Every 4½ minutes an American baby is born with a major birth defect.

Birth defects are common, costly, and critical. CDC’s National Center on Birth Defects and Developmental Disabilities (NCBDDD) saves babies by preventing birth defects. NCBDDD identifies causes of birth defects, finds opportunities to prevent them, and improves the health of those living with birth defects.

How NCBDDD makes a difference

**Birth Defects** – Women and their doctors can help protect the 4 million babies born every year using our research that shows links between birth defects and risk factors such as specific medications and tobacco and alcohol use during pregnancy.

**Fetal Alcohol Syndrome** – 11 universities and professional organizations in collaboration with NCBDDD are providing proven tools and resources to healthcare providers and health systems to help pregnant women reduce their use of alcohol.

**Infant Health** – NCBDDD’s specialized expertise in infant health and development helped CDC identify Zika’s impact on babies early in the epidemic, guiding efforts to limit the impact of Zika, resulting in more babies born healthy.

**Folic Acid** – NCBDDD’s research supported folic acid fortification, which saves the United States $400-$600 million every year.

**Fetal Death** – NCBDDD is learning more about the causes and getting closer to the ultimate goal of preventing fetal death.
2017 Successes

Protecting Babies and Children during the Opioid Crisis
CDC was on the front lines in understanding the impact of the opioid crisis on mothers and babies. A CDC review of previous studies found opioid use during pregnancy may be linked to birth defects, including oral clefts, congenital heart defects, and clubfoot, but more research is needed to understand the connections between individual types of opioids and specific birth defects. CDC also launched four pilot projects to help us better understand how many babies are born with Neonatal Abstinence Syndrome and the short- and long-term effects of prenatal opioid exposure on babies.

Saving Babies with Congenital Heart Disease
Implementing critical congenital heart disease (CCHD) screening nationwide could save at least 120 babies every year. CDC research found a notable decrease in infant deaths from CCHD and other unspecified cardiac causes in states with mandatory screening policies. This information will guide future approaches for saving babies with CCHD through screenings.

Responding to Zika Virus
CDC’s birth defects experts led efforts to reduce the impact of Zika virus in pregnant women, infants, and children. CDC rapidly built surveillance systems to understand the problem and to improve prevention of Zika virus infection during pregnancy. Health departments found a dramatic increase in the number of tests for pregnant women through NCBDDD’s collaboration and connection with 2,400 healthcare providers, who distributed up-to-date clinical care guidance as well as recommendations. As a result, more mothers now have information about the risks their babies have to getting infected with Zika virus. They are able to work with healthcare providers to monitor their child’s development and seek appropriate care.

Detecting Birth Defect Risk Factors
The CDC-funded Centers for Birth Defects Research and Prevention continue to explore factors that can increase the risk for having a baby with a birth defect. Several factors were shown to be associated with risk for certain birth defects including maternal stress, certain blood pressure medication, fever in early pregnancy, and thyroid medication.

Priorities for the future

- Protect babies from emerging threats that may cause birth defects such as Zika virus and the opioid epidemic.

- Ensure that public health and clinical professionals in every state can rapidly identify birth defects, monitor increases, reduce risks, and understand the long-term needs for children and families affected by birth defects.

- Understand the full impact of prenatal opioid exposure by studying the short- and long-term effects of opioid use during pregnancy on developing babies.

- Increase the number of babies born healthy and without preventable conditions by giving healthcare providers the right tools to help mothers while also researching new innovations in prevention.

Birth Defects are Critical
Birth defects cause 1 in every 5 deaths during the first year of life
In just one year, the total costs for hospital care of people with birth defects exceed $23 billion