NNEPQIN   June 6, 2019
From Vermont’s Lake Champlain to the Rocky Coast of Maine:
What does PRAMS Data Tell Us About Mothers and Babies in Northern New England?
Objectives

- What is PRAMS?
- What PRAMS says about the experiences of women who have had a recent birth in northern New England and elsewhere.
- Generate ideas of how you might use PRAMS data to improve health outcomes in your state.
Goal of PRAMS

- **Pregnancy Risk Assessment Monitoring System**
- Developed by CDC in 1987
  - To reduce infant morbidity and mortality and promote maternal health by influencing MCH programs, policies, and maternal behaviors
  - Improving the health of mothers and infants
  - Provides state-specific data about pregnancy and the first few months after birth
PRAMS Overview

PRAMS now covers
• 47 States
• Washington DC
• Puerto Rico
• NYC

And represents 83% of US live births
Data Collection

Data sources

- Birth Certificate data
  - Sample frame: each state’s stratified sample design
  - Population demographics - live births to state residents

- PRAMS Questionnaire data (self reported data by mail or phone)
  - Currently on eighth version
  - Includes
    - Core questions: items asked by all PRAMS sites
    - State-added options
PRAMS in Northern New England

- Maine: Began in 1988
- Vermont: 2001
- New Hampshire: 2013
PRAMS NNE: 2017 Births & Sample

<table>
<thead>
<tr>
<th>2017</th>
<th>Births</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maine</td>
<td>12,298</td>
<td>1,459</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>12,116</td>
<td>1,079</td>
</tr>
<tr>
<td>Vermont</td>
<td>5,655</td>
<td>1,277</td>
</tr>
</tbody>
</table>

Each State’s Data is weighted by CDC to reflect the population of women who had a live birth that year.

Vermont Department of Health
Select Key PRAMS Topics -- NNE

- Marijuana Use
- Alcohol
- Depression
- Tobacco Smoking
- Postpartum contraception
Phase 8 standard Qx drug use questions

<table>
<thead>
<tr>
<th>PRAMS Phase 8 Standard Drug Questions by State, Since 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maine</strong></td>
</tr>
<tr>
<td>Marijuana use before, during, after pregnancy</td>
</tr>
<tr>
<td><strong>During Month Before Pregnancy:</strong></td>
</tr>
<tr>
<td>• OTC pain medication</td>
</tr>
<tr>
<td>• Prescription pain meds</td>
</tr>
<tr>
<td>• Marijuana</td>
</tr>
<tr>
<td>• Amphetamines</td>
</tr>
<tr>
<td>• Cocaine</td>
</tr>
<tr>
<td>• Tranquilizers</td>
</tr>
<tr>
<td>• Hallucinogens</td>
</tr>
<tr>
<td>• Sniffing</td>
</tr>
</tbody>
</table>
Maine and Vermont, 2016-2017:

- Data on use of Prescription Pain Medication:
  - Maine = 3%
  - Vermont = 4%

- Use of other drugs except marijuana
  - n <30 interpret with caution or n<10, too small to report
Marijuana Use Around Pregnancy
2016-2017 PRAMS

<table>
<thead>
<tr>
<th>State</th>
<th>Before*</th>
<th>During</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>15%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>NH</td>
<td>17%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Maine</td>
<td>23%</td>
<td>10%</td>
<td>12%</td>
</tr>
</tbody>
</table>

*Vermont: One month before
New Hampshire/Maine: One year
Marijuana Use

Marijuana Use Before Pregnancy
VT PRAMS 2009-2017

- Used marijuana during year before pregnancy:
  - 2009: 15%
  - 2010: 18%
  - 2011: 20%
  - 2012: 16%
  - 2013: 21%
  - 2014: 16%
  - 2015: 22%
  - 2016: 13%
  - 2017: 16%

