Maternal Mortality in Colorado:

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OVERVIEW

- data
- cross-sectoral collaborations
- questions
data
MATERNAL MORTALITY IN COLORADO, 2014-2016

July 2020
Maternal Mortality in Colorado, 2014-2016 (n = 94)

Figure 1. Trend of Pregnancy-Associated Mortality Ratio (PAMR), Colorado, 2008-2016.
### Maternal Mortality in Colorado, 2014-2016 (n = 94)

Table 2. Causes of Pregnancy-Associated Deaths.

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>Number of pregnancy-associated deaths</th>
<th>Percentage of pregnancy-associated deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide</td>
<td>16</td>
<td>17.0%</td>
</tr>
<tr>
<td>Drug overdose</td>
<td>13</td>
<td>13.8%</td>
</tr>
<tr>
<td>Injury (including motor vehicle crash)</td>
<td>10</td>
<td>10.6%</td>
</tr>
<tr>
<td>Homicide</td>
<td>8</td>
<td>8.5%</td>
</tr>
<tr>
<td>Cardiac conditions</td>
<td>7</td>
<td>7.4%</td>
</tr>
<tr>
<td>All other obstetric complications (hypertensive disorders of pregnancy, ruptured ectopic pregnancy, uterine rupture, amniotic fluid embolism)</td>
<td>7</td>
<td>7.4%</td>
</tr>
<tr>
<td>Sepsis/infection</td>
<td>6</td>
<td>6.4%</td>
</tr>
<tr>
<td>Cerebrovascular accident (stroke)</td>
<td>5</td>
<td>5.3%</td>
</tr>
<tr>
<td>Thrombotic pulmonary embolism</td>
<td>5</td>
<td>5.3%</td>
</tr>
<tr>
<td>All other non-obstetric medical causes of death (e.g. cancer, respiratory conditions)</td>
<td>17</td>
<td>18.1%</td>
</tr>
</tbody>
</table>

Department of Public Health & Environment
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Figure 16. Preventability of Pregnancy-Associated Death, Colorado, 2014-2016.

- Preventable: 76.6% (72)
- Not preventable: 23.4% (22)
Cross-Sectoral Collaborations
Recommendations to Prevent Maternal Deaths

1. Eliminate structural and interpersonal bias and discrimination in the delivery of services and supports needed by pregnant and postpartum people.
2. Integrate universal screening and connection to treatment for mental health conditions into maternity care.
3. Integrate universal screening and connection to treatment for substance use disorders into maternity care.
4. Improve opioid prescribing practices.
5. Improve evidence-based screening and counseling methods for psychosocial risk factors, including intimate partner violence.
6. Improve care coordination for maternity care.
7. Improve electronic medical records.
8. Improve coordination and efficiency among public health, social services, and health care systems.
9. Improve access to care during preconception, pregnancy, and postpartum.
10. Improve quality and standardization of clinical care for medical and obstetric complications.
11. Redesign postpartum care to include an extended timeframe, dyad care, and family-friendly employment policies.
12. Implement trauma-informed maternity care.
13. Improve family planning care.
addiction medicine, anesthesiology, doula, epidemiology, family medicine, forensic nursing, forensic pathology, health systems, home visiting, labor & delivery nursing, maternal fetal medicine, midwifery, neurology, obstetrics, patient advocates, public health, psychology, rural health, social work, violence prevention
Lived Experience Representation

Bringing community voice to decision-making tables helps tackle systems of oppression. CDPHE conducted targeted outreach to people with lived experience to join the MMRC, resulting in the onboarding of 19 new members, 10 of which identify with a marginalized community.
Community-Led Solutions Request for Applications

- Increasing social connectedness and the ability of pregnant and postpartum Coloradans to feel connected, supported and a sense of belonging.
- Increasing economic security or mobility among pregnant and postpartum Coloradans.
- Increasing the community’s collective capacity (people, resources, or infrastructure) to care for and support pregnant and postpartum individuals, formally and informally.
IMPROVING POPULATION HEALTH OF WOMEN

**MMRRIAs**
- Maternal Mortality Review Information Application (MMRRIAs) strengthens critical steps of the MMRC process to empower prevention activities.

**Title V**
- Maternal and Child Health Services Block Grant Program provides funding to states and other jurisdictions for improving the health and well-being of mothers and children.

**Healthy Start**
- Provides individual services and community supports to families in high-risk communities.

**Facility-based SMM Review**
- Identifies severe maternal morbidity cases for quality improvement.

**AIM**
- Review to Action provides tools and resources to establish, enhance, and connect MMRCs.

**MMRCs**
- CDC Levels of Care Assessment Tool (LOCATE) assists states and other jurisdictions in assessing and monitoring systems of risk-appropriate maternal and neonatal care.

**PQCs**
- Levels of Maternal Care (LoMC) describes systems of care that ensure pregnant women deliver at facilities that match their health risks.
Sources of Care Disparities

**Health system factors**
- Health services organization, financing, delivery
- Health care organizational culture, QI

**Patient-level factors**
- Beliefs and preferences
- Race/ethnicity, culture, family
- Education and resources
- Biology

**Clinical encounter**
- Provider communication
- Cultural competence

**Provider factors**
- Knowledge and attitudes
- Competing demands
- Implicit/explicit biases

**Structural factors**
- Poverty/wealth
- Unemployment
- Stability of housing
- Food security
- Racism

*Adapted from Kilbourne et al, AJPH 2006*
Components of these projects include:

- Education- Bias in Maternity Care, Trauma Informed Care, etc.
- Universal, comprehensive screening for Behavioral Health including anxiety, depression, substance use, intimate partner violence, ACEs, Social Determinants of Health- hospital and outpatient
- Community based care coordination across sectors- medical, behavioral, social supports (peer support, doulas, etc.)
- Dyad care- addressing obstetric and neonatal care jointly
Clinical Quality Improvement

ALLIANCE FOR INNOVATION ON MATERNAL HEALTH (AIM)

AIM Substance Use LEARNING COLLABORATIVE

Readiness, Recognition & Prevention, Response, Reporting/Systems Learning

- Care Coordination & Cross Sector Collaboration
  - dyad-focused care, partnering with public health, social, medical (OB, fetal medicine, L&D, ED, NICU, Peds), and community

- Improve Care & Quality – best practice protocols & standards, reduce variation
Clinical Quality Improvement

ALLIANCE FOR INNOVATION ON MATERNAL HEALTH (AIM)

AIM Substance Use LEARNING COLLABORATIVE

- **Education & Training** – trauma informed care and identification of bias in maternity care

- **Screening & Connection to Treatment** – universal and comprehensive behavioral health screening (substance use disorder, maternal mental health, intimate partner violence, etc.) and resource identification & mapping
  
  - Substance Use Disorder
  - Anxiety & Depression
  - Intimate Partner Violence
  - Social Needs
  - ACEs
Statewide Participation

- More than **50% of Colorado’s birthing hospitals** are actively engaged in 1 or more projects.
- More than **70% of Colorado’s deliveries** in 2020 took place in a hospital that is participating in one or more of the Colorado Perinatal Care Quality Collaborative’s projects.
questions?
Thank you!

More questions?

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