## Birth Defects Profile in Michigan Prosperity Region 7

(Clinton, Eaton, and Ingham Counties)



### Birth Defects in Region 7 (2011-2017)

- There were roughly 5,200 infants born in Region 7 each year.
- Just under 700 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 hypospadias is lower in Prosperity Region 7 [23.1 (95% Confidence Interval (CI): 18.2-28.1)] than Michigan as a whole [39.3 (95% CI: 37.9-40.7)].
- The prevalence of all other birth defects was similar between Prosperity Region 7 and Michigan as a whole.

#### 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 theState of Michigan, 2011-2017

	Prosperity Region 7		Michigan	
Birth Defect	Number of Cases	Prevalence (per 10,000 live births)	Number of Cases	Prevalence (per 10,000 live births)
Anencephaly	*	*	79	1.0
Cleft Lip with Cleft Palate	40	10.9	597	7.5
Cleft Lip without Cleft Palate	10	2.7	292	3.7
Cleft Palate without Cleft Lip	32	8.7	589	7.4
Gastroschisis	10	2.7	362	4.6
Hypoplastic Left Heart Syndrome	18	4.9	333	4.2
Hypospadias	85	23.1	3,116	39.3
Limb Deficiencies	18	4.9	360	4.5
Spina Bifida	20	5.4	363	4.6
Tetralogy of Fallot	17	4.6	443	5.6
Transposition of the Great Arteries	17	4.6	408	5.1
Trisomy 21	48	13.1	1,071	13.5
Total Number of Live Births	36,726		793,151	

#### **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 <u>all</u> Mothers and Babies

Between 2011 and 2017, roughly 5,200 babies were born in Prosperity Region 7 each year.

#### During an average year in Prosperity Region 7:

#### Mom's Race and Ethnicity

- 3,760 or 72 percent of infants were born to white, non-Hispanic mothers.
- 670 or 13 percent of infants were born to Black, non-Hispanic mothers.
- 450 or 8 percent of infants were born to all other non-Hispanic mothers.
- 380 or 7 percent of infants were born to Hispanic mothers.

#### Mom's Socioeconomic and Educational Status

- 2,100 or 41 percent of all births reported Medicaid as the intended payer.
- 500 or 10 percent of infants were born to mothers with less than a high school education.
- 1,300 or 25 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 associate degree.
- 1,600 or 31 percent of infants were born to mothers that had a college degree.

Data source: Michigan resident live birth files, MDHHS, Division of Vital Records and Health Statistics, 2011-2017.





#### Mom's Age

- 302 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).
- 700 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 53 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.
- 410 or 8 percent of infants were born at a low birth weight.
- 40 or 1 percent of infants were born to mothers who had pre-pregnancy diabetes type 1 or type 2.



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