- Used marijuana during month before pregnancy:
  - 2009: 15%
  - 2010: 18%
  - 2011: 20%
  - 2012: 16%
  - 2013: 21%
  - 2014: 16%
  - 2015: 22%
  - 2016: 13%
  - 2017: 16%
Marijuana Use Before Pregnancy by Age
2016-2017 PRAMS

- <25: 32% (Vermont), 37% (NH), 24% (Maine)
- 25-34: 14% (Vermont), 15% (NH), 20% (Maine)
- 35+: 10% (Vermont), 10% (NH), 13% (Maine)
Marijuana Use Before Pregnancy by Delivery Payer
2016-2017 PRAMS

- Medicaid:
  - Vermont: 22%
  - NH: 34%
  - Maine: 32%

- Private:
  - Vermont: 10%
  - NH: 11%
  - Maine: 16%
Marijuana Use Before Pregnancy by Intendedness
2016-2017 PRAMS

Unintended
- Vermont: 22%
- NH: 31%
- Maine: 33%

Intended
- Vermont: 11%
- NH: 11%
- Maine: 17%
Maine PRAMS:

“How long should you wait to breastfeed after using marijuana?”

- 81%: Not safe at all
- 8%: No wait
- 6%: Wait 2-3 hours after no longer high
- 5%: Wait until no longer high
Key Topics: Alcohol Use

Drank Alcohol, 3 Mos. Before Pregnancy
2016-2017 PRAMS

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>72%</td>
<td>68%</td>
</tr>
<tr>
<td>NH</td>
<td>76%</td>
<td>74%</td>
</tr>
<tr>
<td>Maine</td>
<td>67%</td>
<td>71%</td>
</tr>
<tr>
<td>All-PRAMS</td>
<td>57%</td>
<td></td>
</tr>
</tbody>
</table>
Key Topics: Alcohol Use

Any Drinking During Pregnancy
2016-2017 PRAMS

- Vermont: 17% (2016), 15% (2017)
- Maine: 8% (2016), 10% (2017)
- All-PRAMS: 8% (2016), 8% (2017)
Key Topics: Alcohol Use

Any Drinking Binges, 3 Mos. Before Pregnancy
2016-2017 PRAMS

- Vermont: 20% (2016) vs. 18% (2017)
- Maine: 17% (2016) vs. 17% (2017)
Alcohol Use Before Pregnancy

Drinking Before* Pregnancy by Age
2016-2017 PRAMS

- <25: 57% Vermont, 68% NH, 62% Maine
- 25-34: 72% Vermont, 77% NH, 72% Maine
- 35+: 75% Vermont, 74% NH, 65% Maine

*Any alcohol drinking during the 3 months before pregnancy
Alcohol Use Before Pregnancy

*Any alcohol drinking during the 3 months before pregnancy*

**Drinking Before* Pregnancy by Insurance**
2016-2017 PRAMS

<table>
<thead>
<tr>
<th>Insurance Type</th>
<th>Vermont</th>
<th>NH</th>
<th>Maine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>57%</td>
<td>63%</td>
<td>56%</td>
</tr>
<tr>
<td>Private</td>
<td>82%</td>
<td>81%</td>
<td>79%</td>
</tr>
</tbody>
</table>

*Any alcohol drinking during the 3 months before pregnancy*
Alcohol Use Before Pregnancy

Drinking Before* Pregnancy by Intendedness
2016-2017 PRAMS

- Unintended
  - Vermont: 61%
  - NH: 75%
  - Maine: 69%

- Intended
  - Vermont: 75%
  - NH: 75%
  - Maine: 68%

*Any alcohol drinking during the 3 months before pregnancy
*4 or more drinks in a 2 hour span at least once during the 3 months before pregnancy*
Binge Drinking Before Pregnancy

Drinking Binge(s) Before Pregnancy* by Insurance 2016-2017 PRAMS

- Medicaid: 18% (Vermont), 17% (Maine)
- Private: 21% (Vermont), 17% (Maine)

*4 or more drinks in a 2 hour span at least once during the 3 months before pregnancy
Binge Drinking Before Pregnancy

