

If you have had a caesarean section (C-section) before, your midwife will talk to you about your options for giving birth this time.

This handout explains some of the research on this topic and gets you thinking about other factors that may affect your decision so you can make the best choice for yourself and your family. This document does not replace the informed choice discussions between you and your midwife.



How to give birth is a personal decision with no right or wrong answer. Your midwife will support your choice, and they will help make your birthing experience as positive as possible, however you choose to birth your baby.

#### What are my options when giving birth after a previous C-section?

You will have the choice of planning either:

<b>VAGINAL BIRTH AFTER</b>		
<b>CAESAREAN SECTION</b>		
(VBAC)		

VBAC is a safe choice for most birthing parents who have had a C-section. Some who plan VBAC will end up having another C-section.

## REPEAT CAESAREAN SECTION (C-SECTION)

You may decide to have another C-section. For some, a planned C-section may be a safer option.<sup>1</sup>

#### **DID YOU KNOW?**

"Once a caesarean, always a caesarean" is an outdated approach. We now know from research and experience that many birthing parents who have had a C-section in the past can still give birth vaginally. In fact, it may be safer to do so.

#### What are some benefits of VBAC and C-section?

Each way of giving birth has potential benefits. Emerging research examines the broader health impacts of vaginal delivery for both birthing parents and newborns.

VBAC	REPEAT C-SECTION
You can experience a vaginal birth. This may be important to you.	It may reassure you if you know what to expect from surgery.

There may be reasons related to your health history and current pregnancy that make C-section a safer option for you and your baby. This includes psychological and emotional safety. For some parents, a history of trauma, including traumatic birth, may result in C-section feeling like the safer option.

References for most information included in this document can be found in the accompanying Clinical Practice Guideline (CPG), <u>Association of Ontario Midwives' Clinical Practice Guideline No. 14: Vaginal Birth After Previous Low-Segment Caesarean Section</u> (1). References not found in the CPG are indicated throughout this document and are included in the reference list on the last page.

#### **VBAC**

You are less likely to have complications related to surgery (see Risks section below).

### You are less likely to have difficulties chest/breastfeeding.

With vaginal birth, levels of prolactin and oxytocin (hormones that help you make milk and bond with your baby) are higher when compared with levels after C-section.

You are more likely to have immediate skin-to-skin contact with your baby and nurse your baby sooner. Babies born by C-section are more likely to be admitted to a nursery or neonatal intensive care unit (NICU) for breathing difficulties.

### Your baby will pick up "good bacteria" from your birth canal when being born.

Although we know that good bacteria are important for the immune system and disease prevention, we need further research to look at the long-term impacts when this exposure to good bacteria does not happen during C-section.

### Your baby is less likely to develop asthma later in life.

Research suggests that this may be related to the "lung squeeze" and/or good bacteria exposure that happens during vaginal birth.

### You are more likely to have a shorter hospital stay and a faster recovery.

This may make it easier to look after other children, chest/breastfeed your baby and return to your usual level of activity.

#### You may experience less pain overall.

One major study showed that about 50% of clients have some pain during the first two months after vaginal delivery, but only 2% report pain at six months after the baby is born. In contrast, 80% of clients report pain two months after a C-section, and 20% still experience pain at six months after delivery (2).

### You are more likely to have a positive birth experience.

In one large Canadian study, clients who had a VBAC rated their experiences more positively than those who had a repeat C-section.

#### You are less likely to have postpartum depression.

A large 2020 study showed lower rates of depression both short term (two weeks postpartum) and long term (six months postpartum or more) in clients who had a vaginal birth compared with those who had a C-section.

#### REPEAT C-SECTION

You are less likely to experience uterine rupture (see Risks section below).

You can avoid the risk of an emergency C-section (see Risks section below).

You may be more likely to know the date when your baby will be born.

You are slightly less likely to experience urinary incontinence (loss of bladder control) and much less likely to experience pelvic organ prolapse (when the uterus, cervix, vagina, bladder, urethra or rectum drops from its typical position) after you have your baby. Urinary incontinence and pelvic organ prolapse are both treatable conditions.

