

# VBAC Community Birth – What Do We Know About Risk?

## One of the decisions every person planning a VBAC will have to make is where to give birth: home, birth center, or hospital.

There is a lot of controversy surrounding this decision and everyone you know will likely have a strong opinion. There are many personal factors that go into this choice. Here, we focus on the research on risk factors and outcomes for home and freestanding birth center VBAC, collectively known as community VBAC.

VBAC is associated with many benefits including avoiding major surgery, quicker recovery times after birth, lower rates of complications such as blood clots, excessive bleeding, infection, blood transfusions, bowel or bladder injury, hysterectomy, and abnormal placentation such as previa and accreta.<sup>1</sup> Even the American College of OB/GYNs (ACOG) agrees that increasing the chances of VBAC is one of the main things we can do to decrease the overall complication rates for parents and their newborns.<sup>1</sup> Community birth is one way to increase VBAC rates.

### Community Birth For “Good” VBAC Candidates?

Sometimes, people will choose where to labor after cesarean (LAC) based on where they think their VBAC odds are highest. Trying to predict who will and will not have a VBAC is problematic, because many of the things that influence VBAC rates are not about you personally. However, it is widely thought that certain key characteristics make people more likely to VBAC without complications. The things associated with higher VBAC odds include starting labor spontaneously, more than 19 months since the last birth, having had another vaginal birth at some point, and having had the first cesarean for something that is not likely to repeat such as breech or twins.<sup>1</sup>

On the other hand, there are a few personal characteristics that do seem to decrease VBAC odds. According to ACOG, people who are older than 35, who go past 40 weeks gestation, or who have preeclampsia have a decreased chance of VBAC.<sup>1</sup> People with a higher BMI also have a decreased chance of a VBAC, but some evidence shows that this is largely due to providers not being willing to offer VBAC to people of size.<sup>2</sup> Although common thought is that previous cesarean for failure to progress (FTP) is a predictor for VBAC success, diagnosis of FTP is often subjective and does not follow the current guidelines. And, many people who LAC with a prior FTP diagnosis do birth vaginally.<sup>3</sup> Black and brown parents, as well as immigrant parents are generally less likely

to have a VBAC than white parents.<sup>4,5</sup> Here is the thing about all of these personal characteristics: we do not know if they decrease chances due to protocols, provider bias, or actual risk.

### Risks to the Parent

Most parents hear about uterine rupture (UR) as the greatest risk when choosing to LAC. It is impossible to know who will and will not experience a UR and the research we have on UR, especially UR in community birth settings, is not great due to small sample sizes and challenges with how the studies were conducted. Even ACOG says “no accurate ... predictors of uterine rupture have been identified.”<sup>1</sup>

The main risk factor in VBACs in home and freestanding birth center settings is distance from an operating room. This is also true for anyone planning to deliver at a smaller hospital that does not have staff and operating rooms ready for emergency cesarean 24 hours a day. Yet it's important to note that some of these hospitals still offer VBAC because they believe in your right to make your own risk assessment and medical decisions. In either case, the additional time between recognition of an issue to surgery increases risk.

People choosing LAC community birth should know that there does appear to be an increased risk IF uterine rupture occurs, but that the rates of uterine rupture remain relatively low in community birth settings.<sup>6</sup> Cox found a confirmed uterine rupture rate of 0.19%, or 1 in 526 planned community VBACs, which increased to 0.38%, or 1 in 263 when they included suspected uterine ruptures. Overall, Cox found that people who had a vaginal delivery prior to their VBAC had lower rates of complications than those who did not.

Race plays a factor in risk, too. Black parents are more likely to try for a VBAC and less likely to have a uterine rupture. They also have an increased chance of complications if they have an elective repeat cesarean section when compared to their non-black counterparts.<sup>4,7</sup> The newest research looking at this disparity establishes that poor outcomes for parents of color are likely due to racism.<sup>7,8</sup>

Community LACs have an increased risk of transfer to the hospital when compared to people without a cesarean history, but people who plan community LACs have a greater likelihood of birthing vaginally after transferring than if the LAC occurred at the hospital.<sup>9,10</sup> And it is important to note that timely transfer to the hospital if there is a suspected problem is an example of good

collaboration between community providers and hospitals, which improves outcomes.

