

Division of Public Health
Department of Health
and Social Services

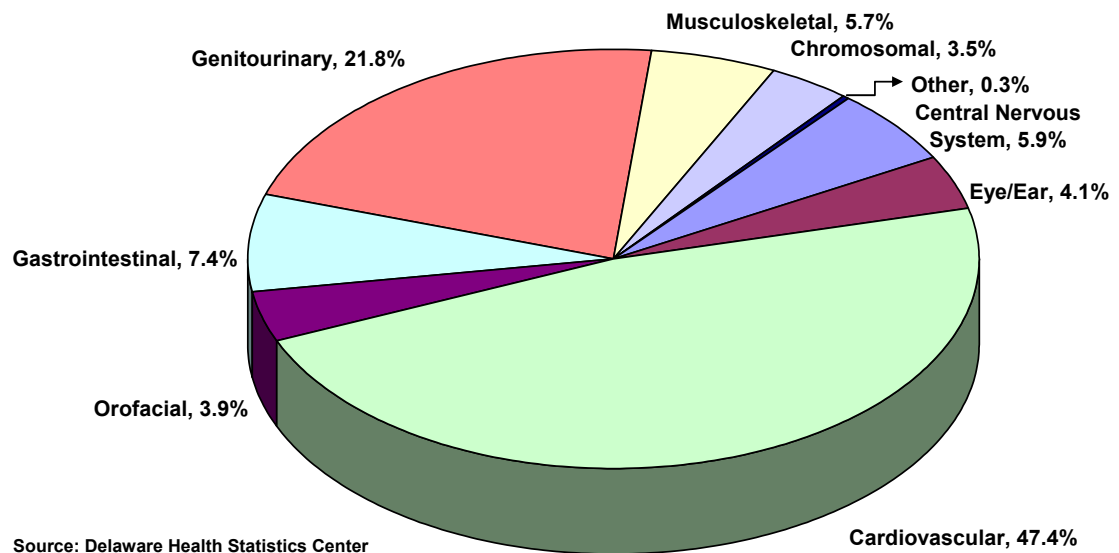
Birth Defects

Birth defects were the second leading cause of infant death in 2001-2005.

Birth defects (congenital anomalies) are conditions that:

- 1) result from a malformation, deformation, or disruption in one or more parts of the body;
- 2) are present at birth; and
- 3) have a serious adverse effect on health, development, or functional ability¹.

Percent Distribution of Birth Defect Categories
Delaware, 2001-2005



- Cardiovascular birth defects, such as patent ductus arteriosus, atrial and ventricular septal defects, accounted for almost half of all birth defects.
- Genitourinary congenital anomalies were the second most common birth defect, and include hypospadias, epispadias, and obstructive genitourinary defects.

According to national estimates, approximately 3 percent of infants are born with a birth defect². Though the majority of birth defects do not have an identified cause, nutrient deficiencies, infections during pregnancy, illegal drug use, smoking, alcohol use, genetic disorders, and environmental factors can increase the chance of having a baby with a birth defect.