#### **DID YOU KNOW?**

It's common to worry about vaginal tears with VBAC. You might worry about pain in the area and problems with having sex or urination and bowel movements. Fortunately, for the few birthing parents who do experience major tears, these problems are temporary. Studies show that they tend to be resolved within three months after giving birth. (3)



#### What are some risks of VBAC and C-section?

Studies tell us that both VBAC and planned C-section are very safe. However, having a baby always involves some risk of complications, no matter which kind of birth you have.

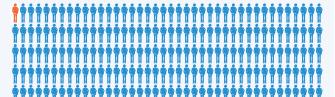
#### **VBAC**

#### **Uterine rupture:**

Uterine rupture occurs when the wall of the uterus splits during pregnancy or labour. If this were to happen, the split would likely be along the scar tissue of the previous C-section. Uterine rupture requires emergency surgery.

Uterine rupture happens in about 0.5% of all VBAC labours. This means that one uterine rupture would be expected to occur for every 200 birthing parents who plan to have a VBAC (which means a 99.5% chance this will not happen).

FOR EVERY 200 WHO PLAN A VBAC
ONE WILL EXPERIENCE UTERINE RUPTURE



Most birthing parents and babies will recover completely after uterine rupture. On rare occasions, it can have serious effects:

- Birthing parent: excessive bleeding or removal of the uterus (hysterectomy).
- Baby: brain damage or death.

These outcomes occur in 6% or less of cases of uterine rupture. Because uterine rupture occurs so rarely, the chances that a VBAC will lead to problems for you or your baby are very low.

There is no way to know for certain who will have a uterine rupture. Your chances may be lower if:

You have had a previous vaginal delivery.

Your chances of a uterine rupture may be higher if:

- You had your last C-section less than two years ago.
- You have had more than one C-section.
- You are given drugs to induce (start) or augment (strengthen or speed up) your labour this time.

Having one of these factors doesn't mean it is unsafe to plan a VBAC. It just means that the likelihood of a uterine rupture is slightly higher but still low.

#### Having an emergency C-section:

Even if you plan VBAC, you may need to have a C-section. This happens to about one in four clients who plan VBAC. Having a C-section after labour has begun is associated with more risks (such as uterine infection) than a C-section before labour.

#### REPEAT C-SECTION

#### Problems related to surgery:

As with any major surgery, C-section can lead to some problems: fever, infection, injuries to the bowel or bladder, or blood clots.

#### Problems with the placenta in future pregnancies:

Scars from a C-section can cause difficulties with how the placenta attaches itself to the uterus in future pregnancies (placenta previa and placenta accrete). These conditions can cause serious bleeding and in rare occasions may result in death.

The risk of placenta problems increases with each additional C-section.

#### **DID YOU KNOW?**

If you plan on having more than one child after a previous C-section, vaginal birth may be safer than repeat C-section, which is major uterine surgery. The risks to future pregnancies and deliveries increase with every C-section you have.

#### Neonatal breathing difficulties:

Vaginal birth helps squeeze fluid from your baby's lungs. That's why babies born by C-section are more likely to have trouble breathing right after birth compared with those who are born vaginally.

Midwives and hospitals are well prepared to deal with babies' breathing problems. Most of the time, these are mild and babies recover quickly.

Breathing problems may mean your baby requires admission to a special nursery or neonatal intensive care unit (NICU) for observation or treatment. This may mean that you are separated from your baby.

## What's the safest option?

It's hard to compare the safety of planned VBAC with repeat C-section because the overall risks of both options are very low.

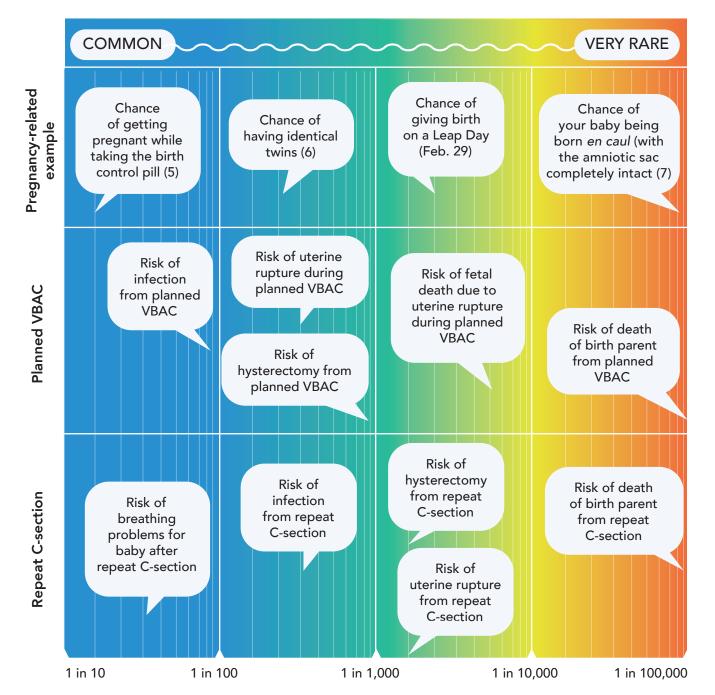
It may be helpful to know that in general:

- A planned VBAC that results in vaginal birth carries the lowest risk for parent and baby.
- A planned VBAC that ends up being an unplanned C-section carries a higher risk.
- A planned C-section is somewhere in between (4).

#### Putting risk into perspective

This chart compares the risks of VBAC and repeat C-section. To help you put these into perspective, we've included other examples of pregnancy-related odds that you may have thought about.

#### **ODDS COMPARISON**



#### What are my chances of having a VBAC?

Most VBACs happen as planned. It's hard to guess whether you will have a VBAC. Some factors about your health history, current pregnancy and previous birth experience(s) may make it more or less likely that you will give birth vaginally.



- You have had a vaginal birth before.
- The reason for your last C-section is not a factor this time; for example, your last C-section happened because your baby was not in a headdown position, and this time your baby is head down.
- You are younger than 35 years old.
- Your labour starts on its own.
- Your labour progresses typically.

## Your chances of having a VBAC DECREASE if:

- You have had more than one C-section.
- Your BMI (body mass index) is over 25.
- You are 35 years of age or older.
- You are given drugs to induce (start) or augment (strengthen or speed up) your labour.

Studies tell us that for every 100 VBACs planned:

Your chances of having a VBAC may be higher or lower if any of these factors applies to you. However, there is no way to know for certain whether or not you will have a VBAC. Research shows that even if your odds are decreased, you still have a greater than 50% chance of having a vaginal birth.

25%
will have another
C-section

75%

will have a VBAC

# Frequently asked questions about VBAC

## What about having my baby at home or at a birth centre?

A previous C-section may affect your choice of where to give birth. One challenge of decision-making is the limited research to help us know whether attempting a VBAC out of hospital is less safe than attempting a VBAC in hospital. In one study of Ontario clients cared for by midwives from 2003 to 2008, babies born at home by VBAC were no less healthy than those born in hospital by VBAC.

If you are thinking of having your baby at home or at a birth centre, talk to your midwife about what this means for you in your community. There are many factors to consider, including:

- How far is the hospital from your home or birth centre?
- What can the local hospital manage in an emergency?
  - » Can they perform a C-section there, or would you need to travel to a hospital farther away?
  - » Are specialists on site, or do they need to come in when called?

## What about listening to the baby's heart rate in labour?

During your labour, you will be able to listen to your baby's heart rate continuously or intermittently (on a regular basis but not continuously). Where you have your baby (home, birth centre or hospital) will affect your options. There is a lack of high-quality research to compare continuous and intermittent listening during VBAC labour. However, continuous listening has become routine in many communities. Talk to your midwife about the risks and benefits of your options.

## What about pain relief?

It is possible to have an epidural during a VBAC labour, although this may lower your chances of having a vaginal birth. Discuss the risks and benefits with your midwife. You may want to try other methods of pain relief (sterile water injections, massage, hydrotherapy, nitrous oxide) that do not lower your chances of having a vaginal birth.

## What if I go past my due date? What about induction?

If you are planning VBAC, going past your due date and being induced (having your labour started for you) are options. If you are induced, your chances of vaginal delivery may be lower, and your chances of uterine rupture may be higher. An accurate due date is especially important if you are planning VBAC.

