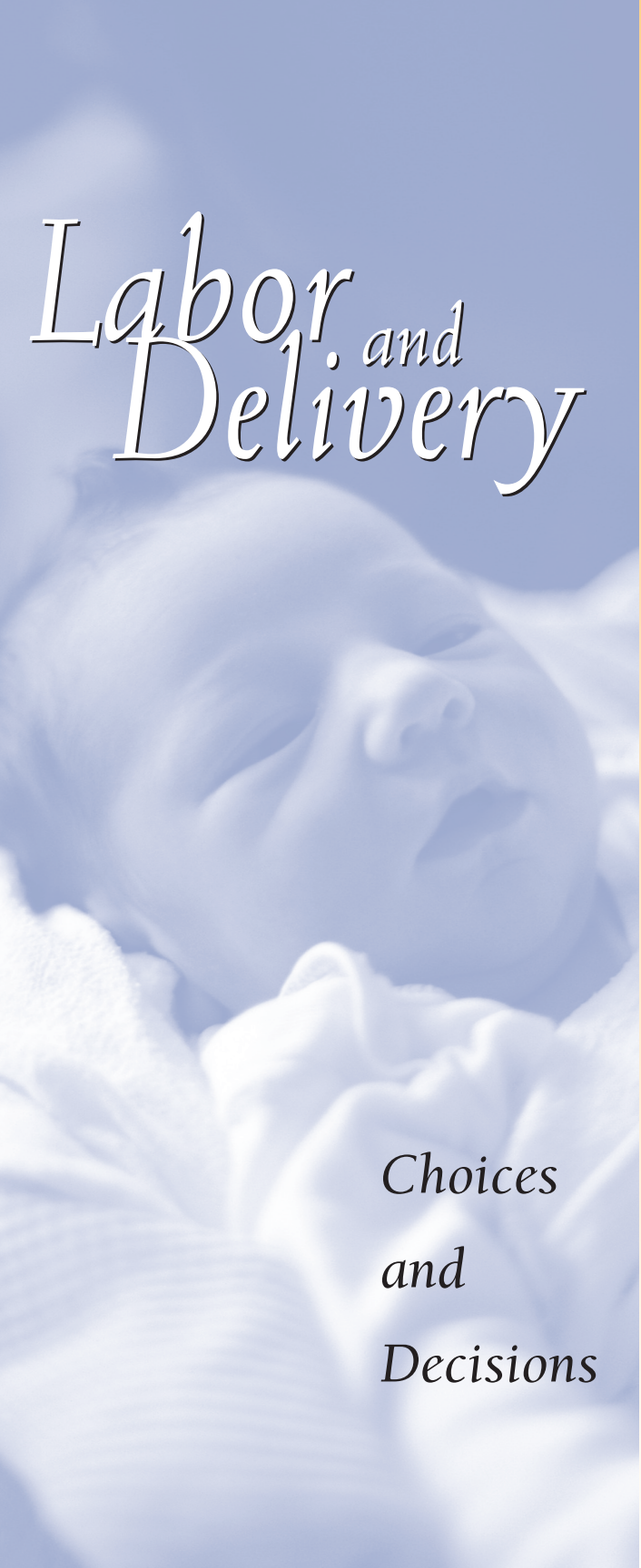
Labor and Delivery
Choices and Decisions

# Labor and Delivery

*Choices and Decisions*

## Purpose Of This Brochure

This brochure provides information about labor and the delivery of your baby. It outlines what will happen at the hospital* once your labor begins, and explains the different kinds of treatment and care you and your baby may be given during your labor and delivery. Also, this brochure discusses different kinds of pain relief that are available, and when they might be used.

As you probably know, most women have healthy babies with very few problems. Sometimes, however, complications do happen during labor and delivery. Being aware of problems that sometimes occur during labor, and understanding what can be done about them, will help you to be more relaxed and confident about having your baby.

After reading this brochure, you will probably have questions. Your doctor or midwife will be happy to answer your questions and explain anything that is not clear to you.

**Specific hospital procedures will vary*

## General Information

Many women feel uncomfortable with the symptoms of advanced pregnancy and initiate discussions with their doctor or midwife about delivering as soon as possible.

Induction prior to your baby's due date is discouraged. There is a large body of science showing that elective induction of labor before 39 weeks of completed pregnancy is associated with significant increase in the risk of Cesarean delivery and a significant risk for medical problems in the newborn, including admission to a newborn intensive care unit. For these reasons, we strongly encourage you to work with your obstetrical provider to safely delay delivery for your infant until after 39 weeks. If medical conditions arise during your pregnancy that would make it important to deliver your baby earlier, your obstetrical provider will work with you to make sure you understand the risks and the benefits associated with early delivery.

