

Background

Birth defects are a leading cause of infant mortality. Additionally, babies born with birth defects who survive infancy have a greater chance of illness and long term disability than babies without birth defects. The causes can involve genetic (such as chromosomal anomalies) or environmental (such as lead exposure during pregnancy) factors, or a combination of these factors. However, in about 70 percent of cases of birth defects, the causes are unknown. The South Carolina Birth Defects Program (SCBDP) began in July 2006 after passage of the S.C. Birth Defects Act. This law mandates active surveillance of major structural birth defects identified prenatally through age two. South Carolina monitors over 50 birth defects recommended by the Centers for Disease Control and Prevention, National Birth Defects Prevention Network.

The most commonly occurring birth defects in South Carolina in 2014¹ were:

1. **Ventricular Septal Defect** (a heart anomaly)
2. **Down Syndrome** (a chromosomal anomaly)
3. **Pulmonary Valve Atresia and Stenosis** (a heart anomaly)
4. **Obstructive genitourinary defect** (a genital and urinary tract anomaly)

2011–2014 South Carolina Birth Defects Program Data

Number of Cases by Organ System

Central Nervous System	451
Eye	41
Ear	22
Cardiovascular	1,785
Orofacial	337
Gastrointestinal	202
Genitourinary	274
Musculoskeletal	453
Chromosomal	365

Quick Facts



About **one out of every 33** babies is born with a major birth defect in the United States.

S.C. monitors **over 50 birth defects**. During 2011-2014, about **one out of every 77** babies was born with one of the major birth defects collected in the state.



1 in 5 deaths

among infants less than a year old is caused by birth defects.

Many birth defects happen during **early pregnancy** often before a woman knows she is pregnant.



The SCBDP Uses S.C. Birth Defects Data to:

- Determine rates and trends of birth defects
- Promote effective referral of infants/families for appropriate services
- Develop public health strategies for prevention of birth defects
- Set stage for better understanding of causes, distribution and prevention of birth defects.

How Birth Defects Impact S.C. Families, in Their Own Words:

A parent of a child with AV Canal Heart Defect, Autism, an intellectual disability, and a seizure disorder

"She has very limited cognitive abilities and has had multiple surgeries. The seizures are the most paralyzing, she has made multiple trips in life flights and ambulance. Can never relax...always a reality."

Parent of a child with a serious heart defect:

On family life:

"There have been emotional strains within my marriage, bouts of depression from a combination of lack of sleep, balancing marriage, other young child, work, home, social life, and the overall responsibility that comes with raising a medically complex child; from doctors' appointments, therapists schedule, nursing schedule, follow ups, phone calls, and other day-to-day communication with my son's care team."

On the way her son has affected her:

"My son is just three years old, and in those three years, he has changed me for the better in so many ways. As hard as it has been at times, his life has touched so many and added so much joy to everyone he meets. I feel truly lucky to be his mom."

Parent of a child with Gastroschisis and Down Syndrome:

"Families with this need require a lot of support and help."

Tips for the Prevention and Treatment of Birth Defects:

- Addressing health risks and behaviors before pregnancy can reduce the risk of poor birth outcomes, including some birth defects.
- Women who are trying to get pregnant or find out they are pregnant should talk to their doctor and pharmacist about the medications they are taking to make sure they are safe during pregnancy.
- 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. Prenatal vitamins are a great source of folic acid.
- In 2013, South Carolina passed the Emerson Rose Act mandating that hospitals use pulse oximetry screening, a non-invasive, low cost test, for early intervention of Critical Congenital Heart Defects.

