

Texas Birth Defects Registry (TBDR) Annual Report

Table 4. Prevalence of Selected Birth Defects by Mother's Race/Ethnicity, Texas, 1999–2020

Birth Defect (Body System)	Mother's Race/Ethnicity	Cases (count)	Prevalence (rate)	Confidence Interval (95% for Prevalence)
Central Nervous System				
Anencephaly* [p<0.0001]	White non-Hispanic	613	2.08	1.91 – 2.24
	Black non-Hispanic	177	1.82	1.55 – 2.09
	Hispanic	1,216	2.99	2.82 – 3.16
Spina bifida without anencephaly* [p<0.0001]	White non-Hispanic	1,023	3.47	3.26 – 3.68
	Black non-Hispanic	257	2.64	2.32 – 2.97
	Hispanic	1,766	4.34	4.14 – 4.55
Encephalocele* [p<0.0001]	White non-Hispanic	220	0.75	0.65 – 0.84
	Black non-Hispanic	118	1.21	1.00 – 1.43
	Hispanic	433	1.06	0.96 – 1.17
Microcephaly, severe (head circumference <3 rd percentile)* [p<0.0001]	White non-Hispanic	993	3.37	3.16 – 3.58
	Black non-Hispanic	941	9.68	9.07 – 10.30
	Hispanic	2,138	5.26	5.03 – 5.48
Holoprosencephaly* [p<0.0001]	White non-Hispanic	256	0.87	0.76 – 0.97
	Black non-Hispanic	97	1.00	0.81 – 1.22
	Hispanic	504	1.24	1.13 – 1.35
Hydrocephaly without spina bifida* [p<0.0001]	White non-Hispanic	2,335	7.91	7.59 – 8.24
	Black non-Hispanic	908	9.34	8.74 – 9.95
	Hispanic	3,284	8.08	7.80 – 8.35
Eye and Ear				
Anophthalmia* [p<0.05]	White non-Hispanic	71	0.24	0.19 – 0.30
	Black non-Hispanic	28	0.29	0.19 – 0.42
	Hispanic	143	0.35	0.29 – 0.41
Microphthalmia* [p<0.0001]	White non-Hispanic	760	2.58	2.39 – 2.76
	Black non-Hispanic	221	2.27	1.97 – 2.57
	Hispanic	1,219	3.00	2.83 – 3.17
Cataract* [p<0.05]	White non-Hispanic	571	1.94	1.78 – 2.09
	Black non-Hispanic	224	2.31	2.00 – 2.61
	Hispanic	765	1.88	1.75 – 2.01
Anotia or microtia* [p<0.0001]	White non-Hispanic	653	2.21	2.04 – 2.38
	Black non-Hispanic	152	1.56	1.32 – 1.81
	Hispanic	2,069	5.09	4.87 – 5.31
Cardiac and Circulatory				
Common truncus* [p<0.01]	White non-Hispanic	187	0.63	0.54 – 0.72
	Black non-Hispanic	77	0.79	0.63 – 0.99
	Hispanic	357	0.88	0.79 – 0.97
Transposition of the great vessels* [p<0.0001]	White non-Hispanic	1,086	3.68	3.46 – 3.90
	Black non-Hispanic	223	2.30	1.99 – 2.60
	Hispanic	1,397	3.44	3.25 – 3.62