When your labor begins, you should follow your doctor or midwife's instructions to either call your doctor or midwife or go directly to the hospital. If you have a personal plan regarding the birth of your child (often called a **birth plan**), you should take a copy of your plan to the hospital so you can discuss it with the nurses, midwife, or hospital doctor. A copy will be placed in your hospital chart.

## At The Hospital

After you check in, a nurse will begin to examine you and your baby. This includes listening to fetal heart tones usually using a fetal monitor. Your doctor or midwife will then be notified.

If it is determined that you are in labor, you will then be admitted to a birthing room. Your doctor may not come to examine you until you are further along in your labor.

In case an emergency develops, any of the doctors, midwives, and nurses may step in to help you.

As your labor continues, the hospital staff will keep a close watch on how you are progressing. Your baby's heart rate and your **contractions** (labor pains) will be carefully monitored. With your doctor or midwife's help, you will decide whether you need something to control pain or whether anything needs to be done to improve your labor.

## Some Decisions Concerning Your Labor

A number of decisions must be made concerning your labor and delivery. You and your doctor or midwife must decide:

1) how to monitor your baby during labor,
2) whether you want any pain relievers during labor and delivery,
3) whether your **membranes** (bag of waters) should be ruptured and if so, when,

4) whether a drug (oxytocin) is necessary to improve your labor,

5) whether your baby will be delivered vaginally or by Cesarean section, and

6) whether or not vacuum or forceps will be used to assist in delivering your baby vaginally.

Information to help you make these decisions follows.

## Monitoring Your Baby During Labor

The purpose of **fetal monitoring** (checking your baby's condition) during labor is to try to determine how your baby is tolerating labor. There are three basic ways your baby can be monitored: **internal electronic monitoring, external monitoring, and periodic monitoring.** Usually a fetal monitor is used to record the baby's heart rate.

Internal electronic monitoring gives the most accurate information about your baby's condition during labor. A tiny metal electrode is attached directly to the baby's scalp, and the baby's heart rate is continuously recorded on a graph. This type of monitoring allows your doctors, midwife, or nurses to check the status of your baby at any point throughout labor.

The risks to you and your baby with this type of monitoring are very small. For example, there is a very slight risk of infection for you, and a very minor risk that the electrode might not be placed on the baby's head and there-

fore not give accurate information. In order to use this type of monitoring, the bag of waters must have already ruptured. If this has not happened naturally, the doctor must rupture the membranes. (This is explained in more detail later in this brochure.)

**External electronic monitoring** gives a continuous printout of your baby's heart rate on a graph much like internal monitoring does, but it is somewhat less accurate. With this type of monitoring, a belt is attached around your abdomen holding in place a device that picks up the baby's heartbeat using sound waves. Again, there is very little risk for you or your baby with this type of monitoring.

**Periodic monitoring** is listening to the baby's heartbeat at timed intervals. This may be done using a **stethoscope**, **fetoscope**, or **doptone monitor** placed on your abdomen, or possibly an external electronic fetal monitor. This type of monitoring often gives adequate information about your baby but is not continuous, and gives a less complete picture of your baby's status. If circumstances change during labor, use of more accurate monitoring may be needed.

Monitoring your baby during labor is important. You should discuss the different types of monitoring with your doctor or midwife and decide together which type is best for you and your baby.

There are several factors to consider when choosing the type of monitoring you will use.

The most important factor is whether you or your baby is at special risk for complications during labor and delivery.

**Common risk factors** to be considered include:

- **hypertension** (high blood pressure)
- slow progress of labor or labor that stops
- amniotic fluid from the bag of waters that is stained by meconium (the baby's first stool), which sometimes indicates stress to the baby
- bleeding
- abnormal fetal heartbeats
- preterm labor
- post-term labor
- your height and weight
- having more than one baby at a time
- history of previous Cesarean section or uterine surgery
- diabetes

Discussing with your doctor or midwife whether any risk factors apply to you will help you make an intelligent choice about the type of monitoring to have during your labor and delivery.

## Medications for Relaxation and Comfort

A variety of approaches are available to help with relaxation and comfort during labor and delivery. Many women today choose to

go through their labor and delivery without the use of any drugs to relieve pain (natural childbirth). If possible, a drug-free labor may be desirable for you and your baby. However, many women prefer or require pain relief during labor and delivery.

Certain medications are administered by the labor and delivery nurse, while others are provided by your delivering doctor/midwife or by an **anesthetist**. An anesthetist specializes in administering medications/drugs for surgery and pain relief for procedures and may be a medical doctor (anesthesiologist) or advanced practice nurse (nurse anesthetist).

