



Cesarean Deliveries

What is a cesarean delivery?

A cesarean delivery, also known as a “C-section”, is the surgical delivery of a baby. Doctors make an incision in the mother’s abdomen and uterus to remove the baby, rather than birth taking place through the vagina.

What are the reasons a baby would need to be born by cesarean?

While most women are able to deliver vaginally, there are many health reasons for C-sections. Every pregnancy is different. Sometimes the need for a C-section is discovered during pregnancy and the surgery is planned in advance. Other times, doctors decide to do a C-section after a woman is already in labor.

A cesarean delivery is needed if:

- The labor is not progressing.
- The baby is too big to safely pass through the mother’s pelvis.
- The baby is in a position that would make it difficult to complete a safe vaginal delivery.
- There is abnormal bleeding from the mother’s uterus.
- The baby is not tolerating labor.
- The baby has a birth defect or problem that requires a surgical delivery.
- The placenta is covering the cervix (placenta previa).
- The woman has an active genital herpes infection when she goes into labor.
- The woman has tested positive to the HIV antibody (AIDS) test.
- The woman is pregnant with triplets or more. C-section is also recommended in some twin pregnancies.

A C-section may also be needed if:

- The mother has previously had an incision in her uterus that will not make it safe for her to labor (for example: several prior cesareans or some myomectomies).

For any of these medical reasons, and a few others, a doctor may decide that a cesarean delivery is safest for both mother and baby. Planned c-sections for non-medical reasons are not recommended before 39 weeks because your baby's lungs and other important organs may not yet be fully developed.

What happens in a C-section?

Anesthesia (pain medication)

Before beginning a C-section, the mother is given medication to block pain. In most cases where a woman has been in labor, this is an epidural, done by injection into the space outside the spinal cord. It makes the woman not feel pain from the waist down. In cases of scheduled cesarean sections, a spinal anesthetic is usually used. In this case, a combination of pain medication and

numbing medication is placed directly into the area around the spinal cord, making the mother numb from the waist down.

Both epidurals and spinals affect a mother's ability to stand, move or walk. In rare cases, a general anesthetic is given, in which case the mother would not be awake during delivery.

Surgery

A C-section is performed in an operating room. It typically takes about 30 to 45 minutes, although it sometimes takes longer. The mother's partner or other support person is usually allowed into the operating room. As soon as the anesthetic medication takes effect, an incision (cut) is made in the lower abdomen, the abdominal muscles are pushed aside, another incision is made in the uterus, and the baby is removed. The baby is usually delivered within the first 5 to 10 minutes after the surgery begins. The woman may be able to feel a pulling or tugging sensation as the baby is delivered, but should not feel pain. She may have a chance to see the baby briefly shortly after it is born. The placenta is removed through the same opening in the uterus. Afterwards, the incision is closed, and the mother is taken to the recovery room for about 1 to 4 hours before going back to her hospital room.

Recovery

A woman delivering by C-section will usually stay in the hospital for 2 to 3 days after the surgery. In the hospital, nurses will help the new mother get out of bed in the first 12 hours to use the restroom. They will encourage her to get a moderate amount of activity. This helps relieve gas, and improve circulation and breathing. Pain medication is usually necessary for one to two weeks when recovering from a cesarean.

Once back home, the mother should plan to have help for the first few weeks. Caring for her baby is the most demanding activity she should do during this recovery period. A mother can breastfeed her baby after a C-section. Breastfeeding will help the uterus return to its normal size more quickly. Medications prescribed by your doctors are usually safe even when breastfeeding.

After a C-section a mother will be asked to keep the incision site clean and dry and free of lotions, ointments, and powders. Gradually, she will be able to increase her activities. After about 6 weeks, she will likely be able to do everything she did before her surgery.

Risks

A C-section is a relatively safe operation. However, it is a major abdominal surgery, and there can be complications. Like all operations, it has certain risks. When a doctor is deciding about whether a C-section is necessary, he or she is deciding whether there are enough benefits of doing a C-section to outweigh these risks.

For the mother, risks include:

- Infection
- Bleeding

- Damage to other organs close to the uterus, such as the bladder or the bowel
- Reactions to the anesthesia

Depending on the type of complication, its treatment may require being readmitted to the hospital. Fortunately, these problems range from unusual to rare. You will be told what to watch for when you go home after your C-section.

For the baby, risks include:

- Breathing problems if its lungs are not yet ready for birth
- Laceration (cut) from the surgery (this is unusual and typically minor)
- Being born prematurely

Future deliveries

Some women who have had a C-section will choose to have their next child by C-section. Other women will try to deliver vaginally. This is known as a trial of labor. A successful trial of labor is known as a VBAC (vaginal birth after cesarean). Your doctor or other medical professional can help you explore what type of delivery would be best for your next pregnancy.

There are unusual but serious risks that increase with each additional C-section (related to increased scar tissue and abnormal attachment of the placenta). Therefore, it is important that a woman planning to have more than 2 children carefully consider the possibility of having a VBAC after a first C-section.

If a medical reason for a C-section is determined during her pregnancy, a woman would have a planned C-section (one that is scheduled ahead of time). The surgery would be scheduled close to her baby's due date. Seeing her doctor or other medical professional early in the pregnancy helps determine the due date accurately. This helps decrease the risk of delivering the baby too early. Most women who have elective repeat C-sections should plan and schedule their deliveries between 39 and 40 weeks gestation.

Sometimes women who are scheduled to have a planned C-section go into labor first. Generally, there is no problem with this as long as the labor period is not too long. Typically, doctors will perform a C-section earlier than planned as long as labor is confirmed and it is safe to proceed.

Understanding C-sections

A cesarean surgery is a major operation with a higher risk of complications, and a longer recovery period than a vaginal birth. Some women think that having a C-section means that they will avoid pain since they are not likely to experience labor. However, it is not realistic to expect to avoid all pain and discomfort while healing after a major surgery like a C-section. Pregnant women who feel anxious about pain in labor are encouraged to explore ways to manage these feelings and become more prepared.

Attending childbirth classes, getting emotional support during labor, and discussing medication for pain management ahead of time, are all things that can help women with their concerns about labor and delivery.

Women often have very strong feelings about wanting to deliver their babies vaginally, and avoid a C-section. For most women, vaginal birth is possible. And for most, it is the best way for them to deliver their babies. For some women, however, a vaginal delivery is impossible, and the safest way for them to deliver is by having a C-section. A surgical delivery is still the birth of a new baby, and can be a joyous experience for the mother and her partner.

If your doctor decides a C-section is necessary, remember that it is always with the best interests of you and your baby in mind.

If, during your pregnancy, your doctor or other medical professional thinks that you are more likely to need a C-section, be sure and explore any questions you may have so that you understand why a C-section is necessary.

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Other resources

- To learn more about what to expect, view our online 'Prepare for Your Procedure (Emmi)' program on your doctor's home page at **kp.org/mydoctor**.
- Connect to our Web site at **kp.org** to access health and drug encyclopedias, interactive programs, health classes, and much more.
- Contact your Kaiser Permanente Health Education Center or Department for health information, programs, and other resources.
- American College of Obstetricians and Gynecologists (ACOG): **acog.org**

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor.