

Vaginal Birth After Three or More Cesareans: What You Need to Know!

After someone has a cesarean section, they often wonder if they will always have to have a cesarean for future deliveries. While “once a cesarean, always a cesarean” is a common belief, it is not valid from a scientific standpoint. Vaginal birth after three or more cesareans (VBA3+C) is an option for some people.

**Largest Study:
241 people**

How much information do we have about the risks of VBA3+Cs?

The honest answer is that we do not have much information. Only a handful of studies have been published on VBA3+C,

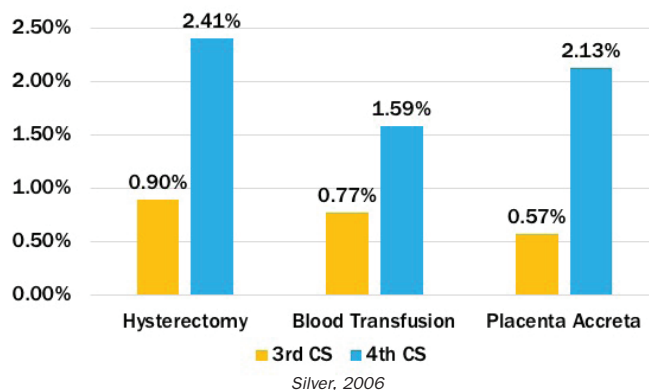
and the strength of their findings is limited because they included a small number of women. Among the couple of thousand women with three or more prior cesareans only a fraction of them planned for a vaginal birth. The largest study included 241 women who planned a VBA3+C.¹ Additionally, studies often combine vaginal birth after two cesareans (VBA2C) with VBA3+C, making it impossible to break out the risk among higher-order VBACs.

What do we know about the risks of opting for a repeat cesarean section?

Cesarean sections do pose risks to both the birthing parent and baby. They are associated with common minor complications and life-threatening risks, including excessive bleeding, blood clots, injury to other organs during surgery, injuries to baby, future risks with abnormal placentas (previa and accreta), and infection. As the number of cesareans increase, so do some of these risks.

Scheduling a repeat cesarean and avoiding labor does not necessarily eliminate risks. For example, one large study of planned cesareans reported the risk of needed hysterectomy as 0.9% during the third cesarean and 2.41% in the fourth cesarean.² The risk of requiring a large blood transfusion also grows from 0.77% in the third cesarean to 1.59% in the fourth.² Placenta accreta, when the placenta abnormally attaches to the uterine wall, increases from 0.57% in the third cesarean to 2.13% in the fourth.²

RATES OF OCCURRENCE DURING A PLANNED CESAREAN

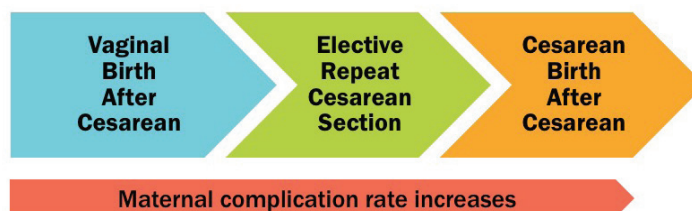


The risk of placenta previa in future pregnancies (when the placenta implants over the cervical opening), length of operative time, length of hospital stay, and rate of uterine infection all increase with each cesarean.²

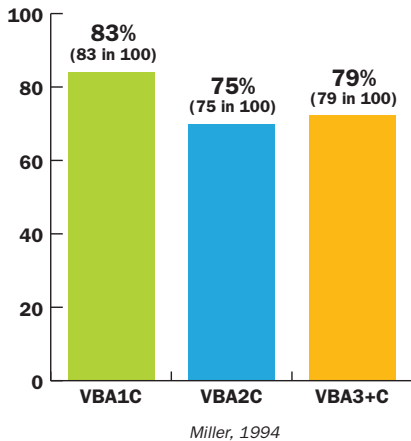
Keep in mind that these are the rates among repeat cesareans which occurred simply because there was a prior cesarean. There was no medical reason for these cesareans to occur.² We also see higher rates for many of these complications when a medical reason develops during a planned VBAC that requires a cesarean.^{3*}

Maternal birth complications in pregnancies following cesarean vary by how the person delivers. After one or two prior cesareans, VBACs have the lowest rates of complications, followed by planned cesareans, and then by those who plan a VBAC but have an unexpected repeat cesarean during labor³ (cesarean birth after cesarean.)

MATERNAL COMPLICATIONS BY MODE OF DELIVERY



RATE OF VAGINAL BIRTH AFTER CESAREAN



Miller, 1994

What do the limited studies of VBA3+C say?