*4 or more drinks in a 2 hour span at least once during the 3 months before pregnancy

**Drinking Binge(s) Before Pregnancy* by Intendedness
2016-2017 PRAMS**

- **Unintended**
  - Vermont: 22%
  - Maine: 24%

- **Intended**
  - Vermont: 17%
  - Maine: 13%
Alcohol Use During Pregnancy

Any Alcohol During Pregnancy by Age
2016-2017 PRAMS

- <25: 7% Vermont, 4% Maine
- 25-34: 15% Vermont, 9% Maine
- 35+: 24% Vermont, 15% Maine
Alcohol Use During Pregnancy

Any Alcohol During Pregnancy by Insurance
2016-2017 PRAMS

- Medicaid: 10% (Vermont), 5% (Maine)
- Private: 21% (Vermont), 12% (Maine)
Depression Before Pregnancy

Depression Before Pregnancy by Age
PRAMS 2016-2017

- <25: 37%
- 25-34: 17%, 17%, 19%
- 35+: 15%, 12%, 15%

Colors:
- Green: Vermont
- Blue: NH
- White: Maine
Depression Before Pregnancy

Depression Before Pregnancy by Insurance
PRAMS 2016-2017

Medicaid
- Vermont: 30%
- NH: 35%
- Maine: 29%

Private
- Vermont: 12%
- NH: 12%
- Maine: 14%
Depression During Pregnancy

Depression During Pregnancy
2016-2017 PRAMS

Vermont: 17% (2016), 15% (2017)
NH: 17% (2016), 16% (2017)
Maine: 16% (2016), 16% (2017)
All-PRAMS: 12% (2017)
Depression During Pregnancy

Depression During Pregnancy by Insurance
PRAMS 2016-2017

- Medicaid: 23%
- Medicaid: 31%
- Medicaid: 25%
- Private: 11%
- Private: 11%
- Private: 9%

Vermont  NH  Maine
Depression After Pregnancy

Depression Symptoms, Postpartum
2016-2017 PRAMS

- Vermont: 13% (2016), 12% (2017)
- NH: 13% (2016), 16% (2017)
- Maine: 11% (2016), 13% (2017)
- All-PRAMS: 13% (2016), 13% (2017)
Depression After Pregnancy

Depressive Symptoms Postpartum by Age
PRAMS 2016-2017

- <25: Vermont 20%, NH 24%, Maine 20%
- 25-34: Vermont 10%, NH 13%, Maine 11%
- 35+: Vermont 11%, NH 12%, Maine 9%

Legend:
- Green: Vermont
- Blue: NH
- White: Maine
Depression After Pregnancy

Depressive Symptoms Postpartum by Insurance
PRAMS 2016-2017

- Medicaid: 16% Vermont, 25% NH, 9% Maine
- Private: 10% Vermont, 7% NH, 10% Maine
Tobacco Use

Cigarette Smoking, 3 Months Before Pregnancy
2016-2017 PRAMS

<table>
<thead>
<tr>
<th>Location</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>NH</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>Maine</td>
<td>25%</td>
<td>27%</td>
</tr>
<tr>
<td>All-PRAMS</td>
<td>17%</td>
<td></td>
</tr>
</tbody>
</table>
Cigarette Smoking, Last 3 Months of Pregnancy
2016-2017 PRAMS

- Vermont: 14%, 12%
- NH: 11%, 11%
- Maine: 14%, 14%
- All-PRAMS: 8%

2016 2017
Tobacco Use

Smoked Before Pregnancy by Age
2016-2017 PRAMS

- <25: Vermont 40%, NH 30%, Maine 22%
- 25-34: Vermont 38%, NH 22%, Maine 20%
- 35+: Vermont 14%, NH 10%, Maine 16%
Tobacco Use

