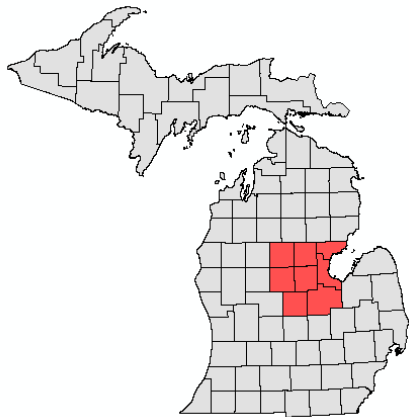


Birth Defects Profile in Michigan Prosperity Region 5

(Arenac, Bay, Clare, Gladwin, Gratiot, Isabella, Midland, and Saginaw counties)



Michigan Birth Defects Registry (MBDR)

- ❖ By law, hospitals and medical labs report certain health conditions affecting children at birth or 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.

Birth Defects in Region 5 (2013-2019)

- ❖ An average of 5,853 infants born in Region 5 each year.
- ❖ Approximately 458 of these infants were born with a birth defect.
- ❖ Hypospadias and Trisomy 21 were the most prevalent birth defects in Michigan and Prosperity Region 5 (Table 1).
- ❖ The prevalence of hypospadias was **lower** in Region 5 [27.3 (95% Confidence Interval (CI): 22.3-32.4)] than Michigan as a whole [39.0 (95% CI: 37.6-40.4)].
- ❖ The prevalence of all other birth defects was similar between Prosperity Region 5 and Michigan as a whole.

Table 1. Prevalence of Selected Birth Defects within Prosperity Region 5 and the State of Michigan, 2013-2019

Birth Defect	Prosperity Region 5		Michigan	
	Number of Cases	Prevalence (per 10,000 live births)	Number of Cases	Prevalence (per 10,000 live births)
Anencephaly	--*	--*	69	0.9
Cleft Lip with Cleft Palate	36	8.8	517	6.6
Cleft Lip without Cleft Palate	16	3.9	264	3.4
Cleft Palate without Cleft Lip	39	9.5	541	6.9
Gastroschisis	17	4.1	321	4.1
Hypoplastic Left Heart Syndrome	20	4.9	308	3.9
Hypospadias	112	27.3	3052	39.0
Limb Deficiencies	17	4.1	308	3.9
Spina Bifida	16	3.9	326	4.2
Tetralogy of Fallot	16	3.9	406	5.2
Transposition of the Great Arteries	15	3.7	298	3.8
Trisomy 21	70	17.1	1010	12.9
Total Number of Live Births	40,972		782,227	

* Data suppressed due to small birth defects counts (1 ≤ N ≤ 5),

MBDR Data Limitations and Cautions

- Data are based on passive reporting, which means MBDR relies on facilities to identify and report cases of birth defects. Getting all facilities to report complete and timely data can be a challenge.
- Some facilities report children with a birth defect that is later “ruled out” resulting in an overcount 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 border counties.

Birth Characteristics among all Mothers and Babies

Between 2013 and 2019, roughly **5,853** babies were born in Prosperity Region 5 each year.

During an average year in Prosperity Region 5:

Mother's Race and Ethnicity

- ❖ **4,440**, or **76 percent** of, infants were born to **white, non-Hispanic** mothers.
- ❖ **650**, or **11 percent** of, infants were born to **Black, non-Hispanic** mothers.
- ❖ **340**, or **6 percent** of, infants were born to **all other non-Hispanic** mothers.
- ❖ **430**, or **7 percent** of, infants were born to **Hispanic** mothers.



Mom's Socioeconomic and Educational Status

- ❖ **2,840**, or **49 percent** of, all births reported **Medicaid** as the intended payer.
- ❖ **760**, or **13 percent** of, infants were born to mothers with **less than a high school** education.
- ❖ **1,530**, or **26 percent** of, infants were born to mothers who had a **high school** education.
- ❖ **2,100**, or **36 percent** of, infants were born to mothers who had **some college** or an **associate degree**.
- ❖ **1,450**, or **25 percent** of, infants were born to mothers who had a **college degree**.

Mom's Age

- ❖ **370**, or **6 percent** of, infants were born to **teenage** mothers (15 to 19 years).
- ❖ **4,840**, or **83 percent** of, infants were born to mothers **20 to 34 years of age**.
- ❖ **640**, or **11 percent** of, infants were born to mothers **35 years of age** or older.

Mom and Baby Health Before, During, and After Pregnancy

- ❖ **3,420**, or **59 percent** of, infants were born to mothers who were **overweight** or **obese**.
- ❖ **1,370**, or **24 percent** of, infants were born to mothers who **used tobacco** during pregnancy.
- ❖ **640**, or **11 percent** of, infants were **born prematurely**.
- ❖ **480**, or **8 percent** of, infants were born at a **low birth weight**.
- ❖ **60**, or **1 percent** of, infants were born to mothers who had **pre-pregnancy diabetes type 1** or **type 2**.

Data source: Michigan resident live birth files, MDHHS, Division of Vital Records and Health Statistics, 2013-2019.

