# Vaginal Birth and Cesarean Birth: How Do the Risks Compare?

Companion chart to the booklet

What Every Pregnant Woman Needs

to Know About Cesarean Section

be informed

know your rights

protect yourself

protect your baby

CHILDBIRTH CONNECTION

# Vaginal Birth and Cesarean Birth: How Do the Risks Compare?

The information in this chart and in the companion booklet, *What Every Pregnant Woman Needs to Know About Cesarean Section*, is based on an extensive review of current research. These resources were developed to help women make informed decisions about cesarean section.

The review found that "spontaneous" vaginal birth (with neither vacuum extraction nor forceps) involves many fewer risks than either cesarean section or "assisted" vaginal birth (with vacuum extraction or forceps). Without a clear and compelling need for a cesarean or for assisted delivery, a spontaneous vaginal birth is likely to be the safest way to give birth.

See key to information in tables at the end of the next page.

#### 1. CONCERNS ABOUT HAVING A CESAREAN SECTION

Having a cesarean section rather than a vaginal birth increases risk for the problems listed below.

# RISKS FOR MOTHERS AROUND THE TIME OF BIRTH

- maternal death LOW TO VERY LOW
- emergency hysterectomy *MODERATE*
- blood clots and stroke LOW
- injuries from surgery \*
- longer time in hospital VERY HIGH
- going back into hospital MODERATE
- infection HIGH
- pain, overall and at site of wound VERY HIGH
- poor birth experience VERY HIGH to HIGH
- less early contact with baby VERY HIGH
- unfavorable reaction to baby \*
- depression (difference found for some but not all studies)
- psychological trauma (difference found for unplanned cesarean) *HIGH*
- poor overall mental health and self-esteem \*
- poor overall functioning \*

#### **ONGOING RISKS FOR MOTHERS**

- pelvic pain \*
- bowel obstruction MODERATE

# FUTURE REPRODUCTIVE RISKS FOR MOTHERS

- infertility: want to become pregnant and cannot VERY HIGH to HIGH (not by choice)
- infertility: have less desire to be pregnant and choose to avoid *HIGH* (by choice)
- maternal death \* (possibly VERY LOW for maternal death related to scar)
- ectopic pregnancy MODERATE
- placenta previa MODERATE after one cesarean, HIGH after more than one cesarean
- placenta accreta MODERATE
- placental abruption MODERATE
- rupture of the uterus MODERATE

# RISKS FOR BABIES AROUND THE TIME OF BIRTH

- accidental surgical cuts HIGH
- respiratory problems *HIGH to MODERATE*
- not breastfeeding VERY HIGH to HIGH

#### **ONGOING RISK FOR BABIES**

• asthma, in childhood and adulthood HIGH

### RISKS FOR BABIES IN FUTURE PREGNANCIES

- stillbirth or death shortly after birth MODERATE
- low birth weight and preterm birth \*
- malformation \*
- central nervous system injury \*

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#### 2. CONCERNS ABOUT HAVING AN ASSISTED VAGINAL BIRTH

Having a vaginal birth with either vacuum extraction or forceps rather than a "spontaneous" vaginal birth without these procedures increases risk for the problems listed below.

#### **RISKS FOR MOTHERS**

- tear in perineum going into or through anal muscle VERY HIGH to HIGH with vacuum extraction; VERY HIGH with forceps
- excessive bleeding and transfusion *HIGH* for excessive bleeding; *HIGH* to *MODERATE* for transfusion
- going back into the hospital MODERATE
- infection VERY HIGH to HIGH for infection of the perineum; HIGH for infection within the uterus
- painful vaginal area VERY HIGH
- poor birth experience VERY HIGH
- bowel problems *VERY HIGH to HIGH*
- urinary incontinence \*
- anal incontinence VERY HIGH to HIGH for some leaking gas or stool in period after birth with forceps; \* for vacuum extraction
- hemorrhoids VERY HIGH to HIGH
- sexual problems *VERY HIGH to HIGH in weeks and months after birth*
- psychological trauma *HIGH* for *PTSD* diagnosis
- poor overall functioning \*

#### **RISKS FOR BABIES**

- brain injury LOW
- other birth injury MODERATE for injuries to the body and face

#### 3. CONCERNS ABOUT HAVING A VAGINAL BIRTH

Having a vaginal birth rather than a cesarean increases risk for problems listed below. Differences tend to be greater for assisted delivery (with vacuum extraction or forceps) and less for spontaneous vaginal birth (without these procedures).

#### **RISKS FOR MOTHERS**

- painful vaginal area VERY HIGH
- urinary incontinence \*
- anal incontinence \*

In most instances, these problems are mild and resolve during the recovery period after birth. Many can be prevented with conservative use of some maternity practices (such as episiotomy). See booklet for more information about these matters (pages 7 and 26-27) and for tips to reduce risk (pages 13-18).

#### **RISK FOR BABIES**

brachial plexus birth injury LOW

In most instances, this injury resolves soon after or within weeks of birth. In a small proportion of babies with this problem, a weakness with lifting the arms persists.

#### What do the Capitalized Words in Red Mean?

The capitalized words tell you the extra likelihood of experiencing a specific problem (such as infection or excessive bleeding) if you give birth with the care that involves more rather than less risk. In some cases (marked \*), there was not enough information to make this type of estimate. Additional research about these problems could lead to a different conclusion or identify new problems for the three lists. This system will allow you to estimate how a decision will affect your likelihood of experiencing a particular problem. You can focus on risks and problems that are especially important to you or on overall trends.

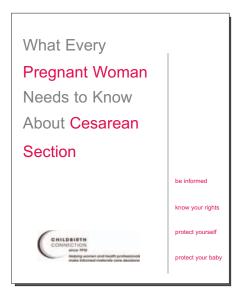
Extra likelihood of having a specific problem	Compared with the safer form of care, the care with more risk may cause problems for an additional	
VERY HIGH	1,000 to 10,000	
HIGH	100 to 999	
MODERATE	10 to 99	of every 10,000 mothers or babies
LOW	1 to 9	
VERY LOW	less than 1	
	1	

<sup>\*</sup> Studies examined did not include information to describe size of effect

# About the Booklet What Every Pregnant Woman Needs to Know About Cesarean Section

To help women make informed decisions about cesarean section, this booklet discusses: the importance of these issues for *all* pregnant women, women's right to "informed consent" and "informed refusal," situations that can lead to a cesarean, and evidence-based tips for use in pregnancy and in labor to help avoid unnecessary cesarean section and assisted vaginal birth. An appendix to the booklet describes the problems listed in this chart and estimates the difference that the type of birth makes to the likelihood that a woman will experience each problem.

This booklet was developed by Childbirth Connection, the oldest national organization advocating on behalf of childbearing women in the United States, in partnership with many professional and consumer groups. It has been endorsed by over 30 non-profit organizations.



This booklet is available without charge as a PDF file at <a href="https://www.childbirthconnection.org/cesareanbooklet/">www.childbirthconnection.org/cesareanbooklet/</a>

To learn more about the process and sources used to draw conclusions, go to the same web page.



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