Birth Defects Profile in Michigan Prosperity Region 7
(Clinton, Eaton, and Ingham Counties)

Michigan Birth Defects Registry (MBDR)
- By law, hospitals and medical labs report certain health conditions affecting Michigan born babies up to 2 years of age.
- MBDR information is confidential. It is used to:
  - Calculate baseline rates
  - Analyze trends
  - Identify and respond to public health concerns
- MBDR data helps us understand health and development needs, identify causes, and share prevention strategies

Table 1. Prevalence of Selected Birth Defects within Prosperity 7 and the State of Michigan, 2010-2016

<table>
<thead>
<tr>
<th>Birth Defect</th>
<th>Prosperity Region 7</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Cases</td>
<td>Prevalence (per 10,000 live births)</td>
</tr>
<tr>
<td>Anencephaly</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>Cleft Lip with Cleft Palate</td>
<td>47</td>
<td>12.8</td>
</tr>
<tr>
<td>Cleft Lip without Cleft Palate</td>
<td>8</td>
<td>2.2</td>
</tr>
<tr>
<td>Cleft Palate without Cleft Lip</td>
<td>24</td>
<td>6.5</td>
</tr>
<tr>
<td>Gastrochisis</td>
<td>9</td>
<td>2.4</td>
</tr>
<tr>
<td>Hypoplastic Left Heart Syndrome</td>
<td>21</td>
<td>5.7</td>
</tr>
<tr>
<td>Hypospadias</td>
<td>56</td>
<td>15.2</td>
</tr>
<tr>
<td>Limb Deficiencies</td>
<td>25</td>
<td>6.8</td>
</tr>
<tr>
<td>Spina Bifida</td>
<td>21</td>
<td>5.7</td>
</tr>
<tr>
<td>Tetralogy of Fallot</td>
<td>20</td>
<td>5.4</td>
</tr>
<tr>
<td>Transposition of the Great Arteries</td>
<td>20</td>
<td>5.4</td>
</tr>
<tr>
<td>Trisomy 21</td>
<td>60</td>
<td>16.3</td>
</tr>
<tr>
<td>Total Number of Live Births</td>
<td>36,759</td>
<td></td>
</tr>
</tbody>
</table>

Birth Defects in Region 7 (2010-2016)
- There were roughly 5,200 infants born in Region 7 each year.
- Just over 1,000 of these infants were born with a birth defect.
- Hypospadias and Trisomy 21 were the most prevalent birth defects in Michigan and Prosperity Region 7 (Table 1).
- The prevalence of gastrochisis and hypospadias is lower in Prosperity Region 7 [2.4 (95% Confidence Interval (CI): 0.8-4.0) and 15.2 (95% CI: 11.2-19.2), respectively] than Michigan as a whole [4.9 (95% CI: 4.4-5.4) and 37.9 (95% CI: 36.6-39.3), respectively].
- The prevalence of cleft lip with cleft palate is higher in Prosperity Region 7 [12.8 (95% CI: 9.1-16.4)] than Michigan as a whole [7.2 (95% CI: 6.7-7.8)].

The prevalence of all other birth defects was similar between Prosperity Region 7 and Michigan as a whole.

MBDR Data Limitations and Cautions
- Data are based on passive reporting which means it is the responsibility of facilities to identify and report cases of birth defects. Not all facilities report cases as completely and timely as would be the ideal.
- Some facilities report children with a birth defect that is later “ruled out” resulting in an over count of the actual number of cases.
- Children diagnosed and treated in facilities in other states may be missed which will significantly affect the completeness of data for Michigan’s boarder counties.
Birth Characteristics among all Mothers and Babies
Between 2010 and 2016, roughly **5,200** babies were born in Prosperity Region 7 each year.

During an average year in Prosperity Region 7:

**Mom’s Socioeconomic and Educational Status**
- **2,200** or 41 percent of all births were covered by Medicaid.
- **500** or 10 percent of infants were born to mothers with less than a high school education.
- **1,400** or 27 percent of infants were born to mothers that had a high school education.
- **1,700** or 33 percent of infants were born to mothers that had some college or an associates degree.
- **1,500** or 29 percent of infants were born to mothers that had a college degree.

**Mom’s Race and Ethnicity**
- **3,790** or 73 percent of infants were born to white, non-Hispanic mothers.
- **670** or 13 percent of infants were born to black, non-Hispanic mothers.
- **430** or 8 percent of infants were born to other, non-Hispanic mothers.
- **370** or 7 percent of infants were born to Hispanic mothers.

**Mom’s Age**
- **330** or 6 percent of infants were born to teenage mothers (15 to 19 years).
- **4,200** or 81 percent of infants were born to mothers of reproductive age (20 to 34 years).
- **680** or 13 percent of infants were born to mothers 35 years of age or older.

**Mom and Baby Health Before, During, and After Pregnancy**
- **2,800** or 54 percent of infants were born to mothers who were overweight or obese.
- **950** or 18 percent of infants were born to mothers that used tobacco during pregnancy.
- **490** or 9 percent of infants were born prematurely.
- **480** or 9 percent of infants were born at a low birth weight.
- **37** or less than 1 percent of infants were born to mothers who had pre-pregnancy diabetes type 1 or type 2.