IMPACT OF SUBSTANCE USE: MOTHERS, INFANTS & FAMILIES
The number of Montana children in foster care has more than doubled since 2011: out of more than 3,200 children in foster care in 2016, 64% were removed from the home for reasons related to parental substance abuse.

Among Medicaid patients, the percentage of infants with perinatal drug exposure increased from 3.7% in 2010 to 12.3% in 2016.

Access to SUD treatment is a huge problem for pregnant women: as of 2016, only 6% of Montana’s state-licensed substance use disorder treatment programs served pregnant women or young families.

Screening and treatment for prevalent mental illnesses are not yet routine in prenatal and post-partum care.

(Reference: Medicaid’s Role in the Delivery and Payment of Substance Use Disorders, March 2017)
Impact of Perinatal Behavioral Health Issues

• Perinatal mood and anxiety disorders are associated with increased risks of maternal and infant mortality and morbidity.

• The impact of parental depression and anxiety, especially the mother, can be quite significant both on the attachment relationship and on the neurodevelopment of the baby. This impact is exacerbated when the parent experiences more clinically significant mental health issues, such as addiction.

• Regular use of some drugs can cause neonatal abstinence syndrome (NAS).

• The type and severity of an infant’s withdrawal symptoms depend on the drug(s) used, how long and how often the birth mother used, how her body breaks the drug down, and whether the infant was born full term or prematurely.

• Parents are fearful that seeking prenatal care, disclosing substance use, and initiating treatment for a substance use disorder may result in removal of their infant.

[This, unfortunately, increases the risk of obstetrical complications, preterm birth, and delivery of low birth weight infants. It also contributes to higher rates of unmanaged Neonatal Abstinence Syndrome (NAS)].
Some risks of drinking and drug use during pregnancy

**Withdrawal**
(opiates, cocaine, marijuana, amphetamines, alcohol, benzos)

**Fetal alcohol spectrum disorders**
(alcohol)

**Birth defects**
(alcohol, marijuana, cocaine, opiates)

**Low birth weight**
(alcohol, marijuana, cocaine, opiates, meth, tobacco)

**Miscarriage**
(alcohol, cocaine, tobacco)

**Premature birth**
(alcohol, marijuana, cocaine, opiates, meth, tobacco)

**Sudden Infant Death Syndrome**
(tobacco)

**Development and behavior problems**
NEONATAL ABSTINENCE SYNDROME (NAS)

- Symptoms of NAS vary depending on the type of substance used, the last time it was used, and whether the baby is full-term or premature.
- Symptoms of withdrawal may begin as early as 24 to 48 hours after birth, or as late as five to 10 days.
- Symptoms of withdrawal in full-term babies may include:
  - Tremors (trembling)
  - Irritability (excessive crying)
  - Sleep problems
  - High-pitched crying
  - Tight muscle tone
  - Hyperactive reflexes
  - Seizures
  - Yawning, stuffy nose, and sneezing
  - Poor feeding and suck
  - Vomiting
  - Diarrhea
  - Dehydration
  - Sweating
  - Fever or unstable temperature
DIGGING FURTHER INTO THE DATA
Baseline Data: Substance Diagnoses in Infants <1 year MT MCD Data

Percent of Children Less than One-Year-Old with Substance Diagnosis

- 2010: 0.63%
- 2011: 0.70%
- 2012: 0.87%
- 2013: 1.35%
- 2014: 1.76%
- 2015: 1.96%
- 2016*: 2.66%

Percent with Opioid Diagnosis

Count of Children Less than One-Year-Old with Substance Diagnosis

- 2010: 67
- 2011: 77
- 2012: 95
- 2013: 157
- 2014: 225
- 2015: 260
- 2016*: 322

Count of those with Opioid Diagnosis

Any Substance Use Diagnosis

- 2010: 164
- 2011: 175
- 2012: 164
- 2013: 244
- 2014: 469
- 2015: 465
- 2016*: 387
# Montana Hospitalizations
## Attributable to Neonatal Abstinence Syndrome
### By Health Region, Montana Residents, 2016 - 2018 (n=34,692)

