Collaborating to ERASE Maternal Mortality in New Hampshire

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Background

- NH Maternal Mortality Review Committee History/ Goals

- CDC Foundation focus on maternal mortality and morbidity

- ERASE MM grant opportunity
NH Maternal Mortality Review Committee History

- Maternal Mortality legislation passed 2010
- First case reviews in NH- 2012
- Grant for established MM Committees- CDC
CDC Support

• Communication with each state/ Review to Action website

• Maternal Mortality Review Information Application (MMRIA)

• Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM)
New Hampshire Women ages 15 to 44 who died in a recent 2-year period

All Causes

464
Pregnancy-Associated Deaths in New Hampshire since 2012

**Pregnancy-associated death**
The death of a woman while pregnant or within one year of the termination of pregnancy, regardless of the cause. These deaths make up the universe of maternal mortality; within that universe are pregnancy-related deaths and pregnancy-associated, but not related deaths.

**Pregnancy-related death**
The death of a woman during pregnancy or within one year of the end of pregnancy, from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.  
2012-2018 = 5 NH

<table>
<thead>
<tr>
<th>Year</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>3</td>
</tr>
<tr>
<td>2013</td>
<td>10</td>
</tr>
<tr>
<td>2014</td>
<td>10</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
</tr>
<tr>
<td>2016</td>
<td>10</td>
</tr>
<tr>
<td>2017</td>
<td>8</td>
</tr>
<tr>
<td>2018</td>
<td>9</td>
</tr>
<tr>
<td>2019</td>
<td>7</td>
</tr>
<tr>
<td>2020 (to date)</td>
<td>4</td>
</tr>
</tbody>
</table>
Timing and Cause of Pregnancy-Associated Deaths in New Hampshire

• Eleven of the twelve pregnancy-associated deaths in 2016-2017 occurred during the postpartum period and one was during pregnancy.

• The leading cause of pregnancy-associated deaths in NH, 2016-2017 was accidental drug overdose.
Maternal Death Causes Among New Hampshire Women ages 15 to 44
Severe Maternal Morbidity

Background

• Maternal Deaths “Tip of the iceberg”

• Severe Maternal Morbidity “Near-misses”

• Unexpected outcomes of labor and delivery that result in significant short- or long-term consequences to a woman’s health
## Overall Severe Maternal Morbidities (SMM) and AIM measures, 2013-2015

<table>
<thead>
<tr>
<th></th>
<th>ME</th>
<th>NH</th>
<th>VT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Rate per 10,000</td>
<td>Count</td>
</tr>
<tr>
<td><strong>Total delivery discharges</strong></td>
<td>35,729</td>
<td>NA</td>
<td>35,692</td>
</tr>
<tr>
<td><strong>Any SMM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any severe maternal morbidity (21 conditions)</td>
<td>430</td>
<td>120.4</td>
<td>541</td>
</tr>
<tr>
<td>Any severe maternal morbidity (excluding transfusion)</td>
<td>267</td>
<td>74.7</td>
<td>233</td>
</tr>
<tr>
<td><strong>Severe hypertension</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe hypertension cases</td>
<td>773</td>
<td>216.4</td>
<td>811</td>
</tr>
<tr>
<td>SMM among severe hypertension cases</td>
<td>59</td>
<td>763.3</td>
<td>54</td>
</tr>
<tr>
<td>SMM (excluding transfusion) among severe hypertension cases</td>
<td>53</td>
<td>685.6</td>
<td>36</td>
</tr>
<tr>
<td><strong>Severe hemorrhage</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe hemorrhage cases</td>
<td>2869</td>
<td>803.0</td>
<td>2585</td>
</tr>
<tr>
<td>SMM among hemorrhage cases</td>
<td>270</td>
<td>941.1</td>
<td>417</td>
</tr>
<tr>
<td>SMM (excluding transfusion) among hemorrhage cases</td>
<td>107</td>
<td>373.0</td>
<td>109</td>
</tr>
</tbody>
</table>
Maternal Mortality: Ongoing Public Health Crisis in the United States

More than half of these maternal deaths are preventable

Characteristics of U.S. Pregnancy-Related Deaths: Maternal Mortality Review Data

Causes of Pregnancy-related Deaths: 14 MMRCs

<table>
<thead>
<tr>
<th>Medical Condition</th>
<th>Total N</th>
<th>%</th>
<th>Black n</th>
<th>Black %</th>
<th>White n</th>
<th>White %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular Conditions</td>
<td>58</td>
<td>13.8</td>
<td>22</td>
<td>13.9</td>
<td>27</td>
<td>13.4</td>
</tr>
<tr>
<td>Hemorrhage</td>
<td>55</td>
<td>13.1</td>
<td>17</td>
<td>10.8</td>
<td>27</td>
<td>13.4</td>
</tr>
<tr>
<td>Infection</td>
<td>48</td>
<td>11.4</td>
<td>16</td>
<td>10.1</td>
<td>25</td>
<td>12.4</td>
</tr>
<tr>
<td>Embolism</td>
<td>40</td>
<td>9.5</td>
<td>16</td>
<td>10.1</td>
<td>16</td>
<td>8.0</td>
</tr>
<tr>
<td>Cardiomyopathy</td>
<td>39</td>
<td>9.3</td>
<td>22</td>
<td>13.9</td>
<td>16</td>
<td>8.0</td>
</tr>
<tr>
<td>Mental Health Conditions</td>
<td>37</td>
<td>8.8</td>
<td>-</td>
<td>--</td>
<td>30</td>
<td>14.9</td>
</tr>
<tr>
<td>Preeclampsia and Eclampsia</td>
<td>35</td>
<td>8.3</td>
<td>18</td>
<td>11.4</td>
<td>13</td>
<td>6.5</td>
</tr>
</tbody>
</table>

*Specific cause of death was missing or listed as "Unknown" for a total of 34 (7.5%) pregnancy-related deaths. Numbers are not presented when cell size is <5. Deaths among women not classified as non-Hispanic Black or non-Hispanic White are included in the total number of deaths.

