

### Vermont PRAMS Overview September 5, 2014



# Vermont PRAMS Overview



•PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy.

•Vermont PRAMS data are collected via surveys mailed to a random sample of Vermont mothers 2-6 months after they have given birth.

•Vermont PRAMS began collecting data in 2001.

# Availability of Vermont PRAMS Data

•PRAMS data for a given year of data are generally available for analysis around 15 months after the end of that year (e.g., 2014 births may be available in April 2016).

•However, the CDC introduced a new data collection system for PRAMS at the beginning of 2012 data collection, which has delayed the data entry and weighting of 2012 data.

•Vermont PRAMS 2011 data is currently available, as is data from most other 2011 PRAMS states. Comparisons across states in this summary are based on 2011 births.

•Most of the data in this summary is from the Phase 6 questionnaire, which covers 2009-2011 births. Unless otherwise indicated, Vermont-specific information in this summary is based on births in the years 2009-2011.

# Vermont PRAMS Data

### Maternal Substance Use

Percent who Smoked Before Pregnancy, By State 2011 PRAMS States



31% of Vermonters who gave birth in 2011 were smoking during the 3 months before their pregnancies. This is the 5<sup>th</sup> highest rate of smoking before pregnancy among 2011 PRAMS states.

#### Percent of Smokers who Quit Before Final 3 Months of Pregnancy, 2011 PRAMS States



Among those Vermonters who had been smoking before their pregnancies, only 38% abstained from smoking in the last 3 months of pregnancy. Vermont's was the second-lowest quit rate among 2011 PRAMS states.

Percent who Smoked During Last 3 Months of Pregnancy 2011 PRAMS States



19% of Vermonters who delivered a live birth in 2011 smoked cigarettes during the last 3 months of pregnancy, the second-highest rate among 2011 PRAMS states.

Average Number of Cigarettes Smoked per Day Last 3 Months Before Pregnancy



While most Vermont women who gave birth between 2009-2011 did not smoke any cigarettes during the 3 months before pregnancy, over 20% smoked at 6 or more cigarettes per day during that period.



Percent who Smoked Before, During and After Pregnancy, Vermont PRAMS 2002-2011

Rates of smoking before, during and after pregnancy have not declined in the last 10 years.

#### Factors Associated with Cessation, Vermont PRAMS 2009-2011



Quit Rate by Income Level

Smokers with more education and with a higher household income were more likely to quit smoking for the last 3 months of pregnancy.

#### Factors Associated with Cessation, Vermont PRAMS 2009-2011



Quit Rate by Average Number of Cigarettes Smoked per Day Before Pregnancy

Women who smoked fewer cigarettes per day during the 3 months before pregnancy were significantly more likely to quit smoking for the last 3 months of pregnancy.

# PRAMS Findings – Alcohol

Percent Who Reported Drinking Before Pregnancy 2011 PRAMS States



67% of Vermonters drank at least some alcohol in the 3 months before pregnancy, the second highest proportion of 2011 PRAMS states.

# PRAMS Findings – Maternal Alcohol Use

#### Percent Who Reported Drinking During the Last 3 Months of Pregnancy, 2011 PRAMS States



Among 2011 PRAMS states, Vermont had the highest rate of drinking during the last 3 months of pregnancy, at 12.9%.

# PRAMS Findings – Alcohol

Drinking During Last 3 Months of Pregnancy, by Age Vermont PRAMS 2009-2011



19% of those age 35 or older and 14% between the ages of 25 and 34 drank alcohol during the last 3 months of pregnancy, while less than 10% of those under the age of 25 drank.

# PRAMS Findings – Alcohol

Percent Drinking During Last 3 Months of Pregnancy, by Age Vermont PRAMS 2002-2011



The pattern of older women being more likely to drink during pregnancy has remained stable over the last decade.

# Vermont PRAMS Data to Action - 049

•Vermont PRAMS data identified two distinct profiles of women who used alcohol before and during pregnancy, and showed that a healthcare provider's advice against drinking any alcohol during pregnancy was associated with lower rates of drinking.

•This data was shared with the Division of Alcohol and Drug Abuse Programs in a series of fact sheets and graphs in 2011 and 2012.

# Vermont PRAMS Data to Action - 049

•In May 2013 ADAP launched the "049 – Zero Alcohol for Nine Months" campaign to prevent drinking during pregnancy.

•Vermont PRAMS data were cited in the campaign materials and will be used to monitor the effectiveness of the campaign.

# PRAMS Findings – Marijuana

#### Marijuana Use, by Age Group Vermont PRAMS 2009-2011



Vermont PRAMS has been collecting data on marijuana use since 2009. During the years 2009-2011, 17.8% of all Vermont mothers smoked marijuana in the 12 months before pregnancy, while 5.6% smoked marijuana during pregnancy.

