Birth Defects Profile in Michigan Prosperity Region 2

(Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Kalkaska, Leelanau, Manistee, Missaukee, and Wexford Counties)



Birth Defects in Region 2 (2011-2017)

- There were roughly 2,900 infants born in Region 2 each year.
- Just over 250 of these infants were born with a birth defect.
- Hypospadias and Trisomy 21 were the most prevalent birth defects in Michigan and Prosperity Region 2 (Table 1).
- The prevalence of all birth defects was similar between Prosperity Region 2 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 Region 2 and the State of Michigan, 2011-2017

	Prosperity Region 2		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	17	8.3	597	7.5
Cleft Lip without Cleft Palate	11	5.4	292	3.7
Cleft Palate without Cleft Lip	14	6.8	589	7.4
Gastroschisis	14	6.8	362	4.6
Hypoplastic Left Heart Syndrome	8	3.9	333	4.2
Hypospadias	83	40.4	3116	39.3
Limb Deficiencies	10	4.9	360	4.5
Spina Bifida	8	3.9	363	4.6
Tetralogy of Fallot	9	4.4	443	5.6
Transposition of the Great Arteries	10	4.9	408	5.1
Trisomy 21	24	11.7	1071	13.5
Total Number of Live Births	20,551		793,131	

^{*} Data suppressed due to birth defects counts of less than six.

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.

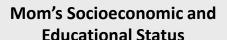
Birth Characteristics among all Mother and Babies

Between 2011 and 2017, roughly 2,900 babies were born in Prosperity Region 2 each year.

During an average year in Prosperity Region 2:

Mom's Race and Ethnicity

- 2,700 or 92 percent of infants were born to white, non-Hispanic mothers.
- ❖ 15 or less than 1 percent of infants were born to Black, non-Hispanic mothers.
- ❖ 140 or 5 percent of infants were born to all other non-Hispanic mothers.
- ❖ 90 or 3 percent of infants were born to Hispanic mothers.



- 1,450 or 50 percent of all births reported Medicaid as the intended payer.
- ❖ 310 or 11 percent of infants were born to mothers with less than a high school education.
- ❖ 750 or 26 percent of infants were born to mothers that had a high school education.
- 1,120 or 38 percent of infants were born to mothers that had some college or an associate degree.
- ❖ 750 or 26 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

- 200 or 7 percent of infants were born to teenage mothers (15 to 19 years).
- 2,400 or 81 percent of infants were born to mothers of reproductive age (20 to 34 years).
- 370 or 13 percent of infants were born to mothers 35 years of age or older.

Mom and Baby Health Before, During, and After Pregnancy

- 1,550 or 52 percent of infants were born to mothers who were overweight or obese.
- 740 or 25 percent of infants were born to mothers that used tobacco during pregnancy.
- 250 or 9 percent of infants were born prematurely.
- **❖ 190** or **7 percent** of infants were born at a **low birth weight**.
- 24 or 1 percent of infants were born to mothers who had pre-pregnancy diabetes type 1 or type 2.