The largest study we have (Miller, 1994) reported that among those who planned a VBA3+C, 79% had one. For comparison, among those who planned a VBA1C (VBAC after one cesarean), 83% had a vaginal

birth as did 75% of those who planned a VBA2C.

Miller reported a VBA3+C uterine rupture rate of 1.2%. However, only 241 people in his study planned a VBA3+C and you need a couple thousand people to report uterine rupture rates accurately. So, we cannot say whether this uterine rupture rate of 1.2% is accurate. The risk may be higher or lower than reported in this small study.

Miller reported that no babies died among the 241 that planned a VBA3+C. Again, a sample of 241 people is not enough to accurately report that outcome.

There may be other risks associated with VBA3+C; Miller did not report on other potential outcomes like oxygen deprivation to the baby or rates of excessive bleeding or hysterectomy among mothers.

While there are other studies on VBA3+C, their sample sizes are even smaller, making their conclusions even weaker: A 2010 study included 89 people planning a VBA3+C.⁴ A 2003 study had 4 people planning a vaginal birth after three cesareans (VBA3C).⁵ A 2006 study included 104 people with three or more prior cesareans but didn't break out outcomes for this group.⁶ As a result, we don't have strong data on VBA3+C outcomes among birthing people or their babies.

What this all means is this: no one can really say what the risks are. They are likely higher than a VBA2C, but how much higher is tough to pin down.

What do national guidelines say?

The American College of Obstetricians and Gynecologists (ACOG) simply states that data regarding risks for women planning VBACs with more than two previous cesareans is limited.⁷ Many believe since ACOG only explicitly mentions one or two prior cesareans, that means anything above and beyond that is outside of guidelines.

However, we must remember that ACOG is not shy about making recommendations. If their goal was to risk out VBA3+C, then they would have used plain language to make that intention clear. They did not do that.

The most important thing for parents to know

Every decision you will make surrounding your pregnancy and childbirth has risks and benefits. If you are thinking about a VBA3+C, there are many things to consider, including how many more children you want to have.

Knowing what the research says is one thing to consider, but given that so few studies have been published on VBA3+C, we just don't have good data. So the most important thing for you to remember is that this is an area of unknown risk. Keep in mind that even in these situations, you still have the right to make your own medical decisions.

So as you consider your options, check in with yourself about weighing the unknown risk of VBA3+C with the known risks and benefits of multiple cesareans. The limited evidence we have says that 79% of those who plan a VBA3+C will have one, and as we don't have firm data on the uterine rupture risk, we can't say for certain what that particular risk is. The bottom line is, there is not enough information available to make a decision on whether or not to plan a VBA3+C based solely on statistics.

The other thing to keep in mind is that most physicians and midwives do not attend VBA3+C for a variety of reasons that may not be about evidence, but rather policy or regulation. As a result, many women who want to labor after multiple cesareans have to travel long distances in order to find a supportive provider.

Ultimately, how you give birth is your choice and your right. In exercising that choice, you take on a measure of personal responsibility for your health care outcomes.

* I do refer here to older studies, but newer research is not as robust. The newer research relies on smaller groups of people and/or birth certificate data, doesn't break out complications for higher numbers of repeat cesareans, and does not control for complicating factors like induction, induction agent, scar type, etc.

RESOURCES:

1. Miller, D. A., Diaz, F. G., & Paul, R. H. (1994). Vaginal Birth After Cesarean: A 10-Year Experience. *Obstetrics & Gynecology*, 84, 255-8.
2. Silver, R. M., Landon, M. B., Rouse, D. J., & Leveno, K. J. (2006). Maternal Morbidity Associated With Multiple Repeat Cesarean Deliveries. *Obstetrics & Gynecology*, 107(6), 1226-1232.
3. Landon, M. B., Hauth, J. C., & Leveno, K. J. (2004). Maternal and Perinatal Outcomes Associated with a Trial of Labor after Prior Cesarean Delivery. *New England Journal of Medicine*, 351, 2581-2589.
4. Cahill, A., Tuuli, M., Odibo, A., Stamilio, D., & Maccones, G. (2009). Vaginal birth after cesarean for women with three or more prior cesareans: assessing safety and success. *BJOG*, 117, 422-428.
5. Spaans, W. A., van der Vliet, L., Roell-Schorer, E., Bleker, O. P., & Roosmalen, J. (2003). Trial of labour after two or three previous caesarean sections. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 110, 16-19.
6. Landon, M. B., Spong, C. Y., & Tom, E. (2006). Risk of Uterine Rupture With a Trial of Labor in Women with Multiple and Single Prior Cesarean Delivery. *Obstetrics & Gynecology*, 108, 12-20.
7. American College of Obstetricians and Gynecologists. (2019). ACOG Practice Bulletin No. 205: Vaginal birth after cesarean delivery. *Obstetrics & Gynecology*, 133(2), e110-e127.