Even if you plan to have natural childbirth, it is important to learn about the options available for relaxation and pain relief, which could become necessary for a variety of reasons. The use of these options depends on your condition and any special factors that may apply to you. Please remember that it is important to tell your doctor if you have ever had an allergy or unusual reaction to any drug or anesthetic. With any drug, however, there is a chance that an unexpected reaction could affect you and your baby.

**Sedative medications** (also known as relaxants or tranquilizers) are sometimes used for

their calming effect to help you relax. In small doses, sedatives rarely cause any serious side effects.


**Narcotic medications** are effective drugs for pain relief, and they are often given by injection during labor. They are almost always safe, but again, there is a small chance of serious side effects, including breathing problems for you or your baby, low blood pressure, nausea, vomiting, or slowing of labor.

**Pudendal blocks** and **perineal blocks** (numbing medication) are local anesthetic injections usually given just before delivery or after delivery to numb the birth canal and repair an episiotomy or tears without undue discomfort.

More involved procedures for comfort during labor and delivery include epidural, spinal, and general anesthesia. These are usually provided by an anesthetist.

Epidural anesthesia may be used for both relief of labor pain and for delivery. This involves the placement of numbing medication, and possibly narcotics, in an area called the "epidural space" in the lower spine. The nerves responsible for the pain during labor and delivery run through the epidural space.

If you require a Cesarean section, epidural anesthesia may be used, or you may require spinal or general anesthesia. Spinal anesthesia is very similar to epidural anesthesia, except

that the medications are placed in the "spinal canal." This results in more rapid onset of numbness. General anesthesia is used when the baby must be delivered urgently by Cesarean section and epidural or spinal anesthesia are not possible. With general anesthesia, you are given a medication intravenously, which allows you to drift quickly off to sleep. For safety, a breathing tube is then placed through the mouth and into the windpipe.

Epidural, spinal, and general anesthetics are usually safe for you and your baby, but complications can and do occur. These complications are usually minor, like incomplete pain relief, low blood pressure, nausea, vomiting, or headache. Very rarely, life-threatening complications affecting the heart, lungs, nerves, brain, and other organs could occur. Please be sure to speak with your anesthetist if you have any questions or concerns.

## Rupture of Membranes

Many women begin labor and arrive at the hospital before the **fetal membranes** that hold the **amniotic fluid** (the bag of waters) rupture or burst. The membranes usually rupture spontaneously as labor progresses. Sometimes, if labor is not progressing, the doctor will artificially rupture the membranes with an instrument to help your labor progress. At other times, the membranes are ruptured so that an internal monitor can be started by placing a small electrode on your baby's scalp.

If the membranes rupture when the baby's head is not well down, there is a risk that the **umbilical cord** will prolapse (slip down between the baby and the birth canal) and be compressed or blocked, which cuts down the supply of blood and oxygen going to the baby. Whether the membranes **rupture spontaneously** (natural rupture) or the doctor or midwife ruptures them (artificial rupture), careful monitoring of the baby is very important. Indications for artificial rupture of membranes should be discussed with your doctor or midwife.

## Your Positions During Labor

At times during labor, you can walk around, sit, or lie in bed. When you lie in bed, you should lie on your side rather than your back when possible. When you lie on your back, blood flow to the baby may be reduced, possibly causing the baby distress. There may be times, of course, when a doctor or nurse asks you to lie in a different position—for example, during an examination or when an internal monitor is being placed. You may be allowed to change your position to respond to concerns about the baby's heart rate or your blood preasure.

## Aiding Labor

Some women do not progress well in labor because once labor starts, they have weak or infrequent contractions. When this happens, a drug called **oxytocin** (also known as

Pitocin) is commonly used to increase the frequency and strength of the contractions and improve the labor process. Your doctor may recommend using oxytocin, which is given through an IV line, if your labor fails to progress.

It is important to monitor contractions carefully during oxytocin administration to prevent **overstimulation** (contractions that are too strong, too long, or too frequent), which could cause harm to you or your baby. The fetal monitor is the proper device for this. The dosage of oxytocin can be adjusted to regulate the strength, length, and frequency of the contractions.

Many doctors will use a **pressure catheter** (a small tube placed internally) to measure the strength of the contractions. The bag of waters must have ruptured in order to place the catheter.

