

About 1 out of every 33 babies is born with a major birth defect.

Birth defects cause one in five deaths among infants less than a year old.

Birth defects lead to \$2.5 billion per year in hospital costs alone in the U.S.

Selected birth defects counts and birth prevalence, Massachusetts and US

Defects	Massachusetts [†]		US [‡]	
	Annual no. of cases	Birth prevalence*	Annual no. of cases	Birth prevalence*
Central nervous system				
Anencephalus	4	0.53	1,009	2.51
Spina bifida without anencephalus	13	1.61	1,477	3.68
Cardiovascular				
Transposition of great arteries	32	4.03	1,901	4.73
Tetralogy of Fallot	38	4.84	1,574	3.92
Atrioventricular septal defect (also known as endocardial cushion defect)	41	5.19	1,748	4.36
Hypoplastic left heart syndrome	10	1.31	975	2.43
Orofacial				
Cleft lip with and without cleft palate	60	7.50	4,209	10.47
Cleft palate without cleft lip	47	5.89	2,567	6.39
Musculoskeletal				
Upper limb defect	22	2.82	1,521	3.79
Lower limb defect	10	1.23	763	1.90
Gastroschisis	21	2.64	1,497	3.73
Chromosomal				
Down syndrome	99	12.42	5,132	12.78

* per 10,000 live births

† estimates based on pooled data from birth years 2001-2005

‡ estimates based on pooled data from birth years 1999-2001

-- No data available

Note: Due to variability in the methods used by state birth defects surveillance systems and differences in populations and risk factors, state prevalence estimates may not be directly comparable with national estimates or those of other states.

Preventing birth defects

- The causes of about 70% of birth defects are unknown.
- Many birth defects happen during early pregnancy, often before a woman knows she is pregnant.
- Addressing health risks and behaviors before pregnancy can reduce the risk of poor birth outcomes, including some birth defects.
- All women who could become pregnant should take 400 micrograms of folic acid every day to help prevent serious defects of the baby’s brain and spinal cord.

Massachusetts’s Birth Defect Surveillance System

The Massachusetts Birth Defects Monitoring Program (BDMP) is a state-wide, population-based program that collects data on infants (liveborn or stillborn) diagnosed with a birth defect. Based in the Massachusetts Department of Public Health, monitoring activities are mandated by state law and delineated by state regulations. Covering approximately 77,000 births per year, the Massachusetts BDMP produces data reports, maintains a website, and collaborates with researchers and public health colleagues on research, data requests and environmental investigations.

How birth defects data are used in Massachusetts

The Massachusetts BDMP collects data in order to: identify trends; search for causative factors linked with birth defects; address community concerns about birth defects; provide information and referral to families of children with birth defects; and measure the success of screening and prevention efforts.

Program information:

Marlene Anderka, ScD, MPH
 Massachusetts Birth Defects Monitoring Program
 E-mail: marlene.anderka@state.ma.us

Cathy Higgins, BA
 Massachusetts Birth Defects Monitoring Program
 E-mail: cathleen.higgins@state.ma.us

Website: www.mass.gov/birthdefectscenter