<table>
<thead>
<tr>
<th>Montana Health Regions</th>
<th>NAS</th>
<th>% of Montana Hospitalizations</th>
<th>Neonate Hospitalizations</th>
<th>Neonate Hospitalizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flathead</td>
<td>94</td>
<td>0.271%</td>
<td>5,075</td>
<td></td>
</tr>
<tr>
<td>Missoula</td>
<td>26</td>
<td>0.075%</td>
<td>4,131</td>
<td></td>
</tr>
<tr>
<td>Lewis &amp; Clark</td>
<td>14</td>
<td>0.040%</td>
<td>3,345</td>
<td></td>
</tr>
<tr>
<td>Butte</td>
<td>14</td>
<td>0.040%</td>
<td>2,144</td>
<td></td>
</tr>
<tr>
<td>Teton</td>
<td>34</td>
<td>0.098%</td>
<td>1,093</td>
<td></td>
</tr>
<tr>
<td>Gallatin</td>
<td>13</td>
<td>0.037%</td>
<td>3,987</td>
<td></td>
</tr>
<tr>
<td>Cascade</td>
<td>31</td>
<td>0.089%</td>
<td>3,318</td>
<td></td>
</tr>
<tr>
<td>Riverstone</td>
<td>44</td>
<td>0.127%</td>
<td>7,010</td>
<td></td>
</tr>
<tr>
<td>Blaine</td>
<td>7</td>
<td>0.020%</td>
<td>1,473</td>
<td></td>
</tr>
<tr>
<td>Central Montana Health District</td>
<td>†</td>
<td>†</td>
<td>613</td>
<td></td>
</tr>
<tr>
<td>Daniels</td>
<td>16</td>
<td>0.046%</td>
<td>743</td>
<td></td>
</tr>
<tr>
<td>Custer</td>
<td>6</td>
<td>0.017%</td>
<td>1,016</td>
<td></td>
</tr>
<tr>
<td>Richland</td>
<td>†</td>
<td>†</td>
<td>744</td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td>301</td>
<td>0.868%</td>
<td>34,692</td>
<td></td>
</tr>
</tbody>
</table>

Data Provided Courtesy of Participating Montana Hospital Association (MHA) Members
### Montana Hospitalizations

**Attributable to Substance Use By Pregnant Women of Childbearing Age**

**By Health Region, Montana Residents, 2016 - 2018 (n=33,052)**

<table>
<thead>
<tr>
<th>Montana Health Regions</th>
<th>Opioid Use</th>
<th>% of Montana Pregnancy Related Hospitalizations</th>
<th>Stimulant Use</th>
<th>% of Montana Pregnancy Related Hospitalizations</th>
<th>Polysubstance Use (Opioids &amp; Stimulants)</th>
<th>% of Montana Pregnancy Related Hospitalizations</th>
<th>Pregnancy Related Hospitalizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flathead</td>
<td>122</td>
<td>0.369%</td>
<td>127</td>
<td>0.384%</td>
<td>27</td>
<td>0.082%</td>
<td>4890</td>
</tr>
<tr>
<td>Missoula</td>
<td>30</td>
<td>0.091%</td>
<td>27</td>
<td>0.082%</td>
<td>†</td>
<td>†</td>
<td>4148</td>
</tr>
<tr>
<td>Lewis &amp; Clark</td>
<td>16</td>
<td>0.048%</td>
<td>19</td>
<td>0.057%</td>
<td>7</td>
<td>0.021%</td>
<td>2759</td>
</tr>
<tr>
<td>Butte</td>
<td>8</td>
<td>0.024%</td>
<td>23</td>
<td>0.070%</td>
<td>†</td>
<td>†</td>
<td>1914</td>
</tr>
<tr>
<td>Teton</td>
<td>33</td>
<td>0.100%</td>
<td>28</td>
<td>0.085%</td>
<td>7</td>
<td>0.021%</td>
<td>1062</td>
</tr>
<tr>
<td>Gallatin</td>
<td>22</td>
<td>0.067%</td>
<td>†</td>
<td>†</td>
<td>0</td>
<td>0.000%</td>
<td>3697</td>
</tr>
<tr>
<td>Cascade</td>
<td>30</td>
<td>0.091%</td>
<td>56</td>
<td>0.169%</td>
<td>10</td>
<td>0.030%</td>
<td>3391</td>
</tr>
<tr>
<td>Riverstone</td>
<td>45</td>
<td>0.136%</td>
<td>103</td>
<td>0.312%</td>
<td>7</td>
<td>0.021%</td>
<td>6733</td>
</tr>
<tr>
<td>Blaine</td>
<td>33</td>
<td>0.100%</td>
<td>59</td>
<td>0.179%</td>
<td>5</td>
<td>0.015%</td>
<td>1334</td>
</tr>
<tr>
<td>Central Montana Health District</td>
<td>†</td>
<td>†</td>
<td>†</td>
<td>†</td>
<td>0</td>
<td>0.000%</td>
<td>588</td>
</tr>
<tr>
<td>Daniels</td>
<td>5</td>
<td>0.015%</td>
<td>35</td>
<td>0.106%</td>
<td>†</td>
<td>†</td>
<td>724</td>
</tr>
<tr>
<td>Custer</td>
<td>†</td>
<td>†</td>
<td>24</td>
<td>0.073%</td>
<td>†</td>
<td>†</td>
<td>948</td>
</tr>
<tr>
<td>Richland</td>
<td>7</td>
<td>0.021%</td>
<td>6</td>
<td>0.018%</td>
<td>0</td>
<td>0.000%</td>
<td>864</td>
</tr>
<tr>
<td>Montana</td>
<td>355</td>
<td>1.074%</td>
<td>513</td>
<td>1.552%</td>
<td>71</td>
<td>0.215%</td>
<td>33,052</td>
</tr>
</tbody>
</table>
### Montana Emergency Department Visits
**Attributable to Substance Use By Pregnant Women of Childbearing Age**
Montana Residents, 2016 - 2018 (n=16,908)

