Tips for Using Texas Birth Defects Registry (TBDR) Data

- When examining birth defects data, a birth prevalence rate better reflects occurrences in a population than does the number of cases. This is because the number of cases is dependent on the size of the population being analyzed. The birth defect prevalence rate = (number of cases / total number of live births) x 10,000 and is the customary method of reporting birth defects data. It is important to use the number of live births from the same population that produced the birth defects cases.
- A person can have more than one birth defect. In the TBDR, 58% of persons have more than one birth defect. Each defect is counted separately. Therefore, the defect data do not necessarily represent mutually exclusive persons. As a result, adding up the number of defects will not yield the number of people with defects.
- Birth defect data collected in Texas prior to 1999 deliveries have limitations in the scope (case definition) and geographic coverage of the data collected. Data on deliveries after 1998 include the entire state of Texas.
- Although the data include most birth defects, not all defects are collected. Some defects are related to gestational age, are normal variants, or result from other problems and will not be in the Texas data. Please review the defect coding instructions carefully for the defect of interest to be aware of any limitations or restrictions about the data. Examples: The heart defect, patent foramen ovale, is related to gestational age and not included unless certain conditions are met. When brain ventricles are enlarged as a result of bleeding in the brain (intraventricular hemorrhage), the enlarged ventricles are not included as a defect.
- Defects with only a possible/probable diagnosis are in the registry but are not included in routine reports. Only definite cases are reported in routine reports.
- Different birth defects can have different causes and affect different parts of the body. Studying or presenting all birth defects cases together rather than examining each specific defect is of limited value. Just as infectious disease data reports do not look at all infectious diseases combined but break the data out by the specific infectious disease (measles, shigella, AIDS, syphilis, SARs, toxoplasmosis, malaria, etc.), so should the birth defects data be examined.
- Small numbers of cases can create analysis problems, such as unstable rate estimates. The small case numbers might result from the defect being rare or using a small population. The small numbers can show fluctuation in the data over time that may not be statistically significant. To work around the small number problem, try to increase the size of the data to be analyzed by combining years, increasing the geographical area, or combining selected groups of data.