

This is a report on the Pregnancy Risk Assessment Monitoring System (PRAMS), a survey conducted on a sample of Vermont women with live births since 2001. This report presents information about marijuana use before, during and after pregnancy for Vermont births in the years 2009 through 2013.

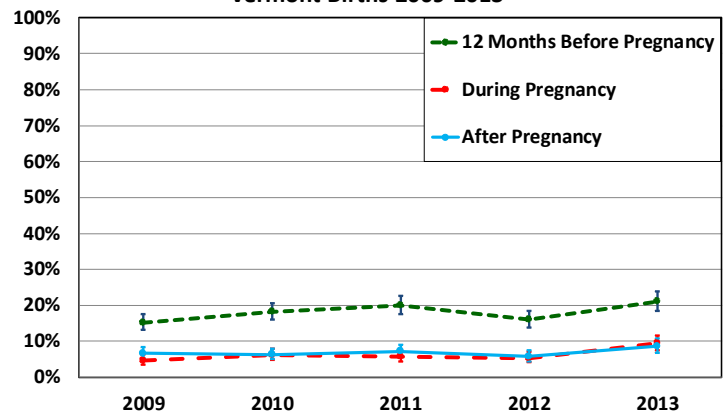
Marijuana Use Before, During & After Pregnancy

Vermont PRAMS has asked about marijuana use since 2009. The questionnaire asks whether the respondent smoked marijuana during the 12 months before pregnancy, during pregnancy, or since giving birth.

For 2013 Vermont births, 21.0% of mothers had smoked marijuana during the 12 months before pregnancy, 9.4% during pregnancy, and 8.6% since delivery.

There is no statistically significant trend in marijuana use around pregnancy in the period that Vermont PRAMS has collected data on marijuana use.

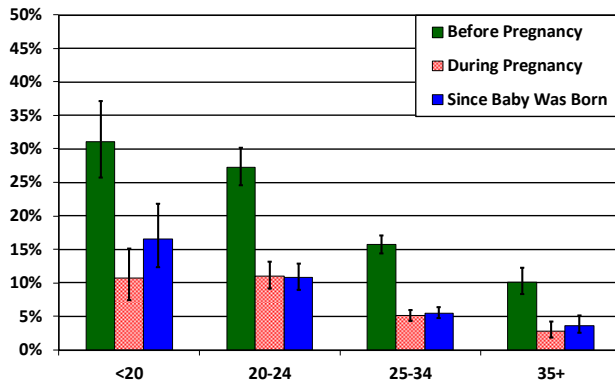
Marijuana Use Before,
During & After Pregnancy
Vermont Births 2009-2013



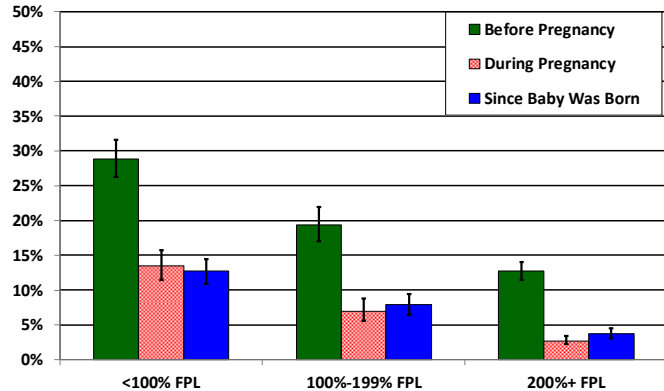
Factors Associated with Marijuana Use

For Vermont births in the years 2009-2013, younger women and women in households with lower incomes were significantly more likely to smoke marijuana before, during and after pregnancy.