## Risks to the Baby

The largest studies we have on newborn outcomes for planned community births in the United States come from the MANAstats data and US birth and death certificates. Keep in mind, there are some issues with both databases. MANAstats includes all types of midwives with a variety of experience, knowledge, and protocols and does not specify things like distance to the hospital. Birth and death certificate data does not distinguish between community births that were planned versus unplanned, or attended by a qualified provider versus unattended. The challenge with both data sets relative to newborn outcomes is that they do not account for other complications that could affect risk, whether the birth occurred in the community or after transfer to the hospital, and they don't include enough people in order to accurately measure rare events like newborn deaths. All of these things influence outcome data.

Cox compared 1,052 community VBACs to 12,092 community births with no history of cesarean.<sup>6</sup> Cox found higher rates of low Apgar scores, newborn hospitalization and death for babies born to people with a cesarean history. In this study, there were two suspected uterine ruptures, two confirmed uterine ruptures, and five newborn deaths. Both suspected uterine ruptures resulted in newborn deaths and we can assume that distance and time played a role in these outcomes. However, both babies from the two confirmed uterine ruptures lived. The three other newborn deaths were not related to the prior cesarean.

Tilden compared 3,147 community VBAC births to 106,823 hospital VBAC births, which may give us a slightly better view of the risk of community birth compared to hospital birth.<sup>11</sup> Tilden found an increase in low Apgar

scores and newborn seizures, but did not find an increase in newborn death when comparing community LAC to hospital LAC. This is important to note because the Cox study indicates a higher risk of newborn death, however Tilden's data tells us that is about VBAC, not about community birth. Research on LAC in hospitals shows us that the risk of neonatal death is increased in the hospital too.<sup>12</sup> And, Tilden also found that LAC in community birth was LESS likely to result in birth injuries and NICU admissions for the baby than hospital LAC. A special note for parents with higher BMIs: one small study in 2017 found there is no difference in newborn outcomes for hospital VBACs or elective repeat cesareans for very heavy parents.<sup>13</sup>

## Conclusions

We don't have enough research to clearly illustrate the risks and benefits of community LAC versus hospital LAC. ACOG recommends all LACs happen in hospital, "because of the unpredictability of complications requiring emergency medical care."<sup>1</sup> Yet, research has shown that hospital VBAC bans and hospital policies that make VBAC difficult to attain encourage people to choose different birthing places.<sup>14,15</sup> Risk is relative. People with a prior vaginal delivery who LAC do have slightly elevated risks overall when compared to people with vaginal births only, but they often have lower risks than first time parents.<sup>16</sup>

Planned community LAC with a midwife dramatically increases the chance of a VBAC which is known to reduce overall risks, especially for brown and black parents. These decisions are not simple and only you know whether community birth is the best choice for your LAC. Each pregnancy is different and needs to include an individualized risk benefit discussion.<sup>16</sup> Also, look at our handout, "VBAC Community Birth – Choosing Place and Provider" for a closer look at how risks and benefits change depending on where and with whom you birth.

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## RESOURCES:

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11. Tilden, E. L., Cheyney, M., Guise, J. M., Emeis, C., Lapidus, J., Biel, F. M., ... & Snowden, J. M. (2017). Vaginal birth after cesarean: neonatal outcomes and United States birth setting. *American Journal of Obstetrics & Gynecology*, 216(4), 403.e1. <https://dx.doi.org/10.1016%2Fajog.2016.12.001>
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DISCLAIMER: This handout is for informational reference only and is not meant to give specific medical advice. Talk with your care provider about all of your medical decisions.