# Vermont PRAMS Data

### Abuse & Life Stressors

### Stress & Abuse, Vermont PRAMS 2009-2011

- The PRAMS questionnaire asks about a series of life stressors that may have occurred in the year before giving birth.
- In 2009-2011, 70% of women reported at least one stressor during the year before giving birth, with 27% reporting at least 3 stressors, and 6% reporting 6 or more.
  - $\odot~53\%$  reported financial stress.
  - $\odot~29\%$  reported emotional stress.
  - $\odot~28\%$  reported partner stress.
  - $\odot~20\%$  reported traumatic stress.

### Stress & Abuse, Vermont PRAMS 2009-2011

- 53% reported financial stress.
  - "You moved to a new address."
  - "Your husband or partner lost his job."
  - "You lost your job even though you wanted to go on working."
  - "You had a lot of bills you could not pay."

### PRAMS Findings – Stressors Before & During Pregnancy

Percent Reporting any Financial Stress During Year Before Giving Birth, 2011 PRAMS States



51% of Vermont mothers giving birth in 2011 reported at least one financial stressor, the 8<sup>th</sup> highest rate among 2011 PRAMS states.

### Stress & Abuse, Vermont PRAMS 2009-2011

- 29% reported experiencing emotional stress during the year before giving birth.
  - "A close family member was very sick and had to go into the hospital."
  - "Someone very close to you died."

### PRAMS Findings – Stressors Before & During Pregnancy

Percent Reporting any Emotional Stress During Year Before Giving Birth, 2011 PRAMS States



For 2011 births, 27% of Vermont mothers experienced an emotional stressor in the year before giving birth, which was 7<sup>th</sup> lowest among the 24 PRAMS states with available data.

### Stress & Abuse, Vermont PRAMS 2009-2011

- 28% reported partner stress.
  - "You got separated or divorced from your husband or partner."
  - "You argued with your husband or partner more than usual."
  - "Your husband or partner said he did not want you to be pregnant."

### PRAMS Findings – Stressors Before & During Pregnancy

Percent Reporting any Partner Stress During Year Before Giving Birth, 2011 PRAMS States



28% of Vermonters giving birth in 2011 experienced one of the three partner-related stressors in the year before delivery, the 9<sup>th</sup> highest among 2011 PRAMS states.

### Stress & Abuse, Vermont PRAMS 2009-2011

- 20% reported traumatic stress, including 4% reporting being homeless.
  - o "You were homeless."
  - "You were in a physical fight."
  - "You or your husband or partner went to jail."
  - "Someone very close to you had a bad problem with drinking or drugs."

### PRAMS Findings – Stressors Before & During Pregnancy

Percent Reporting any Trauma-Related Stress During Year Before Giving Birth, 2011 PRAMS States



19% of Vermonters giving birth in 2011 experienced at least one traumatic stressor, the ninth highest among 2011 PRAMS states.

### Stress & Abuse, Vermont PRAMS 2009-2011

- 3% of mothers reported domestic abuse in the year before giving birth, including 7% of mothers between the ages of 20 and 24.
  - Vermont PRAMS does not include questions about domestic abuse on surveys sent out to teenage mothers.

# PRAMS Findings – Domestic Abuse

#### Physical Abuse by Husband or Partner During Pregnancy Vermont PRAMS 2002-2011



In the years 2002-2011, almost one-half of those physically abused by a partner in the year before pregnancy were also physically abused by a partner during that pregnancy.

# Vermont PRAMS Data

### Preconception Health & Family Planning

### Preconception Health, Vermont PRAMS 2009-2011

- 38% reported taking a multivitamin every day in the month prior to pregnancy
  - 7% of teenage mothers, and 19% of mothers age 20 to 24, took a daily multivitamin during the month prior to pregnancy

### PRAMS Findings – Preconception Health & Family Planning

#### Percent Reporting Daily Multivitamin Use During Month Before Pregnancy, 2011 PRAMS States



In 2011, Vermont had the third-highest rate of daily preconception multivitamin use among PRAMS states, with 38% of Vermonters giving birth in that year having taken a daily multivitamin in the month prior to their pregnancies.

### Preconception Health, Vermont PRAMS 2009-2011

- 3% of mothers were underweight prior to pregnancy, including 11% of teenage mothers.
- 23% of mothers were overweight prior to pregnancy, and 20% were obese.
- 29% of mothers were dieting to lose weight in the year prior to pregnancy, and over half (52%) reported exercising 3 or more times per week.