Marijuana Use Before, During & After Pregnancy by Age
Vermont Births 2009-2013

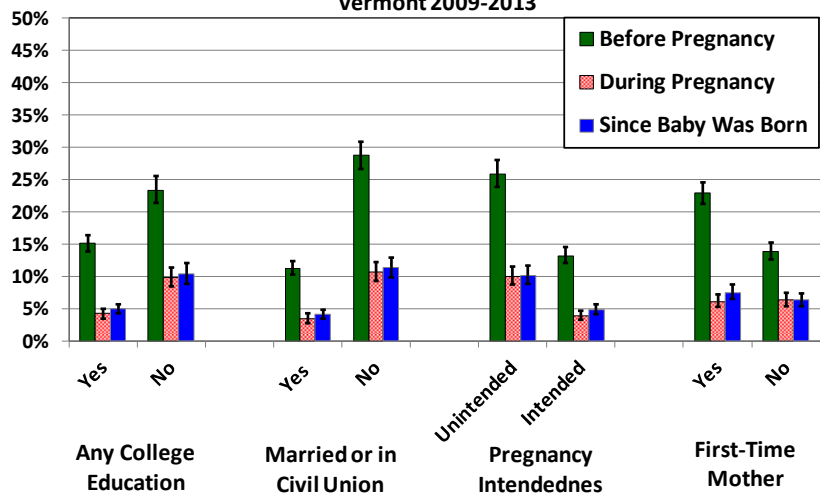


Marijuana Use Before, During & After Pregnancy by
Income Relative to Federal Poverty Level (FPL)
Vermont Births 2009-2013



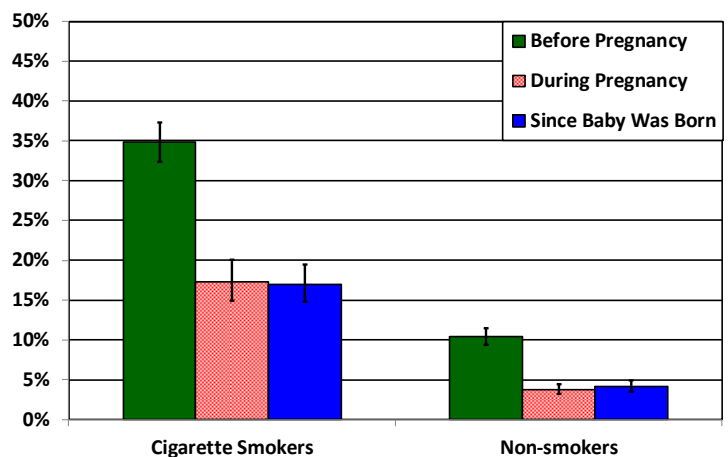
Marijuana use before, during, and after pregnancy was significantly more common among unmarried women, women with lower levels of education, and women whose pregnancies were unintended¹. First-time mothers were significantly more likely to use marijuana before pregnancy than were women who had given birth before.

Factors Associated with Marijuana Use Before, During & After Pregnancy
Vermont 2009-2013



Cigarette smoking had the strongest relationship with marijuana use. Women who smoked cigarettes at a given point in time (before, during and after pregnancy) were significantly more likely to use marijuana at that time.

Marijuana Use by Cigarette Smoking
Vermont Births 2009-2013



Stressful experiences in the year before giving birth were also associated with marijuana use. Women who'd experienced a traumatic, financial, or partner related stressor were more likely to use marijuana before, during, and after pregnancy. Those who had experienced a significant emotional stressor were more likely to use marijuana during pregnancy than those who had not experienced an emotional stressor. (See Table 1, below, for figures on stress and marijuana use.)

¹ The question used to determine pregnancy intendedness changed slightly before 2012 births were sampled, with the addition of a "don't know" option which was treated as "unintended." This led to a slight increase in the proportion of 2012 births interpreted as unintended pregnancies. The relationship between intendedness and marijuana use was similar between 2009-2011 and 2012, however, despite the change in question wording; for purposes of the graphs here, the two wordings are treated as the same variable.

Continued Use of Marijuana during Pregnancy, Vermont 2009-2013

For Vermont births in the years 2009-2013, 34.3% of all mothers who used marijuana in the year before pregnancy, also used marijuana during pregnancy.

For 2013 births, 44.6% (37.5%- 52.0%) of pre-pregnancy marijuana smokers continued to use marijuana during pregnancy. This was the highest estimate of all years that Vermont PRAMS asked about marijuana, but the difference with 2012 was not statistically significant.

There was no detectable statistical trend in continued marijuana use in the years 2009-2013.

