

Why is the U.S. Cesarean Section Rate So High?

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When first measured in 1965, the national U.S. cesarean birth rate was 4.5 percent.¹ Since then, large groups of healthy, low-risk women in the United States who have received care that supported their bodies' innate capacity for giving birth have achieved 4 percent to 6 percent cesarean birth rates and good overall birth outcomes.^{2,3,4} However, the national cesarean rate has increased seven-fold. It peaked in 2009 at 32.9 percent and dropped slightly, to 32.2 percent, by 2014.⁵ About one in three women now gives birth by cesarean section (C-section) – the nation's most common operating room procedure.⁶

The nation's leading professional obstetric societies conclude that women and babies have not benefited from this increase in cesarean section, which is "overused." While cesarean birth is safer than vaginal birth for certain high-risk conditions, it likely poses greater risk of harm in low-risk women. These experts recommend safe, appropriate prevention of overuse of cesarean section.⁷

C-section is major surgery and increases the likelihood of many short- and longer-term adverse effects in mothers and babies (some of these harms are listed below). There are clear, authoritative recommendations for more judicious use of this procedure.^{8,9} Why, then, is the cesarean rate so high?

Three Myths about the Cesarean Section Rate

To explain the high cesarean birth rate, health professionals and journalists often point the spotlight on mothers themselves. Many assume that leading factors in the trend are: 1) that more and more women are asking for C-sections that have no medical rationale; 2) that the number of women who genuinely need a cesarean is increasing; and 3) that liability pressure on health care providers is driving rates up. However, none of these reasons appears to account for a large portion of the growth in the cesarean rate since it began to rise in 1996.

Despite a lot of talk about "maternal request" cesareans, few women appear to be taking this step. Childbirth Connection's national **Listening to Mothers** survey of women who gave birth in hospitals in 2011-2012 asked U.S. women about these decisions and found that only 1 percent of women who had initial ("primary") cesareans said they had planned and carried out surgical birth with the understanding that there had been no medical reason for this procedure.¹⁰ Researchers who have looked at this question in other countries have found similar results.¹¹

Many have also pointed to changes in the population of childbearing women, such as more older women who have developed medical conditions and more women with extra challenges of multiple births. While there are some overall changes in this population, researchers have found that C-section rates have gone up for all groups of birthing women, regardless of age, the number of babies they are having, the extent of health problems, their race/ethnicity or other characteristics.¹² In other words, there is a change in practice standards that reflects an increasing willingness on the part of professionals to follow the cesarean path under all conditions. In fact, one quarter of the *Listening to Mothers* survey participants who had cesareans reported that they had experienced pressure from a health professional to have a cesarean.¹³

Finally, fear of malpractice liability is frequently cited as a major driver of the extensive use of cesarean section. However, a series of studies have examined this question and have concluded that the role of liability pressure is modest at best and can account for just a fraction of the steep recent rise.¹⁴ Further, this factor is overpowered by the role of variation in professional practice style.¹⁵

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Cesarean section is the most common operating room procedure in U.S. hospitals.
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Reasons for the High Cesarean Section Rate

The following interconnected factors appear to contribute to the high cesarean rate.

Low priority of enhancing women's own abilities to give birth. Care that supports physiologic processes – such as providing the midwifery model of care, doula care providing continuous support during labor and using hands-to-belly movements to turn a breech (buttocks- or feet-first) baby to a head-first position – reduces the likelihood of a cesarean section.¹⁶ Quite a few cesareans are carried out because the fetus seems large, even though this estimate is often wrong and a cesarean has not been shown to offer benefits in this situation. The decision to switch to cesarean is often made during labor when care providers could use patience and watchful waiting, positioning and movement, comfort measures, oral nourishment and other approaches to facilitate comfort, rest, a calm environment and labor progress. Providing more women with such care would lower the cesarean section rate.