PRAMS Findings – Preconception Health & Family Planning





36% of 2009-2011 Vermont births were unintended, including 86% of those to teenage mothers and 54% of those to women who were on WIC during pregnancy.

9/5/2014

### Family Planning, Vermont PRAMS 2009-2011

- Fewer than half (49%) of mothers whose pregnancies were unintended reported using any method of birth control.
- 88% of mothers were using contraception after their most recent birth, including 95% of teenage mothers.
### PRAMS Findings – Preconception Health & Family Planning



#### Percent Insured Before Pregnancy, 2011 PRAMS States

88% of Vermonters who gave birth in 2011 had some form of health insurance before pregnancy, the 4<sup>th</sup> highest rate among 2011 PRAMS states.

# Vermont PRAMS Data

### **Prenatal Care**

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### Prenatal Care Initiation, Vermont PRAMS 2009-2011

- 88% indicated they got into prenatal care as early as they wanted to. Of those who did not:
  - $\circ$  44% did not know they were pregnant.
  - $\circ$  31% could not get an appointment.
  - 20% reported that their doctor or health plan would not start care as early as wanted.
  - 20% had too many other things going on, including 35% of teenagers.

### Prenatal Care Initiation, Vermont PRAMS 2009-2011

- 24% of teenagers who did not get into prenatal care as early as they wanted to had been keeping their pregnancies secret.
- 22% of teenagers who did not get into prenatal care as early as they wanted did not have transportation.

- 89% of women reported talking with a healthcare worker about breastfeeding.
- 81% of women reported talking with a healthcare worker about healthy foods, 84% discussed how much weight to gain, and 82% discussed exercise during pregnancy.
  - 32% reported talking about resources to help gain the right amount of weight during pregnancy.
  - After pregnancy, 37% had talked about maintaining a healthy weight after delivery.

# PRAMS Findings – Prenatal Care Content

#### Percent Reporting Prenatal Care Talk about Healthy Weight Gain, Vermont PRAMS 2009-2011



84% of Vermonters who gave birth in the years 2009-2011 talked with a health care worker about healthy weight gain during pregnancy. Rates were similar across age groups and WIC enrollment status.

Vermont Department of Health

- Between 80% and 88% of mothers had discussions with healthcare workers about each of the following topics:
  - Signs of preterm labor, and what to do in the event of early labor;
  - Testing for genetic birth defects;
  - Medicines that are safe to take during pregnancy;
  - $\circ$  What to do if she feels depressed.

- Less than three-quarters of mothers discussed with a healthcare worker the effects of drinking alcohol (72%), smoking tobacco (71%), or using illegal drugs (62%) while pregnant.
  - 86% of smokers had a conversation with a healthcare worker about smoking while pregnant, compared to 64% of non-smokers.
  - 72% of drinkers and 71% of non-drinkers had a conversation with a healthcare worker about drinking during pregnancy.

# PRAMS Findings – Prenatal Care Content

- 55% of mothers discussed seatbelt use during pregnancy with a healthcare worker.
  - The proportion of Vermont mothers who had a conversation on seatbelt use during pregnancy has decreased slightly over the years, from a high of 62% in 2005.
- 49% of mothers discussed physical abuse by a partner or spouse during pregnancy with a health care worker.
  - The proportion of those having discussions about physical abuse increased steadily from 36% to 51% between 2002 and 2005, but has remained around 50% each year since then.

# Vermont PRAMS Data

### PRAMS Flu Seasons 2009-2010, 2010-2011

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### PRAMS Findings – Flu Vaccine

Flu Season 2009-2010, Vermont PRAMS



During the 2009 to 2010 flu season, when both the seasonal and H1N1 flu vaccines were available, 81% of women had at least one of the two vaccines. 12% had the seasonal flu vaccine and not the H1N1 vaccine, while 14% had only the H1N1 vaccine.

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### Health care workers' advice, Vermont PRAMS Flu Season 2009-2010

- During the 2009-2010 flu season, 84% of women had a provider offer them a seasonal flu shot or tell them to get one
- 89% of women had a doctor, nurse or other health care worker offer them or tell them to get an H1N1 shot

### Reasons for not getting the flu vaccine

- In 2009-2010, the most common reasons for not obtaining a flu shot were:
  - The mother doesn't normally get the flu shot
  - Worry that the shot might harm the baby
  - Worries about side effects for herself

## PRAMS Findings – Flu Vaccine



Health care workers' advice, income, WIC status, and marital status were all associated with receiving the 2010-2011 seasonal flu vaccine. Women between the ages of 25 and 34 were more likely to get the vaccine than mothers age 24 or younger.