**Number of Birth Defects* by Race and Ethnicity and Total Live Birth Prevalence Rate
Delaware 2001-2005**

BIRTH DEFECT CATEGORIES/ SPECIFIC BIRTH DEFECT†	RACE/ETHNICITY							Category Percent	Rate‡
	Non-Hispanic White	Non-Hispanic Black	Hispanic	American Indian	Asian/PI	Other/ Unknown	Total		
Central Nervous System	57	41	17	0	2	6	123	100.0	21.9
Anencephalus	6	0	1	0	0	0	7	5.7	1.2
Encephalocele	2	0	0	0	0	0	2	1.6	0.4
Hydrocephalus without Spina Bifida	14	14	6	0	1	4	39	31.7	6.9
Microcephalus	17	17	2	0	1	1	38	30.9	6.8
Spina bifida without anencephalus	18	10	8	0	0	1	37	30.1	6.6
Eye	44	30	5	1	2	3	85	100.0	15.1
Aniridia	1	0	0	0	0	0	1	1.2	0.2
Anophthalmia/ microphthalmia	41	29	5	1	1	3	80	94.1	14.3
Congenital cataract	2	1	0	0	1	0	4	4.7	0.7
Ear	1	0	0	0	0	0	1	100.0	0.2
Anotia/microtia	1	0	0	0	0	0	1	100.0	0.2
Cardiovascular	516	241	99	4	26	104	990	100.0	176.4
Aortic valve stenosis	6	0	0	0	0	0	6	0.6	1.1
Atrial septal defect	139	72	30	1	7	28	277	28.0	49.4
Coarctation of aorta	19	5	0	0	0	6	30	3.0	5.3
Ebstein's anomaly	0	0	0	0	1	0	1	0.1	0.2
Endocardial cushion defect	12	9	0	0	1	1	23	2.3	4.1
Tetralogy of Fallot	17	0	1	0	1	2	21	2.1	3.7
Hypoplastic left heart syndrome	11	2	1	0	0	3	17	1.7	3.0
Patent ductus arteriosus	151	83	37	2	10	25	308	31.1	54.9
Pulmonary valve atresia and stenosis	18	9	0	0	0	5	32	3.2	5.7
Transposition of great arteries	15	3	3	0	1	5	27	2.7	4.8
Tricuspid valve atresia and stenosis	0	1	0	0	0	2	3	0.3	0.5
Common truncus	5	3	0	0	0	1	9	0.9	1.6
Ventricular septal defect	123	54	27	1	5	26	236	23.8	42.0
Orofacial	58	14	3	0	1	6	82	100.0	14.6
Choanal atresia	9	1	0	0	0	0	10	12.2	1.8
CLEFT	3	1	0	0	0	0	4	4.9	0.7
Cleft lip with and without cleft palate	25	7	3	0	0	4	39	47.6	6.9
Cleft palate without cleft lip	21	5	0	0	1	2	29	35.4	5.2
Gastrointestinal	85	17	9	0	1	43	155	100.0	27.6
Biliary atresia	1	1	0	0	0	0	2	0.0	0.4
Esophageal atresia/	4	3	0	0	0	5	12	10.0	2.1
Hirschsprung's disease (congenital)	8	3	2	0	0	1	14	2.5	2.5
Pyloric stenosis	62	8	5	0	0	32	107	75.0	19.1
Rectal and large intestinal	10	2	2	0	1	5	20	12.5	3.6
Genitourinary	284	87	46	2	13	23	455	100.0	81.1
Bladder exstrophy	1	0	0	0	0	0	1	0.2	0.2
Hypospadias and Epispadias	125	46	9	0	6	10	196	43.1	34.9
Obstructive genitourinary defect	140	37	36	2	6	11	232	51.0	41.3
Renal agenesis/hypoplasia	18	4	1	0	1	2	26	5.7	4.6
Musculoskeletal	68	21	9	1	5	14	118	100.0	21.0
Gastroschisis & Omphalocele	15	8	2	0	1	6	32	27.1	5.7
Diaphragmatic hernia	3	1	1	0	0	3	8	6.8	1.4
Congenital hip dislocation	42	8	6	1	4	4	65	55.1	11.6
Reduction deformity, lower limbs	2	1	0	0	0	0	3	2.5	0.5
Reduction deformity, upper limbs	6	3	0	0	0	1	10	8.5	1.8
Chromosomal	35	13	11	2	1	11	73	100.0	13.0
Down syndrome	33	10	11	2	1	10	67	91.8	11.9
Trisomy 18 (Edwards' syndrome)	2	3	0	0	0	1	6	8.2	1.1
Other	3	3	0	0	0	0	6	100	1.1
Fetus affected by maternal alcohol use	3	3	0	0	0	0	6	100	1.1
TOTAL	1151	467	199	10	51	210	2088		372.0

† Infants with more than one birth defect were included in more than 1 defect group.

‡ Total count of defects per 10,000 live births.

*Birth defects were identified by passive case ascertainment using hospital discharge and birth certificate data; as such, some cases may have been missed and the data should be interpreted with caution.

Source: Delaware Health Statistics Center

References:

Centers for Disease Control and Prevention. *Hospital Stays, Hospital Charges, and In-Hospital Deaths Among Infants with Selected Birth Defects – United States, 2003*. MMWR 2007;56:25-26.

Canfield MA, Honein MA, Yuskiv N, Xing J, Mai CT, Collins JS, Devine O, Petrini J, Ramadhani TA, Hobbs CA, Kirby RS. *National estimates and race/ethnic-specific variation of selected birth defects in the United States, 1999-2001*. Birth Defects Res A Clin Mol Teratol. 2006 Nov;76(11):747-56.

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DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

If you have comments, suggestions, and/or questions, please contact the Delaware Health Statistics Center at (302) 744-4541.

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