



## **Pregnancy After a Cesarean**

### **CAN VBAC BE A LOW RISK ALTERNATIVE TO REPEAT CESAREANS?**

Yes, the risk of serious injury to the mother increases progressively with each cesarean. Of those that labor after cesarean (TOLAC), 60-80% will have a vaginal birth (VBAC). For most, VBAC carries lower risks than a repeat cesarean. After your first VBAC, your risk of uterine rupture decreases for your next birth.

### **CHOOSING A PATH TO YOUR FUTURE BIRTHS:**

Cesareans are major abdominal surgery. A common risk of surgery is adhesions (excessive scar tissue growth). Adhesions formed during abdominal surgery connects the uterus to surrounding tissues and organs. Adhesions can increase the risks of longer operation times and injury to adjacent organs. The risk of hysterectomy, or the surgical removal of the uterus, also increases. Your risk of Placenta Accreta rises with each uterine surgery. A person who has repeat cesareans can also be more likely to experience thromboembolisms (blood clots that break loose and block blood vessels), or excessive blood loss. While uterine rupture (a rare, but potentially catastrophic event during pregnancy or childbirth in which the uterine wall splits open) remains a concern after one or more cesareans, the risk of uterine rupture is low, and it decreases with each additional VBAC.

### **Risks of consecutive repeat cesareans compared to consecutive VBACs after the primary cesarean.**

#### **RISKS OF CESAREANS:**

##### **1ST CESAREAN**

Hysterectomy- 0.65%: 1 in 154<sup>[2]</sup>  
Blood transfusion- 4.05%: 1 in 25<sup>[2]</sup>  
Placenta accreta- 0.24%: 1 in 417<sup>[2]</sup>

##### **2ND CESAREAN**

Hysterectomy- 0.42%: 1 in 238<sup>[2]</sup>  
Blood transfusion- 1.53%: 1 in 65<sup>[2]</sup>  
Placenta accreta- 0.31%: 1 in 323<sup>[2]</sup>  
Major complications- 4.3%: 1 in 23<sup>[3]</sup>  
Dense adhesions- 21.6%: 1 in 5<sup>[3]</sup>

##### **3RD CESAREAN**

Hysterectomy- 0.9%: 1 in 111<sup>[2]</sup>  
Blood transfusion- 2.26%: 1 in 44<sup>[2]</sup>  
Placenta accreta- 0.57%: 1 in 175<sup>[2]</sup>  
Major complications- 7.5%: 1 in 13<sup>[3]</sup>  
Dense adhesions- 32.2%: 1 in 3<sup>[3]</sup>

##### **4TH CESAREAN**

Hysterectomy- 2.41%: 1 in 41<sup>[2]</sup>  
Blood transfusion- 3.65%: 1 in 27<sup>[2]</sup>  
Placenta accreta- 2.13%: 1 in 47<sup>[2]</sup>  
Major complications- 12.5%: 1 in 8<sup>[3]</sup>  
Dense adhesions- 42.2%: 2 in 5<sup>[3]</sup>

#### **RISKS OF TOLAC:**

##### **1ST TOLAC**

Rate of VBAC- 63.3%: 2 in 3<sup>[1]</sup>  
Uterine rupture- 0.87%: 1 in 115<sup>[1]</sup>  
Hysterectomy- 0.23%: 1 in 435<sup>[1]</sup>  
Blood transfusion- 1.89%: 1 in 53<sup>[1]</sup>

##### **2ND TOLAC**

Rate of VBAC- 87.6%: 9 in 10<sup>[1]</sup>  
Uterine rupture- 0.45%: 1 in 222<sup>[1]</sup>  
Hysterectomy- 0.17%: 1 in 588<sup>[1]</sup>  
Blood transfusion- 1.24%: 1 in 81<sup>[1]</sup>

##### **3RD TOLAC**

Rate of VBAC- 90.9%: 9 in 10<sup>[1]</sup>  
Uterine rupture- 0.38%: 1 in 263<sup>[1]</sup>  
Hysterectomy- 0.06%: 1 in 1667<sup>[1]</sup>  
Blood transfusion- 0.99%: 1 in 101<sup>[1]</sup>

[1] Mercer, B. M., & Gilbert, S., et al. Labor outcomes with increasing number of prior vaginal births after cesarean delivery. *Obstetrics & Gynecology*. 2008; 111: 285-291.

[2] Silver, R. M., & Landon, M. B., et al. Maternal morbidity associated with multiple repeat cesarean deliveries. *Obstetrics & Gynecology*. 2006; 107: 1226-1232.

[3] Nisenblat, V., Barak, S., & Griness, O.B., et al. Maternal complications associated with multiple cesarean deliveries. *Obstetrics & Gynecology*. 2006; 108: 21-6.