<table>
<thead>
<tr>
<th>Montana Health Regions</th>
<th>Opioid Use</th>
<th>% of Montana Pregnancy Related ED Visits</th>
<th>Stimulant Use</th>
<th>% of Montana Pregnancy Related ED Visits</th>
<th>Polysubstance Use (Opioids and Stimulants)</th>
<th>% of Montana Pregnancy Related ED Visits</th>
<th>Pregnancy Related ED Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montana</td>
<td>78</td>
<td>0.461%</td>
<td>128</td>
<td>0.757%</td>
<td>14</td>
<td>0.083%</td>
<td>16,908</td>
</tr>
</tbody>
</table>

### Montana Hospitalizations and Emergency Department Visits
**Attributable to Alcohol Use By Pregnant Women of Childbearing Age**
By Visit Type, Montana Residents, 2016 - 2018

<table>
<thead>
<tr>
<th>Visit Type</th>
<th>Alcohol Use</th>
<th>% of all Pregnancy Related Hospitalizations / ED Visits</th>
<th>All Pregnancy Related Hospitalizations / ED Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalizations</td>
<td>77</td>
<td>0.233%</td>
<td>33,052</td>
</tr>
<tr>
<td>Emergency Department Visits</td>
<td>54</td>
<td>0.319%</td>
<td>16,908</td>
</tr>
</tbody>
</table>
NEWBORNS AFFECTED BY MATERNAL USE OF SUBSTANCES OF ADDICTION

- Cannabis
- Tobacco
- Alcohol
- Opiates
- Amphetamines
- Unspecified
- Noxious Substances
- Cocaine
- Sedative Hypnotics

Percent based on claim count

October 2018 - September 2019 MT MCD Data
IMPROVING OUTCOMES FOR MOTHERS, INFANTS & FAMILIES
Goal: Reduce the adverse outcomes of perinatal mental illness and substance use disorders for newborns and families, by implementing team-based integrated prenatal care in every Montana community with a delivering hospital.

History: In May 2018 the Montana Healthcare Foundation (MHCF) and Montana Department of Public Health and Human Services announced the “Solving Perinatal Drug and Alcohol Use Initiative”. That initiative allows prenatal care providers to implement supportive, team-based care and better coordination between health care providers and social service agencies to address this drug and alcohol use in pregnancy.
MHCF partnered with DPHHS to apply for and be awarded a HRSA grant to expand the scope of the project and to jointly administer the project throughout the state of Montana.

What’s new? With the additional support from HRSA we have expanded the scope to add screening, treatment, and referral for mental illnesses such as depression and anxiety.

What’s unchanged? The clinical model stays the same—the core of this initiative is still integrated, team-based care with care coordination.
Screen for SUDs, conduct brief interventions and “warm hand-offs”.

Provide brief counseling interventions and outpatient therapy. Refer to higher-level care.

Address social issues and coordinate referrals.

Prenatal Care Providers

Behavioral Health Provider

Care Coordinator

Clinical Team
Integration: Why?

- Access: there will never be enough specialty providers/specialty care available for people who need it.

- Referrals by and large don’t work—at least the “cold” ones.

- Decrease patient burden, catches people where they are.

- Improved outcomes.

- Restores the mind/body connection.

- Decreases discrimination (stigma).
Current Grantees:

- Community Hospital of Anaconda
- Blackfeet Community Hospital
- Benefis Health System
- Bozeman Health Deaconess Hospital
- St. James Healthcare
- Community Medical Center
- Helena OBGYN and Associates
- Livingston Healthcare
- Providence St. Patrick Hospital
- St. Peter’s Health
- St. Vincent Healthcare
Questions?

Thank you!
Sara.Boutilier@mt.gov
406-444-0950