Side effects of common labor interventions. Current research suggests that quite a few labor interventions make cesarean birth more likely, such as inducing labor among first-time mothers and/or when the cervix is not soft and ready to open. Continuous electronic fetal monitoring (versus periodic listening to the fetal heartbeat with a handheld device) increases the likelihood of a cesarean. Having an epidural without a high dose of synthetic oxytocin (Pitocin) seems to increase the likelihood of a cesarean birth. Epidural analgesia appears to increase the likelihood of cesareans performed in response to "fetal distress." Lying in bed during labor (versus being upright and mobile) also has this effect.

Refusal to offer the informed choice of vaginal birth. Many maternity care providers and hospitals are unwilling to offer the informed choice of vaginal birth to women in certain circumstances. The *Listening to Mothers* survey found that many women with a previous cesarean would have liked the option of a vaginal birth after cesarean (VBAC) but did not have it because providers and/or hospitals were unwilling.¹⁷ About nine in ten women with a previous cesarean section are having repeat cesareans in the United States. Similarly, few women with a fetus in a breech position have the option to plan a vaginal birth, and twins are increasingly born via planned cesarean section.

Casual attitudes about surgery and variation in professional practice style. Our society is more tolerant than ever of surgical procedures, even when not medically needed. This is reflected in the comfort level that many health care providers, insurers, hospital administrators and women themselves have with cesarean trends. Further, the cesarean rate varies quite a bit across states and areas of the country, hospitals and maternity care providers. Most of this variation is due to "practice style" rather than differences in the needs and preferences of childbearing women.¹⁸

Limited awareness of harms that are more likely with cesarean section. Cesarean section is a major surgical procedure that increases the likelihood of many types of harm for mothers and babies in comparison with vaginal birth. Short-term harms for mothers include increased risk of unintended surgical cuts, infection, blood clots, emergency hysterectomy, going back into the hospital, a challenging recovery and death. Babies born by cesarean section are more likely to have breathing problems and to develop several chronic diseases, including childhood-onset diabetes, allergies with cold-like symptoms and asthma. Perhaps due to the common surgical side effect of scarring and adhesion formation, women who have cesareans are more likely to have ongoing pelvic pain and to experience infertility in the future. Of special concern after cesarean are various serious conditions for mothers and babies that are more likely in future pregnancies. For mothers, these include ectopic pregnancy, placenta previa, placenta accreta, placental abruption, emergency hysterectomy and uterine rupture. Babies in future pregnancies are more likely to need breathing help and have extended hospital stays. Preliminary research suggests that many other harms are more likely with cesarean section and more studies are needed.¹⁹

Incentives to practice in a manner that is efficient for providers. Many health care providers are feeling squeezed by tightened payments for services and increasing practice expenses. The flat "global fee" method of paying for childbirth does not provide any extra pay for providers who patiently support a longer vaginal birth. Some payment schedules pay more for cesarean than vaginal birth. Even when payment is similar for both, a planned cesarean section is an especially efficient way for professionals to organize their hospital and office work. Average hospital payments are much greater for cesarean than vaginal birth and may offer hospitals greater opportunity for profit.

Professional expectations for work-life balance. Compared with the past, health care providers have greater expectations for work-life balance. In maternity care, this manifests as reduced willingness to attend births at night and on weekends and holidays and scheduling more births on weekdays.

Women's great trust in their maternity care. The national *Listening to Mothers* survey found that women may have very little awareness of the extent to which practice variation and other non-medical factors and side effects of interventions affect their care and outcomes. Large proportions reported that their maternity care providers were "completely" (47 percent) or "very" (33 percent) trustworthy, and that the quality of the maternity care system is "excellent" (36 percent) or "good" (47 percent).²⁰

All of these factors contribute to a current national cesarean section rate of over 30 percent, although we increasingly understand that this rate could and should be much lower.

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- ⁹ U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. (2010). *HealthyPeople.gov: Maternal, Infant, and Child Health*. Retrieved 24 September 2015, from <http://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Maternal-Infant-and-Child-Health>
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Childbirth Connection, a program of the National Partnership for Women & Families, works to improve the quality, outcomes and value of maternity care in the United States. Learn more at www.ChildbirthConnection.org and www.NationalPartnership.org.

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