VERMONT
DEPARTMENT OF HEALTH

Division of Maternal & Child Health

BRIEF: Low Risk Cesarean Deliveries

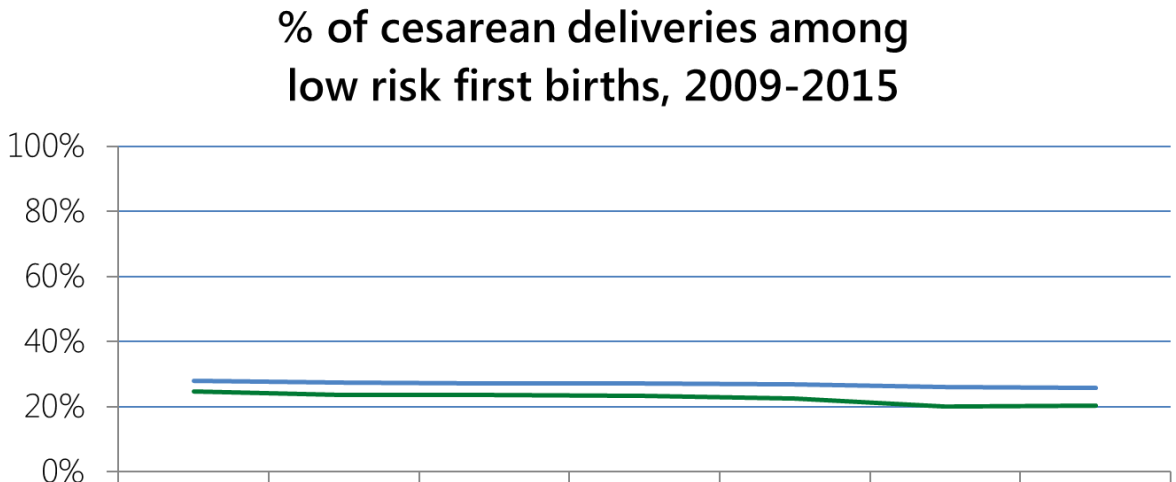
The vision of the Division of Maternal and Child Health is that the health and wellness of Vermont's women, children, and families is a foundation for the health of all Vermonters. We work to achieve this vision through strategies that are family centered, evidence-based, and data driven.

Performance Measure Healthy People 2020

Percent of cesarean deliveries among low risk first births
Maternal, Infant, and Child Health Objective 7.1. Reduce cesarean births among low-risk women with no prior cesarean (Baseline: 26.5%, Target: 23.9%)

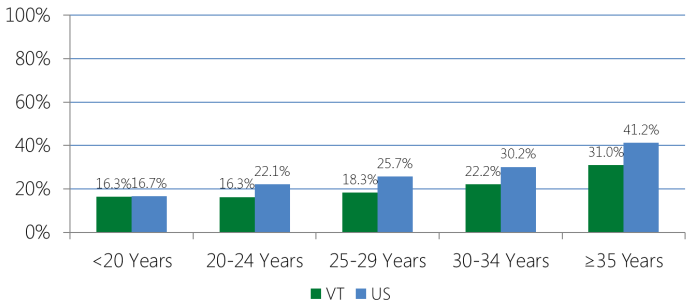
Introduction. Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots—risks that compound with subsequent cesarean deliveries. Much of the increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. This low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the ACOG, The Joint Commission (PC-02), National Quality Forum (#0471), Center for Medicaid and Medicare Services (CMS) – CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement.

Results. Vermont's low-risk, first-birth cesarean delivery rate is declining by 0.8% per year. It is significantly lower than the US rate in all years, and below the Healthy People 2020 rate of 23.9% in 2014 and 2015 (see data notes). The US rate is above the HP2020 target rate in all years, but is declining by 0.4%/year.



