



PREVENTION OPPORTUNITIES UNDER THE BIG SKY

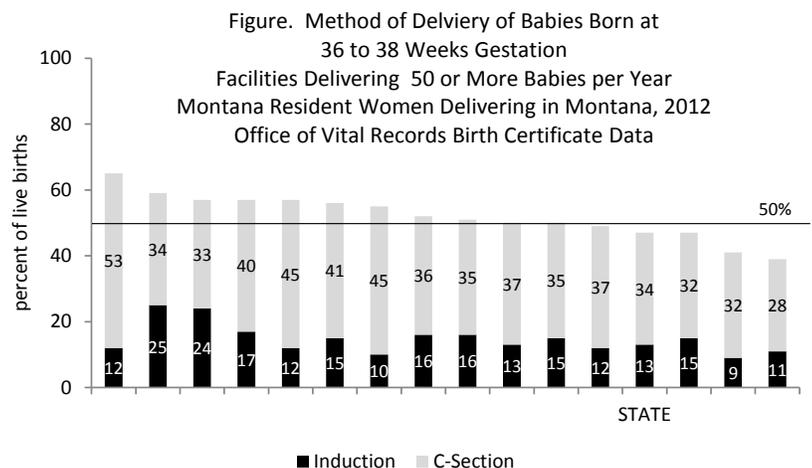
Elective Delivery Without Recognized Medical Indications: Elective Prematurity?

There is no evidence the early *elective* delivery, either through induction of labor or cesarean section, provides any health benefit to mother or infant, and ample evidence that early delivery incurs increased risks to both.¹ Although many of the adverse sequelae of early elective delivery are individually uncommon, in the aggregate they impose a substantial burden on the short-term health of mothers and infants and may have long-term adverse effects on infants. Nevertheless, the incidence of induction before 39 completed weeks gestation in the United States increased from 10% of live births in 1990 to 24% in 2008; cesarean deliveries for all gestational ages increased from 23% to 33% during the same interval.² It is unlikely the prevalence of conditions constituting medical necessity for early delivery increased at the same pace. The most recent opinion statement from the American Congress of Obstetricians and Gynecologists (ACOG) estimates that between 6% and 12% of all pregnancies are affected by conditions that make early delivery medically necessary or advisable.³ The bulk of the increase in inductions and cesarean sections before 39 weeks completed gestation has therefore been attributed to a substantial increase in *elective* early deliveries.⁴ This issue of *Montana Public Health* describes the prevalence of early deliveries among Montana-resident women giving birth in Montana.

Data Source and Limitations Data for this report come from Montana birth certificates which contain check boxes for method of delivery, including induction or cesarean section. Gestational age was determined by obstetrician estimate. Only live singleton births were included in this analysis. Birth certificates have very limited information on conditions that might constitute medical indications for early delivery, so we were unable to distinguish between medically indicated and elective early deliveries from this source.

The Picture in Montana There are approximately 12,000 births in Montana each year. Statewide, 24% are delivered by induced labor and 31% are delivered by cesarean section. More than one quarter (27%) of Montana births are born at estimated ages between 36 and 38 weeks completed gestation (data not shown).

The rate of inductions before 39 weeks completed gestation across the large Montana hospitals that deliver 50 or more babies a year ranged from 1% to 25% in 2012; the rate of cesarean sections ranged from 30% to 57% (data not shown). Looking only at births from 36 to 38 weeks completed gestation, the rate of induction ranged from 9% to 25% and the rate of cesarean section ranged from 28% to 53% (Figure).



Highlights

- Only 45% of Montana babies are born by spontaneous vaginal delivery.
- 27% of Montana babies are moderately premature, born at estimated ages of 36 to 38 weeks completed gestation.
- 47% of deliveries between 36 and 38 weeks are the result of induction or cesarean section.

Are All Deliveries With Medical Intervention Medically Indicated?

Some of Montana's larger hospitals receive referrals of high risk pregnancies and therefore might be expected to have higher than average rates of medically necessary inductions or cesarean sections. However, we cannot explore this hypothesis with the limited information available from birth certificates.

Assuming that the prevalence of conditions that make early delivery medically necessary or advisable in Montana is similar to the rest of the nation, *we estimate that nearly 2,000 of the 12,000 Montana babies are delivered early through medical intervention in the absence of currently recognized medical indications each year.*

Many health care organizations in the United States are adopting the March of Dimes toolkit for reducing early elective deliveries.⁴ It is a comprehensive approach that engages statewide stakeholder organizations, hospital administrators, physicians, and peer review panels to support policies to ensure that induced or cesarean section deliveries before 39 weeks completed gestation are medically indicated. Marked reduction in elective deliveries has been reported from several areas in the US. Intermountain Healthcare of Utah and Idaho reduced elective deliveries before 39 weeks from 28% to 10% within six months and maintained a rate less than 5% for the next six years. Magee Women's Hospital of Pittsburgh reduced its rate from 12% to 4% in 14 months. Hospitals participating in the Ohio Perinatal Quality Collaborative reduced their rate from 13% to 8% in 14 months.

Recommendations for Health Care Providers

- Teach patients that every week counts and that spontaneous delivery at term is usually best for both mother and baby.
- Remember that early delivery and unnecessary inductions or cesarean sections increase costs by increasing length of stay for babies and mothers, by incurring additional treatment costs for complications, and by increasing NICU admissions for babies.
- The Montana Department of Public Health and Human Services endorses the ACOG committee recommendations to reduce non-medically-indicated early deliveries.¹
- The Department recommends the March of Dimes toolkit for step-by-step guidance about reducing early elective deliveries.⁴

For more information about Montana's initiative to reduce early elective deliveries, contact Denise Higgins, Chief, Family and Community Health Bureau, at 406-444-4743 or dehiggins@mt.gov.

References:

1. http://www.acog.org/Resources_And_Publications/Committee_Opinions/Committee_on_Obstetric_Practice/Nonmedically_Indicated_Early-Term_Deliveries
2. National Center for Health Statistics, National Vital Statistics Reports: *Births: Final Data for 2008*. Vol. 57, no. 7. Bethesda, MD: NCHS, 2010.
3. American College of Obstetricians and Gynecologists. ACOG Committee opinion no. 560: Medically indicated late-preterm and early-term deliveries. *Obstet Gynecol* 2013; 212:908-910.
4. Main E, et al. *Elimination of Non-Medically Indicated (Elective) Deliveries Before 39 Weeks Gestational Age*. San Francisco: March of Dimes, 2010.

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