Maternal-Child Health During the Current Opioid Crisis


NAS Admissions (Rate per 1,000 LB in 2016)

Maternity care provides a critical opportunity to intervene

Source: Kaiser Family Foundation

Source: Healthcare Cost and Utilization Project
The work of the MMRC is to identify and review cases of pregnancy associated death, determine cause(s) and preventability, and to generate recommendations for action.
New Hampshire MMRC Recommendations for Maternity Care Providers

**Support engagement in prenatal care and substance use treatment**
- Educate healthcare teams to reduce stigma against people who use substances
- Provide warm handoff from PCP to facilitate engagement in prenatal care
- Improve collaboration between substance use providers and mental health providers

**Address social determinants of health**
- Assess social determinants and link to services directly from Emergency Department for patients with substance-related complaints
- Increase outreach to unhoused people, prioritizing access to women's services

**Overdose prevention**
- Standardize perinatal education about risk for overdose after pregnancy or any period of abstinence
- Provide naloxone kits and standard education at discharge for postpartum patients with OUD
Available National and Regional Guidance to Improve Maternal Outcomes
NH Hospital Survey Results

Familiarity With National/Regional Guidelines Regarding Perinatal Substance Use Among NH Hospitals

- AWHONN Warning Signs
- NH Plan of Safe Care
- NNEPQIN Guideline
- AIM
- SAMHSA

Familiar | Not Familiar
Plan

Distribute 2019 MMRC report
Continue work with CDC to fully utilize MMRIA database
Address 2019 MMRC recommendations
  • AWHONN Post-birth warning signs
  • Implement AIM patient safety bundles: OUD, Maternal Mental Health and Reducing Racial and Ethnic Disparities
  • Report aggregated, de-identified data to inform policy discussion
“Hubs and Spokes”

• Birth hospitals serve as anchors for our maternity care system

• Yet the vast majority of maternal deaths in New Hampshire occur outside of the hospital

• Opportunities to intervene begin prenatally, and extend for the postpartum year

• Anyone involved with mother or baby over the perinatal period can be a partner in this work
Our Team

• New Hampshire birth hospitals and their affiliated maternity care providers
• New Hampshire-MMRC
• NNEPQIN/NH-AIM initiative
• Patient and Family Advisors for NH-AIM
• NH Office of Health Equity
POST-BIRTH Warning Signs

Are we doing all that we can to make sure she knows when to call and that we actually “HEAR HER”?

Karen Boedtker RN, BSN, MEd
NNEPQIN Improvement Advisor
Save Your Life Handouts are available in English, Spanish, Arabic and Mandarin Chinese

Get Care for These POST-BIRTH Warning Signs

Most women who give birth recover without problems. But any woman can have complications after the birth of a baby. Learning to recognize these POST-BIRTH warning signs and knowing what to do can save your life.

Call 911 if you have:

- Pain in chest
- Obstructed breathing or shortness of breath
- Seizures
- Thoughts of hurting yourself or your baby

Call your healthcare provider if you have:

(IF you can't reach your healthcare provider, call 911 or go to an emergency room)

- Bleeding, soaking through one pad/hour, or blood clots, the size of an egg or bigger
- Incision that is not healing
- Red or swollen leg, that is painful or warm to touch
- Temperature of 100.4°F or higher
- Headache that does not get better, even after taking medicine, or bad headache with vision changes

Tell 911 or your healthcare provider:

"I had a baby on _______ (date) and I am having _______ (specific warning signs)."
CDC “HEAR HER” Campaign covering both pregnancy and postpartum
URGENT MATERNAL WARNING SIGNS

- Headache that won't go away or gets worse over time
- Dizziness or fainting
- Thoughts about hurting yourself or your baby
- Changes in your vision
- Fever
- Trouble breathing
- Chest pain or fast-beating heart
- Severe belly pain that doesn't go away
- Severe nausea and throwing up (not like morning sickness)
- Baby's movements stopping or slowing
- Vaginal bleeding or fluid leaking during pregnancy
- Vaginal bleeding or fluid leaking after pregnancy
- Swelling, redness, or pain of your leg
- Extreme swelling of your hands or face
- Overwhelming tiredness
We are in this **together**!

- NH DHHS and NNEPQIN are working together to help you help her throughout her pregnancy, delivery and postpartum.
- The ERASE MM Grant has allowed us purchase access to the AWHONN Post Birth Warning Signs Educational Materials.
- What can we **all** do to make sure that **she knows** what to be concerned about and that **she is heard** when she calls?
- Do the staff who answer phones in the OB clinic, Community Health Clinic, ED, PCP clinic **understand her special risk** associated with her pregnancy?
- **How can we make sure??**
Your turn to help us and each other with questions and ideas!!

Do you know of a woman who experienced any of these post-birth warning signs that might work with us to share the message?
Thank you for caring for her and for your support to keep her safe!!
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SAVE THE DATES!

We will offer these monthly webinars the 2nd Thursday of Every Month

- September 10, 2020
- October 8, 2020
- November 12, 2020
- December 10, 2020