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### Reasons for not getting the flu vaccine, 2010-2011

- In 2010-2011, 35% of women did not receive a flu shot. Common reasons were:
  - The mother doesn't normally get the flu shot
  - "Not worried about getting the flu" was reported by 55 % as a reason
  - Concerns about side effects and harm to the baby were reported at about the same proportion as the 2009 seasonal flu.

# Vermont PRAMS Data

### Infant Health

# PRAMS Findings – Breastfeeding





71% of Vermonters who gave birth in 2011 were breastfeeding their infants 8 weeks after delivery, the 6<sup>th</sup> highest rate among PRAMS states.

# PRAMS Findings – Breastfeeding



#### Percent Breastfeeding at 8 Weeks, Vermont PRAMS 2002-2011

The prevalence of breastfeeding at 8 weeks has been increasing among WIC enrollees and non-enrollees alike since 2002. 83% of mothers not enrolled in WIC, and 55% of those who were, were breastfeeding those 8-week old infants born in 2011.

#### Percent of Infants Who Often or Always Shared a Bed, 2011 PRAMS States



24% of Vermont infants born in 2011 often or always slept in a shared bed, the 3<sup>rd</sup> highest of the 13 PRAMS that reported bed-sharing data for 2011.

Percent of Infants who Always or Often Share a Bed Vermont PRAMS 2002-2011



The proportion of Vermont infants always or often sharing a bed has remained fairly stable in the last decade, with both WIC and non-WIC populations staying between 23% and 30%.

#### Percent of Infants Who Never Share a Bed Vermont PRAMS 2002-2011



At the same time, the proportion of Vermont infants who never share a bed has been increasing, from a low of 22% in 2004 to 34% in 2011. During this same period, the proportion of those who sometimes share a bed decreased from 24% to 15%.

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Among 2011 PRAMS states, Vermont had the 3<sup>rd</sup> highest proportion of infants who were most often laid on their backs to sleep, 85%.

Percent Who Laid Infant on Their Back to Sleep Vermont PRAMS 2002-2011



The proportion of Vermont infants laid on their back to sleep has been steadily increasing, particularly within WIC-enrolled families. 76% of WIC infants most often were placed on their backs in 2002, while 86% did in 2011. Vermont Department of Health 9/5/2014

Safe Sleep Behaviors Vermont PRAMS 2009-2011



68% of Vermont infants born between in the years 2009-2011 slept without a bumper pad. All other safe-sleep guidelines surveyed by PRAMS were followed by at least 80% of Vermont mothers of infants born in those years.

# PRAMS Findings – Postpartum

### **Postpartum Health**

- The percent of infants who saw a doctor within the first week after delivery increased between 2002 and 2011, from 86% to 98%
- The percent of infants living in homes where smoking was not allowed inside or in a vehicle steadily increased between 2004 and 2011, from 90% to 96%.

# PRAMS Findings – Postpartum

Percent of Mothers Reporting Symptoms of Postpartum Depression Vermont PRAMS 2009-2011



10% of Vermonters who gave birth from 2009-2011 experienced symptoms consistent with depression in the months after delivery. Rates were highest among mothers under the age of 24 and among WIC enrollees.

# Vermont PRAMS Data

### **Oral Health**

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#### Had Teeth Cleaned During Year Before Pregnancy 2011 PRAMS States



60% of 2011 Vermont mothers had their teeth cleaned in the year before pregnancy, the 6<sup>th</sup> highest rate among PRAMS states that year.

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Went to Dentist or Dental Clinic During Pregnancy 2011 PRAMS States



57% of 2011 Vermont mothers went to a dentist or dental clinic during pregnancy, the 2<sup>nd</sup> highest among the 14 states that asked this question.

#### Discussed Cleaning Teeth & Gums with Dentist or Dental Worker, 2011 PRAMS States





#### Percent Receiving Oral Health Services, by WIC Enrollment VT PRAMS 2009-2011



**During Pregnancy** 

WIC enrollees were significantly less likely than non-enrollees to have a teeth cleaning in the year before pregnancy (48% versus 76%), or to have a talk about teeth and gum care (49% to 60%) or visit a dentist (50% to 66%) during pregnancy.

Questions or comments about this summary of PRAMS findings, or requests for information about Vermont PRAMS, can be directed to John Davy by email at john.davy@state.vt.us or by phone at 802-863-7661.

More information about Vermont PRAMS is available at <a href="http://healthvermont.gov/research/PRAMS/prams.aspx">http://healthvermont.gov/research/PRAMS/prams.aspx</a>, and the CDC PRAMS site can be found at <a href="http://www.cdc.gov/prams/">http://www.cdc.gov/prams/</a>.