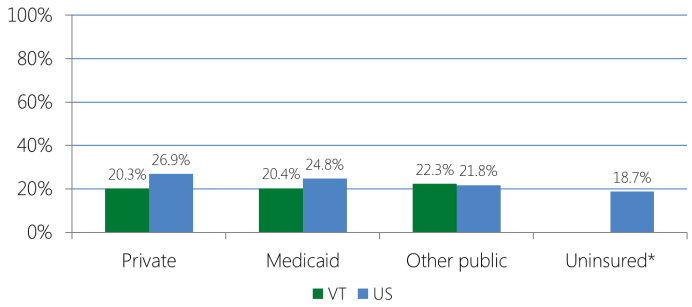
	2009	2010	2011	2012	2013	2014	2015
VT	24.8%	23.6%	23.7%	23.2%	22.5%	20.1%	20.2%
US	28.0%	27.5%	27.2%	27.2%	26.8%	26.0%	25.8%

% of cesarean deliveries among low risk first births, by maternal age, 2015



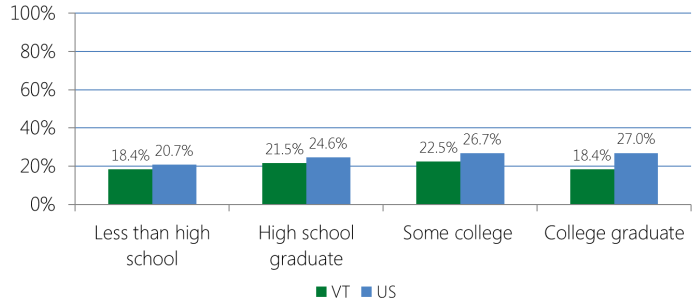
Older women are much more likely than younger women to have low risk first births by cesarean delivery. Nearly one in three (31%) Vermont women 35+ have c-sections compared to 18.3% of 25-29 years and 22.2% of 30-34 years.

% of cesarean deliveries among low risk first births, by health insurance, 2015



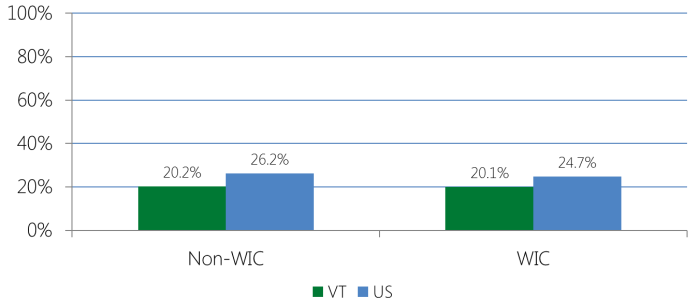
Cesarean deliveries among low risk first births does not differ by health insurance in Vermont. Vermont women with all types of health insurance are less likely to have a c-section than U.S.

% of cesarean deliveries among low risk first births, by maternal educational attainment, 2015



In Vermont, cesarean delivery among low risk first births does not vary widely by maternal educational attainment.

% of cesarean deliveries among low risk first births, by WIC participation, 2015



In Vermont, women enrolled in WIC and those who are not, are equally as likely to have a cesarean delivery among low risk first births.

Vermont Strategies.

With support from the Vermont Department of Health, the University of Vermont and the March of Dimes, participating obstetrical and pediatric care practitioners collaborated with the Vermont Regional Perinatal Health Project (VRPHP) of the Vermont Child Health Improvement Program (VCHIP) to develop and implement practice changes that would potentially decrease the rate of late preterm births and ensure high quality care for those infants born during the late preterm period (between 34+0 and 36+6 weeks gestation). With a particular focus on women insured by Medicaid; this initiative required an innovative approach of collaboration amongst obstetric and pediatric practitioners and nursing staff. Standards for best practice with the newborn population were collaboratively defined and focus on assessing maternal risk for preterm delivery, elective induction of labor, elective cesarean section, and the care management of the late preterm infant (LPI). Partnering with community support services to create a comprehensive medical home for this population of at-risk infants was a key element of this project.

Data Issues.

*Vermont's relatively small sample sizes are often associated with suppressed data or wide confidence intervals, hindering interpretation in these subgroup analyses. This measure is comparable between the 1989 and 2003 revisions of the U.S. Standard Certificate of Live Birth. However, stratifiers that were modified or newly added on the 2003 revision (i.e., educational attainment, health insurance, WIC participation) are only reportable for the states/jurisdictions that had implemented the 2003 revision as of January 1 of the data year. For more information about the birth file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm. Beginning in 2014, term birth status is calculated using gestational age based on the obstetric estimate. For years 2013 and earlier, it was based on gestational age calculated using the date of the last normal menses. This change may lead to a discontinuity between years 2013 and 2014.

Data Sources.

National Vital Statistics System (NVSS)

Contact.

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