Birth Defect (Body System)	Mother's Race/Ethnicity	Cases (count)	Prevalence (rate)	Confidence Interval (95% for Prevalence)
Double outlet right ventricle* [p<0.001]	White non-Hispanic	604	2.05	1.88 – 2.21
	Black non-Hispanic	227	2.34	2.03 – 2.64
	Hispanic	1,030	2.53	2.38 – 2.69
Tetralogy of Fallot* [p<0.001]	White non-Hispanic	1,144	3.88	3.65 – 4.10
	Black non-Hispanic	444	4.57	4.14 – 4.99
	Hispanic	1,538	3.78	3.59 – 3.97
Ventricular septal defect* [p<0.0001]	White non-Hispanic	16,217	54.97	54.12 – 55.81
	Black non-Hispanic	4,678	48.14	46.77 – 49.52
	Hispanic	28,376	69.77	68.96 – 70.59
Atrial septal defect* [p<0.0001]	White non-Hispanic	19,435	65.88	64.95 – 66.80
	Black non-Hispanic	7,236	74.47	72.76 – 76.19
	Hispanic	30,745	75.60	74.75 – 76.44
Atrioventricular septal defect (endocardial cushion defect)* [p<0.0001]	White non-Hispanic	1,393	4.72	4.47 – 4.97
	Black non-Hispanic	502	5.17	4.71 – 5.62
	Hispanic	1,647	4.05	3.85 – 4.25
Pulmonary valve atresia or stenosis* [p<0.0001]	White non-Hispanic	2,631	8.92	8.58 – 9.26
	Black non-Hispanic	1,072	11.03	10.37 – 11.69
	Hispanic	4,358	10.72	10.40 – 11.03
Tricuspid valve atresia or stenosis* [p<0.01]	White non-Hispanic	508	1.72	1.57 – 1.87
	Black non-Hispanic	218	2.24	1.95 – 2.54
	Hispanic	783	1.93	1.79 – 2.06
Ebstein anomaly* [p<0.0001]	White non-Hispanic	213	0.72	0.63 – 0.82
	Black non-Hispanic	40	0.41	0.29 – 0.56
	Hispanic	354	0.87	0.78 – 0.96
Aortic valve stenosis* [p<0.0001]	White non-Hispanic	814	2.76	2.57 – 2.95
	Black non-Hispanic	137	1.41	1.17 – 1.65
	Hispanic	1,005	2.47	2.32 – 2.62
Hypoplastic left heart syndrome* [p<0.001]	White non-Hispanic	761	2.58	2.40 – 2.76
	Black non-Hispanic	222	2.28	1.98 – 2.59
	Hispanic	859	2.11	1.97 – 2.25
Patent ductus arteriosus* [p<0.0001]	White non-Hispanic	15,405	52.22	51.39 – 53.04
	Black non-Hispanic	5,437	55.96	54.47 – 57.44
	Hispanic	26,209	64.45	63.67 – 65.23
Coarctation of the aorta* [p<0.0001]	White non-Hispanic	1,713	5.81	5.53 – 6.08
	Black non-Hispanic	374	3.85	3.46 – 4.24
	Hispanic	2,204	5.42	5.19 – 5.65

Birth Defect (Body System)	Mother's Race/Ethnicity	Cases (count)	Prevalence (rate)	Confidence Interval (95% for Prevalence)
Respiratory				
Choanal atresia or stenosis* [p<0.05]	White non-Hispanic	424	1.44	1.30 – 1.57
	Black non-Hispanic	128	1.32	1.09 – 1.55
	Hispanic	490	1.20	1.10 – 1.31
Agenesis, aplasia, or hypoplasia of the lung* [p<0.0001]	White non-Hispanic	747	2.53	2.35 – 2.71
	Black non-Hispanic	326	3.36	2.99 – 3.72
	Hispanic	1,348	3.31	3.14 – 3.49
Oral Clefts				
Cleft palate alone (without cleft lip)* [p<0.0001]	White non-Hispanic	1,971	6.68	6.39 – 6.98
	Black non-Hispanic	436	4.49	4.07 – 4.91
	Hispanic	2,309	5.68	5.45 – 5.91
Cleft lip with or without cleft palate* [p<0.0001]	White non-Hispanic	3,251	11.02	10.64 – 11.40
	Black non-Hispanic	706	7.27	6.73 – 7.80
	Hispanic	4,656	11.45	11.12 – 11.78
Gastrointestinal				
Tracheoesophageal fistula/esophageal atresia* [p<0.001]	White non-Hispanic	733	2.48	2.30 – 2.66
	Black non-Hispanic	183	1.88	1.61 – 2.16
	Hispanic	849	2.09	1.95 – 2.23
Pyloric stenosis* [p<0.0001]	White non-Hispanic	5,317	18.02	17.54 – 18.51
	Black non-Hispanic	652	6.71	6.20 – 7.23
	Hispanic	7,380	18.15	17.73 – 18.56
Stenosis or atresia of the small intestine	White non-Hispanic	964	3.27	3.06 – 3.47
	Black non-Hispanic	337	3.47	3.10 – 3.84
	Hispanic	1,461	3.59	3.41 – 3.78
Stenosis or atresia of large intestine, rectum, or anal canal* [p<0.0001]	White non-Hispanic	1,499	5.08	4.82 – 5.34
	Black non-Hispanic	406	4.18	3.77 – 4.58
	Hispanic	2,377	5.84	5.61 – 6.08
Hirschsprung disease* [p<0.0001]	White non-Hispanic	508	1.72	1.57 – 1.87
	Black non-Hispanic	232	2.39	2.08 – 2.69
	Hispanic	385	0.95	0.85 – 1.04
Biliary atresia* [p<0.001]	White non-Hispanic	165	0.56	0.47 – 0.64
	Black non-Hispanic	92	0.95	0.76 – 1.16
	Hispanic	287	0.71	0.62 – 0.79
Genitourinary				
Hypospadias (among males)* [p<0.0001]	White non-Hispanic	12,943	85.55	84.08 – 87.02
	Black non-Hispanic	3,708	75.01	72.59 – 77.42
	Hispanic	8,700	41.95	41.07 – 42.83
Epispadias* [p<0.0001]	White non-Hispanic	350	1.19	1.06 – 1.31
	Black non-Hispanic	109	1.12	0.91 – 1.33
	Hispanic	323	0.79	0.71 – 0.88