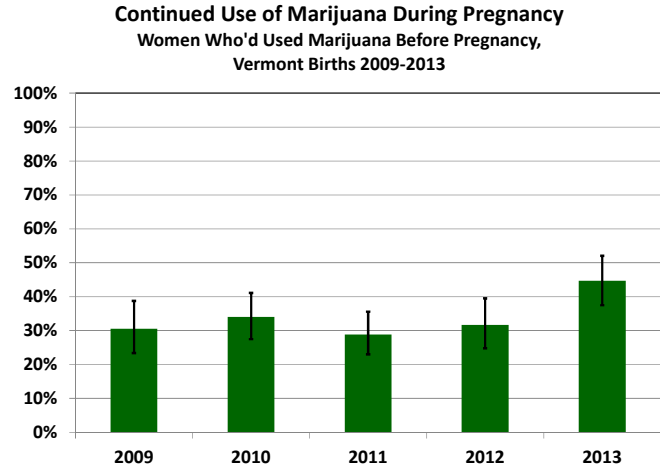


Table 1: Marijuana use before, during and after pregnancy is associated* with experiencing financial, traumatic, and partner-related stressors in the year before giving birth.

Used marijuana...	Stressors experienced in the year before most recent birth					
	At least one financial stressor	No financial stressor	At least one partner-related stressor	No partner related stressor	At least one traumatic stressor	No traumatic stressor
Before pregnancy	24.2% (22.6% - 25.9%)	10.8% (9.6% - 12.2%)	27.4% (25.1% - 29.8%)	13.8% (12.7% - 15.0%)	34.9% (31.9% - 38.0%)	13.9% (12.8% - 15.0%)
During pregnancy	9.3% (8.2% - 10.5%)	2.7% (2.1% - 3.5%)	12.0% (10.4% - 13.8%)	3.8% (3.2% - 4.5%)	15.7% (13.5% - 18.2%)	3.9% (3.3% - 4.5%)
After pregnancy	9.4% (8.3% - 10.6%)	4.0% (3.3% - 4.9%)	12.4% (10.8% - 14.3%)	4.4% (3.8% - 5.2%)	16.1% (13.9% - 18.7%)	4.6% (4.0% - 5.3%)

*All chi-squared tests comparing stressor/non-stressor for financial, partner-related, and traumatic stressors also showed significant differences (all $p < .001$)

Table 2: Marijuana use before and during pregnancy is associated with experiencing at least one emotional stressor in the year before giving birth.

	At least one emotional stressor	No emotional stressor
Used marijuana before pregnancy	20.2% (18.3% - 22.4%)*	17.1% (15.9% - 18.4%)*
Used marijuana during pregnancy	8.4% (7.1% - 10.0%)	5.4% (4.6% - 6.2%)

*Pearson chi-square: 7.048; $p=0.10$.

The following PRAMS questions were used for this data brief:

During any of the following time periods, did you smoke marijuana or hash?

- During the 12 months before I got pregnant
- During my most recent pregnancy
- Since my new baby was born

In the *last 3 months* of your pregnancy, how many cigarettes did you smoke on an average day?

Thinking back to *just before* you got pregnant with your *new* baby, how did you feel about becoming pregnant?

- I wanted to be pregnant sooner
- I wanted to be pregnant later
- I wanted to be pregnant then
- I didn't want to be pregnant then or at any time in the future
- I wasn't sure what I wanted (2012-2013)

Emotional stressors:

- A close family member was very sick and had to go into the hospital
- Someone very close to me died

Partner-related stressors:

- I got separated or divorced from my husband or partner
- I argued with my husband or partner more than usual
- My husband or partner said he didn't want me to be pregnant

Financial stressors:

- I moved to a new address
- My husband or partner lost his job
- I lost my job even though I wanted to go on working
- I had a lot of bills I couldn't pay
- My husband or partner or I had work hours or pay cut back

Traumatic stressors:

- I was homeless or had to sleep outside or in a car, or stay in a shelter
- I was in a physical fight
- My husband or partner or I went to jail
- Someone very close to me had a problem with drinking or drugs

Questions or comments about this report may be directed to John Davy at (802)863-7661 or john.davy@vermont.gov. More information about Vermont PRAMS can also be found at <http://healthvermont.gov/research/PRAMS/prams.aspx>.