## for VBAC if I have a "big baby?"

What does it mean A big baby (called macrosomia, which means birth weight of 4000 g or heavier) may lower your chances of having a vaginal birth and may make your chances of uterine rupture higher. However, it is important to note two points:

- 1. It is very hard to predict before birth how much a baby will weigh, so decisions should not be made based on this.
- 2. If you've had a previous vaginal birth, having a big baby does not lower your chances of having a vaginal birth or make your chances of uterine rupture higher.

#### **DID YOU KNOW?**

Many birthing parents are told that the reason for their previous C-section was because the baby was too big for their pelvis. This is called cephalopelvic disproportion (CPD). True CPD is rare (8), and it is more likely that other factors led to the C-section. These factors will not necessarily happen again.

What about VBAC If you are pregnant with twins, planning a VBAC is possible, although with twins? there is little high-quality research in this area. Existing studies show that VBAC labour with twins may increase the likelihood of uterine rupture when compared with VBAC labour with one baby.

### more than one C-section?

What if I have had It is still possible to have a VBAC after more than one C-section. Research tells us that your chances of having a vaginal delivery are lower and your chances of uterine rupture are higher if you have had two previous C-sections. There is very little research into VBAC after three or more C-sections. One small 2010 study comparing VBAC in birthing parents with a history of three or more C-sections to those with one or two previous C-sections showed no significant difference in rates of vaginal delivery. The study reported no uterine ruptures.

#### How can I decide what's best for me and my baby?

How you choose to give birth is a very personal decision. It may help to consider the following:

- When you think about your previous C-section
  - » Was there anything that you liked or didn't like about it?
  - Do you have any unanswered questions about it?
  - Do you understand the reason for your previous C-section? It might be helpful to talk to your midwife about how likely it is that this situation could happen again.
- Do you have any fears about this upcoming birth?
- What are your hopes for the birth this time?

Ask your midwife about other important factors to think about when making your decision:

- Things about your health, your pregnancy and your plans for future children that may make VBAC safer or less safe for you when compared with repeat C-section.
- Your hospital's policy on VBAC.

If you have other questions be sure to write them down and bring them to your next appointment.

## What matters most to you?

Below is a list of common reasons birthing parents might choose VBAC or repeat C-section. Thinking about what matters most to you can help with your decision. You can add checkmarks to the table below to prioritize the factors. Feel free to add other reasons that are important to you, perhaps based on the thoughts you came up with above and from your discussions with your midwife. See where you put the most checkmarks. You might want to give those reasons extra thought.

How much does this matter to you? 🗹: a little 🔟 🗹: somewhat 🔽 🗹	<b>1</b>
Some reasons you might choose to plan a VBAC:	
You are more likely to have a shorter hospital stay and a faster recovery.	
You are less likely to have problems related to surgery.	
You want to experience a vaginal birth.	
You are less likely to have difficulty with chest/breastfeeding your baby.	
You want your baby to be exposed to good bacteria as they move through your birth canal.	
Your child is less likely to have asthma later in life.	
You are more likely to have less pain overall.	
You are more likely to have a positive birth experience.	
You are less likely to have postpartum depression.	
You may want to have more children after your current pregnancy.	
Other reasons:	
Some reasons you might choose to plan a repeat C-section:	
You are less likely to experience uterine rupture.	
You avoid the risks of an emergency C-section.	
You are less likely to have urinary incontinence and pelvic organ prolapse.	
You are more likely to know the date when your baby will be born.	
It may give you comfort to know what to expect from surgery.	
Other reasons:	

#### **REMEMBER:**

Although it may be difficult to live with uncertainty, sometimes births do not go as planned. Some birthing parents who try for a VBAC may end up having a C-section. In other cases, clients go into labour before a planned repeat C-section but decide to have a VBAC because labour is progressing well.

Whether you are planning a VBAC or a repeat C-section, it's good to think ahead of time about what would make your experience most positive and to discuss these ideas with your midwife.

Choosing between VBAC and a repeat C-section may not feel like an easy decision. There are many factors to consider, and you may have mixed feelings about different aspects of the decision. You might find that the research speaks to you in one way, but you have a particular instinct that pulls you in another direction. Take your time in deciding and know that it's okay to change your mind at any point. Whatever your plan and however your baby is born, your midwife is there to support you.

#### References

Below is a list of the sources used to provide the information in this document:

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