There may be medical reasons for your doctor to recommend that you have your baby before you naturally go into labor. Special tests are available, if needed, to determine whether your baby is mature enough to be born. If your doctor recommends that your labor be **induced** (started artificially), the type of medication used to start labor will depend on how ready your cervix is for labor. If your cervix is not dilated enough, your doctor may recommend use of the following:

- a small balloon inserted through your cervix and filled with sterile water;
- medication placed into the vagina in the form of tablets, gel, or a strip; or
- starting slowly with oxytocin.

Sometimes this may help to stimulate labor as well. If your cervix is already soft and partially open, your membranes may be artificially ruptured or the drug oxytocin, given through an IV, can be used to stimulate contractions and start labor. If your doctor recommends induction of labor, you should discuss together the risks involved with the various methods of induction, as well as alternatives for starting labor.

## Giving Birth

Most uncomplicated births can happen in the birthing room. If you have twins or your doctor or midwife anticipates a difficult delivery, when the delivery is imminent, they may transfer you to a delivery room with additional space and more equipment.

When you have reached the final stage of labor and your baby is ready to be born, you and your doctor or midwife and nurses will go to the delivery room. In most hospitals, the labor room is also the delivery room.

Prenatal birth classes can help you prepare for a variety of individual experiences. For example, depending on how fast your baby is

coming, your doctor or midwife may tell you to push or not to push. There may be ways to help the baby come out more quickly.

One method is use of a device such as a small vacuum cup placed on the baby's head to hasten delivery. Depending on how quickly your baby is coming, the nurse, doctor, or midwife may coach you to push or to breathe and avoid pushing. They want to help you have the minimum amount of vaginal tearing. If needed, your doctor will do an **episiotomy** (an incision in the vaginal area to allow the baby out more quickly). Soon your baby will be delivered. The baby's cord will be cut and your baby will be cleaned, warmed, and attended to. You can request this all be done on your abdomen.

Usually at this point you will get to hold your baby. Your contractions will continue for a short time after the baby is born, until the **placenta** (afterbirth) is expelled. If an episiotomy or tear has occurred, your doctor will repair the incision. If you were in a delivery room, you will then be ready to go back to your room.

## Cesarean Section

Although most women deliver their babies vaginally, about one-third require delivery by **Cesarean section** (delivery through a surgical incision in the mother's abdomen), and it is important that you be aware of this alternative in case you and your doctor or midwife have to decide on this type of delivery.

There are risk factors your doctor or midwife must consider when deciding whether to recommend a Cesarean section. A Cesarean section may be necessary to prevent serious damage to your baby that could occur with a vaginal delivery. Some of the conditions that may justify choosing a Cesarean section are listed below:

- the baby's heart rate pattern is abnormal and does not improve when you are given oxygen or change position
- your labor fails to progress in spite of adequate labor contractions
- the baby is too large to fit through the birth canal
- the baby is coming out in an abnormal position
- the umbilical cord is being compressed so that the baby is not getting enough oxygen
- the placenta is abnormal or is in an abnormal position
- the mother's health or condition advises against vaginal delivery; or
- a Cesarean section was done for a prior delivery

Many of these factors may not be present or obvious until after your labor starts. Because of this, you may have to decide to have a Cesarean section very quickly, while in the pain of labor or perhaps after you have been given drugs for pain relief, which can affect your judgment.

Whether to recommend a Cesarean section over vaginal delivery is a judgment call by your doctor or midwife, after considering both the risks and the benefits to you and your baby. Cesarean sections are generally safe for you and your baby. A Cesarean section, though, is a major surgery that requires anesthesia. Therefore, it has the risks of any major surgery, and you should be sure to ask your doctor or midwife any questions you have about a Cesarean section before you begin your labor, in case you are faced with this decision.

It is important to remember that whether you deliver your baby vaginally or have a Cesarean section, it is rare that a baby or mother suffers any permanent injury during labor and delivery. In a small percentage of cases, however, serious complications do occur during the labor and delivery process.

## Summary

Learning what to expect during your labor and delivery, and understanding the decisions and the various choices available to you, should help you feel more relaxed and confident about having your baby.

In 98 percent of full-term pregnancies, women deliver healthy babies without any significant problems at all. Despite the many improvements in health care for expectant mothers and newborns, serious complications occur about 2 to 3 percent of the time.

Now that you have read through this brochure, you probably have questions you would like to talk over with your doctor or midwife. It is important to discuss the decisions surrounding your labor and delivery in advance. It is also important to realize that even with the best preparations, not all of the decisions made will prevent complications for mother and baby. The doctors, midwifes, nurses, and others who take care of you during labor and delivery will do their best to see that your birthing experience is happy, healthy, and safe.

*(Continued on back of flap)*

*September 2011* RM/606r1

I have read and understand the information contained in the brochure

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Mother's Signature

_____

Father's Signature

_____

Date