Birth Defects Profile in Michigan Prosperity Region 9

(Hillsdale, Jackson, Lenawee, Livingston, Monroe, and Washtenaw Counties)



Birth Defects in Region 9 (2011-2017)

- There were roughly 10,400 infants born in Region 9 each year.
- Just under 1,700 of these infants were born with a birth defect.
- Hypospadias and Trisomy 21 were the most prevalent birth defects in Michigan and Prosperity Region 9 (Table 1).
- The prevalence of cleft palate without cleft lip is higher in Prosperity Region 9 [11.8 (95% Confidence Interval (CI): 9.3-14.3)] than Michigan as a whole [7.4 (95% CI: 6.8-8.0)].
- The prevalence of all other birth defects was similar between Prosperity Region 9 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 9 and the State of Michigan, 2011-2017

	Prosperity Region 9		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	52	7.2	597	7.5
Cleft Lip without Cleft Palate	22	3.0	292	3.7
Cleft Palate without Cleft Lip	86	11.8	589	7.4
Gastroschisis	29	4.0	362	4.6
Hypoplastic Left Heart Syndrome	31	4.3	333	4.2
Hypospadias	309	42.5	3,116	39.3
Limb Deficiencies	35	4.8	360	4.5
Spina Bifida	36	5.0	363	4.6
Tetralogy of Fallot	44	6.1	443	5.6
Transposition of the Great Arteries	52	7.2	408	5.1
Trisomy 21	91	12.5	1,071	13.5
Total Number of Live Births	72,649		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 all Mothers and Babies

Between 2011 and 2017, roughly 10,400 babies were born in Prosperity Region 9 each year.

During an average year in Prosperity Region 9:

Mom's Race and Ethnicity

- * 8,300 or 80 percent of infants were born to white, non-Hispanic mothers.
- ❖ 820 or 8 percent of infants were born to Black, non-Hispanic mothers.
- ❖ 750 or 7 percent of infants were born to all other non-Hispanic mothers.
- **❖ 540** or **5 percent** of infants were born to **Hispanic** mothers.

Mom's Socioeconomic and Educational Status

- 3,600 or 35 percent of all births reported Medicaid as the intended payer.
- ❖ 900 or 9 percent of infants were born to mothers with less than a high school education.
- ❖ 2,150 or 21 percent of infants were born to mothers that had a high school education.
- 3,250 or 31 percent of infants were born to mothers that had some college or an associate degree.
- **❖ 3,800** or **37 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

- ❖ 550 or 5 percent of infants were born to teenage mothers (15 to 19 years).
- ❖ 8,200 or 79 percent of infants were born to mothers of reproductive age (20 to 34 years).
- ❖ 1,650 or 16 percent of infants were born to mothers 35 years of age or older.

Mom and Baby

Health Before, During, and After Pregnancy

- 5,000 or 49 percent of infants were born to mothers who were overweight or obese.
- 1,900 or 18 percent of infants were born to mothers that used tobacco during pregnancy.
- 970 or 9 percent of infants were born prematurely.
- 770 or 7 percent of infants were born at a low birth weight.
- * 70 or less than 1 percent of infants were born to mothers who had prepregnancy diabetes type 1 or type 2.