**Smoked Before Pregnancy by Insurance**

*2016-2017 PRAMS*

- Medicaid:
  - Vermont: 39%
  - NH: 49%
  - Maine: 42%

- Private:
  - Vermont: 11%
  - NH: 10%
  - Maine: 14%
Tobacco Use

Smoked During Pregnancy by Age
2016-2017 PRAMS

- <25: Vermont 20%, NH 14%, Maine 14%
- 25-34: Vermont 14%, NH 12%, Maine 13%
- 35+: Vermont 6%, NH 4%, Maine 7%
Tobacco Use

Smoked During Pregnancy by Insurance
2016-2017 PRAMS

Medicaid
- Vermont: 25%
- NH: 33%
- Maine: 27%

Private
- Vermont: 4%
- NH: 4%
- Maine: 4%
Guidance from Providers to Smokers, 2016-2017 PRAMS

Spent Time Discussing How to Quit

- VT: 47%
- NH: 44%
- ME: 39%
Guidance from Providers to Smokers, 2016-2017 PRAMS

Refer to Counseling or Quitline

- ME: 8% Refer to Counseling, 36% Refer to Quitline
- NH: 12% Refer to Counseling, 23% Refer to Quitline
- VT: 16% Refer to Counseling, 43% Refer to Quitline
Guidance from Providers to Smokers, 2016-2017 PRAMS

Nicotine Replacement Therapy Recommended or Prescribed

- VT: 30% Recommended Nicotine Gum, 29% Recommended Nicotine Patch, 5% Prescribed nicotine spray/inhaler
- NH: 15% Recommended Nicotine Gum, § Recommended Nicotine Patch
- ME: 17% Recommended Nicotine Gum, 20% Recommended Nicotine Patch

§ denotes too few responses to provide estimate
Provider Assistance for Quitting Smoking

- Suggested Class/Program:
  - ME: 17%
  - NH: 29%
  - VT: 36%

- Provided Booklets/Materials:
  - ME: 38%
  - NH: 34%
  - VT: 41%
Provider Assistance for Quitting Smoking

- Suggested Setting Stop Date:
  - ME: 23%
  - NH: 31%
  - VT: 32%

- Ask if Family/Friend Support:
  - ME: 30%
  - NH: 31%
  - VT: 37%

Guidance from Providers to Smokers, 2016-2017 PRAMS
Postpartum Contraception

Using Any Postpartum Contraception
PRAMS 2016-2017

- Vermont: 84% 84%
- NH: 83% 86%
- Maine: 80% 78%
- All-PRAMS: 79%
Postpartum Contraception

Any Postpartum Contraception by Age
PRAMS 2016-2017

- <25: 84% Vermont, 86% NH, 78% Maine
- 25-34: 87% Vermont, 85% NH, 81% Maine
- 35+: 80% Vermont, 82% NH, 72% Maine
Postpartum Contraception

Any Postpartum Contraception by Insurance
PRAMS 2016-2017

- Medicaid:
  - Vermont: 86%
  - NH: 83%
  - Maine: 78%

- Private:
  - Vermont: 84%
  - NH: 84%
  - Maine: 80%
Postpartum Contraception

Most effective forms of contraception include sterilization and LARC. Excluded: pregnant women, women trying to become pregnant, and those not sexually active.
Postpartum Contraception

Most Effective Contraception by Insurance
PRAMS 2016-2017

Medicaid

44% Vermont
46% NH
41% Maine

Private

39% Vermont
35% NH
33% Maine

Most effective forms of contraception include sterilization and LARC. Excluded: pregnant women, women trying to become pregnant, and those not sexually active.
Postpartum Contraception

Excluded: pregnant women, women trying to become pregnant, and those not sexually active.

Use of LARC by Age
PRAMS 2016-2017

- <25: 39% Vermont, 38% NH, 26% Maine
- 25-34: 28% Vermont, 24% NH, 24% Maine
- 35+: 21% Vermont, 17% NH, 14% Maine
Postpartum Contraception

Use of LARC by Insurance
PRAMS 2016-2017

Excluded: pregnant women, women trying to become pregnant, and those not sexually active.
Questions?

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