Birth Defect (Body System)	Mother's Race/Ethnicity	Cases (count)	Prevalence (rate)	Confidence Interval (95% for Prevalence)
Renal agenesis or dysgenesis* [p<0.05]	White non-Hispanic	1,828	6.20	5.91 – 6.48
	Black non-Hispanic	625	6.43	5.93 – 6.94
	Hispanic	2,739	6.74	6.48 – 6.99
Bladder exstrophy* [p<0.0001]	White non-Hispanic	84	0.28	0.23 – 0.35
	Black non-Hispanic	18	0.19	0.11 – 0.29
	Hispanic	38	0.09	0.07 – 0.13
Musculoskeletal				
Congenital hip dislocation without hip dysplasia* [p<0.0001]	White non-Hispanic	885	3.00	2.80 – 3.20
	Black non-Hispanic	132	1.36	1.13 – 1.59
	Hispanic	1,022	2.51	2.36 – 2.67
Talipes equinovarus/clubfoot	White non-Hispanic	5,058	17.14	16.67 – 17.62
	Black non-Hispanic	1,602	16.49	15.68 – 17.29
	Hispanic	6,794	16.71	16.31 – 17.10
Reduction defects of the upper limbs	White non-Hispanic	1,225	4.15	3.92 – 4.38
	Black non-Hispanic	416	4.28	3.87 – 4.69
	Hispanic	1,718	4.22	4.02 – 4.42
Reduction defects of the lower limbs* [p<0.0001]	White non-Hispanic	561	1.90	1.74 – 2.06
	Black non-Hispanic	256	2.63	2.31 – 2.96
	Hispanic	778	1.91	1.78 – 2.05
Craniosynostosis* [p<0.0001]	White non-Hispanic	2,107	7.14	6.84 – 7.45
	Black non-Hispanic	243	2.50	2.19 – 2.82
	Hispanic	2,199	5.41	5.18 – 5.63
Achondroplasia* [p<0.0001]	White non-Hispanic	135	0.46	0.38 – 0.53
	Black non-Hispanic	39	0.40	0.29 – 0.55
	Hispanic	108	0.27	0.22 – 0.32
Diaphragmatic hernia* [p<0.01]	White non-Hispanic	838	2.84	2.65 – 3.03
	Black non-Hispanic	223	2.30	1.99 – 2.60
	Hispanic	1,197	2.94	2.78 – 3.11
Omphalocele	White non-Hispanic	661	2.24	2.07 – 2.41
	Black non-Hispanic	234	2.41	2.10 – 2.72
	Hispanic	837	2.06	1.92 – 2.20
Gastroschisis * [p<0.0001]	White non-Hispanic	1,493	5.06	4.80 – 5.32
	Black non-Hispanic	330	3.40	3.03 – 3.76
	Hispanic	2,376	5.84	5.61 – 6.08
Chromosomal				
Trisomy 21 (Down syndrome)* [p<0.0001]	White non-Hispanic	3,710	12.58	12.17 – 12.98
	Black non-Hispanic	1,001	10.30	9.66 – 10.94
	Hispanic	6,448	15.86	15.47 – 16.24
Trisomy 13 (Patau syndrome)	White non-Hispanic	346	1.17	1.05 – 1.30
	Black non-Hispanic	129	1.33	1.10 – 1.56
	Hispanic	440	1.08	0.98 – 1.18

Birth Defect (Body System)	Mother's Race/Ethnicity	Cases (count)	Prevalence (rate)	Confidence Interval (95% for Prevalence)
Trisomy 18 (Edwards syndrome)	White non-Hispanic	716	2.43	2.25 – 2.60
	Black non-Hispanic	265	2.73	2.40 – 3.06
	Hispanic	1,011	2.49	2.33 – 2.64
Infants and fetuses with regular reportable birth defects* [p<0.0001]	White non-Hispanic	149,553	506.92	504.35 – 509.49
	Black non-Hispanic	49,687	511.37	506.87 – 515.86
	Hispanic	198,872	489.01	486.86 – 491.16

Prevalence (rate) is expressed as the number of cases per 10,000 live births.

*Statistically significant by Poisson regression [p<0.05].

Please see the Methods section of the Annual Report for additional information:

<https://www.dshs.texas.gov/sites/default/files/birthdefects/annualreport/1999-2020-TBDR-Methods.pdf>

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