Texas Birth Defects Epidemiology and Surveillance Branch (TBDES)

**Purpose:** Surveillance, Research, Referral to Services, Referral to Prevention/Intervention Services

**Partner:** Local Health Departments, Hospitals, Environmental Agencies/Organizations, Advocacy Groups, Universities, Early Childhood Prevention Programs, Legislators, Researchers (NBDPN, NBDDS, ICBDSR)

**Program status:** Currently collecting data

**Start year:** 1994

**Earliest year of available data:** 1996

**Organizational location:** Department of Health (Epidemiology/Environment)

**Population covered annually:** 390,877 in 2017

**Statewide:** Yes

**Current legislation or rule:** Health and Safety Code, Title 2, Subtitle D, Section 1, Chapter 87

**Legislation year enacted:** 1993

**Case Definition**

**Outcomes covered:** All major structural birth defects and fetal alcohol syndrome.

**Pregnancy outcome:** Livebirths (All gestational ages and birth weights), Fetal deaths - stillbirths, spontaneous abortions, etc. (All gestational ages), Elective terminations (All gestational ages)

**Age:** Up to one year after delivery and up to 6 years for FAS, special studies and childhood genetic disorders diagnosed after infancy.

**Residence:** In and out of state births to state residents

**Surveillance Methods**

**Case ascertainment:** Active Case Finding, Population-based, includes entire state

**Vital records:** Fetal death certificates for delivery year 2009 to present

**Delivery hospitals:** Disease index or discharge index, Discharge summaries, Obstetrics logs (i.e., labor & delivery), Regular nursery logs, ICU/NICU logs or charts, Pediatric logs, Postmortem/pathology logs, Surgery logs, Cardiac catheterization laboratories, Specialty outpatient clinics, Genetics, stillbirths and radiology logs

**Pediatric & tertiary care hospitals:** Disease index or discharge index, Discharge summaries, ICU/NICU logs or charts, Pediatric logs, Postmortem/pathology logs, Surgery logs, Laboratory logs, Cardiac catheterization laboratories, Specialty outpatient clinics, genetics, stillbirths and radiology logs

**Other sources:** Midwifery Facilities, Licensed birthing centers

**Case Ascertainment**

**Conditions warranting chart review in newborn period:** Any chart with an ICD-9-CM code 740-759/ICD-10-CM code Q00-Q99. Any chart with a selected list of ICD-9-CM codes outside 740-759/ICD-10-CM codes outside Q00-Q99. Any chart with selected defects or medical conditions (i.e. abnormal facies, congenital heart disease). Infants with low birth weight or low gestation (<34 weeks gestational age). All stillborn infants

**Conditions warranting chart review beyond the newborn period:** CNS condition (e.g. seizure), GI condition (e.g. intestinal blockage), GU condition (e.g. recurrent infections), Cardiovascular condition, Any infant with a codable defect

**Coding:** CDC coding system based on BPA

**Data Collection Methods and Storage**

**Data collection:** Printed abstract/report filled out by staff, Electronic file/report filled out by staff at facility (laptop, web-based, etc.)

**Database collection and storage:** Oracle

**Data Analysis**

**Data analysis software:** SAS, Access

**Quality assurance:** Validity checks, Re-abstraction of cases, Double-checking of assigned codes, Comparison/verification between multiple data sources, Clinical review, Timeliness, Re-casefinding, Re-review of medical records

**Data use and analysis:** Routine statistical monitoring, Public health program evaluation, Baseline rates, Rates by demographic and other variables, Monitoring outbreaks and cluster investigations, Time trends, Time-space cluster analyses, Capture-recapture analyses, Observed vs. expected analyses, Epidemiological studies (using only program data), Identification of potential cases for other epidemiologic studies, Needs assessment, Service delivery, Referral, Grant proposals, Education/public awareness, Prevention projects, Link registry to vital records for demographic data, special projects linking to other files (Texas Health Data for geocodes, Newborn Screening data).

**System Integration**

**System links:** Link to other state registries/databases, Link to environmental databases, Statewide hospital discharge datasets

**Funding**

**Funding source:** 94% MCH funds, 6% CDC grant

**Other**

**Web site:** https://www.dshs.texas.gov/birthdefects/

**Surveillance reports on file:** See website for publication and surveillance reports

**Contacts**

**Mark A Canfield, PhD**
Birth Defects Epidemiology and Surveillance Branch
P.O. Box 149347, Mail Code 1964
Austin, TX 78714-9347
Phone: 512-776-7232 Fax: 512-776-7330
Email: Mark.Canfield@dshs.texas.gov

Lisa K Marengo, M.S.
Birth Defects Epidemiology and Surveillance Branch
P.O. Box 149347, Mail Code 1964
Austin, TX 78714-9347
Phone: 512-776-6381 Fax: 512-776-7330
Email: Lisa.Marengo@dshs.texas.gov

**Data Collected**

**Infant/fetus:** Identification information (name, address, date-of-birth, etc.), Demographic information (race/ethnicity, sex, etc.), Birth measurements (weight, gestation, Apgars, etc.), Tests and procedures, Infant complications, Birth defect diagnostic information

**Mother:** Identification information (name, address, date-of-birth, etc.), Demographic information (race/ethnicity, sex, etc.), Gravidity/parity, Illnesses/conditions, Prenatal care, Prenatal diagnostic information, Pregnancy/delivery complications, Family history

**Father:** Identification information (name, address, date-of-birth, etc.), Demographic information (race/ethnicity, sex, etc.), Family history