



# Primary Cesarean Reduction Provider Discussion Information

## Background

A vaginal delivery is the safest way to deliver most infants. The decision to have a vaginal birth or a Cesarean birth can have a significant impact on a woman, her infant, and her future pregnancies. The following information is intended to guide the discussion with a pregnant woman who does not have a history of a prior Cesarean delivery. For information and materials on vaginal birth after Cesarean (VBAC), please refer to the other Cesarean Reduction Toolkit materials on the WAPC Web site ([www.perinatalweb.org](http://www.perinatalweb.org)).

## Estimated Date of Confinement

The estimated date of confinement (EDC) is usually based on the last menstrual period and/or an ultrasound. In either case, dating gives an estimate for the delivery date. Sharing the limits of EDC with women and their families can decrease anxiety as women approach and exceed the EDC.

## Benefits and Risks

Informed patient decision-making requires a full evaluation of benefits, risks, and alternatives. The tables below list benefits and risks for each birth modality. This can serve as a tool to guide women and their families through the decision-making process. This table is intended to complement the Cesarean Reduction Toolkit consumer education materials that are available on the WAPC Web site ([www.perinatalweb.org](http://www.perinatalweb.org)).

### Benefits of Vaginal Delivery Compared to a Cesarean Delivery

Maternal	Fetal/Neonatal
<ul style="list-style-type: none"> <li>• Shorter hospital length of stay (1)</li> <li>• Decreased risk of infection (1)</li> <li>• Decreased risk of anesthetic complications (1)</li> <li>• Higher breastfeeding initiation rates (2,3)</li> <li>• Greater duration of breastfeeding (4)</li> <li>• Decreased risk of complications in subsequent pregnancies               <ul style="list-style-type: none"> <li>▪ Placenta previa (5)</li> <li>▪ Placenta accreta (5)</li> <li>▪ Bladder and bowel injuries (6,7)</li> <li>▪ Anemia (8)</li> <li>▪ Placental abruption (8)</li> <li>▪ Uterine rupture (8)</li> </ul> </li> <li>• Decreased risk of postpartum cardiac arrest (1)</li> <li>• Decreased risk of wound hematoma (1)</li> <li>• Decreased risk of febrile morbidity (9)</li> </ul>	<ul style="list-style-type: none"> <li>• Decreased risk of respiratory problems (2,10)               <ul style="list-style-type: none"> <li>▪ Persistent pulmonary hypertension (11)</li> <li>▪ Respiratory distress syndrome (12,13,14)</li> <li>▪ Transient tachypnea of the newborn (15,16)</li> </ul> </li> <li>• Decreased risk of iatrogenic prematurity (17)</li> <li>• Shorter length of hospital stay (18)</li> </ul>

### Risks of Attempting a Vaginal Delivery Compared to a Cesarean Delivery

Maternal	Fetal/Neonatal
<ul style="list-style-type: none"> <li>• Labor may require an unplanned Cesarean delivery for failure to progress or fetal intolerance to labor</li> </ul>	<ul style="list-style-type: none"> <li>• May require instrumentation</li> <li>• May require an unplanned Cesarean delivery</li> </ul>

## Benefits of Natural Labor

The specific cause(s) of labor are unknown. Some researchers postulate that fetal, placental, and maternal hormonal changes result in the onset of labor and the associated cervical changes. Hormones associated with labor accelerate fetal lung maturation in preparation for birth. Infants delivered without benefit of labor may experience transitional delay, characterized by retained fetal lung fluid and/or surfactant deficiency and respiratory distress. (19)

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### Support During Labor

Research shows that appropriate support during labor can assist with pain management and decrease the risk of Cesarean delivery. (20,21,22) One way a provider can promote support is by asking a pregnant woman about her plans for support during labor and delivery. The provider can also give information to the support person about what she/he can do to assist the pregnant woman.

### Cesarean Delivery

Depending on clinical and historical risk factors, a Cesarean delivery may be the safest way to ensure the health of a mother and/or her infant. In some situations, a provider may recommend Cesarean delivery early in pregnancy based on knowledge of a pregnant woman's clinical situation, e.g., multiple gestation. At other times, a provider may recommend a Cesarean delivery late in pregnancy, or in labor, based on recognition of current or evolving maternal or fetal concerns, e.g., malpresentation, macrosomia. In either case, it is important that the provider explains to the woman the rationale for the recommendation and the short- and long-term risks and benefits of the surgery for herself and her infant.

### Major Indications for Primary Cesarean Delivery (23)

Stage	Indication	Percent	Stage	Indication	Percent
Prelabor	Malpresentation	10-15	In labor	First-stage arrest	15-30
	Multiple gestation	3		Second-stage arrest	10-25
	Hypertensive disorders	3		Failed induction	10
	Macrosomia	3		Non-reassuring fetal heart rate	10
	Maternal request	2-8			

### Benefits of a Planned Elective Cesarean Delivery Compared to a Vaginal Delivery

Maternal	Fetal/Neonatal
<ul style="list-style-type: none"> <li>Decreased urinary incontinence (24,25)</li> <li>Decreased risk of chorioamnionitis (26)</li> <li>Decreased risk of postpartum hemorrhage (26)</li> <li>Decreased risk of uterine atony (26)</li> <li>Decreased risk of prolonged rupture of membranes (26)</li> <li>Decreased risk of bleeding complications (9)</li> </ul>	<ul style="list-style-type: none"> <li>Reduced risk of intracranial hemorrhage, neonatal asphyxia, and encephalopathy (if instrumentation required) (27)</li> <li>Reduced risk of birth injuries (28,29)</li> </ul>

### Benefits of a Planned Elective Cesarean Delivery Compared to an Unplanned Cesarean Delivery

Maternal	Fetal/Neonatal
<ul style="list-style-type: none"> <li>Decreased risk of postpartum hemorrhage and transfusion (30)</li> <li>Decreased risk of bleeding complications (9)</li> <li>Fewer surgical complications compared to Cesarean delivery for failed induction</li> </ul>	<ul style="list-style-type: none"> <li>Reduced risk of intracranial hemorrhage, neonatal asphyxia, and encephalopathy (31,32)</li> <li>Reduced risk of birth injuries (28)</li> </ul>

### Risks of a Planned Elective Cesarean Delivery Compared to a Vaginal Delivery

(The risks of a planned elective Cesarean delivery are generally lower than the risks of an unplanned Cesarean delivery for both mother and fetus/infant.)

Maternal	Fetal/Neonatal
<ul style="list-style-type: none"> <li>Higher risk of subsequent repeat Cesarean delivery (33,34)</li> </ul>	<ul style="list-style-type: none"> <li>Higher risk of respiratory complications (29)</li> <li>Higher risk of delivery prior to 39 completed weeks (17)</li> </ul>

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