Birth Outcome and Risk Assessment Data Usage Notes

- There are seven Presentation Types for Birth Outcome Data Query. They are:

    1. Bar Charts present total live births, the numbers and the rates of selected birth outcome with bar charts grouped by area and by year.

    2. County Rank and Comparison Plots present total live births, the numbers and the rates of selected birth outcome with county ranking and county comparison plot.

    3. Time Trend Curves present the rates of selected birth outcome with trend curves over time.

    4. Scatter Plots present the rates and plot the graphics for two selected birth outcome indicators.

    5. Statewide Tables present the rates of selected birth outcomes for all counties and regions with multiple indicator selections.

    6. Selected Area Tables present the rates of birth outcomes for selected areas with multiple indicator selections.

    7. Selected Area Profiles present numbers and percentages of births for all collected indicators related to birth outcomes and risk factors.

- Three-year annualized rates use the total number of selected birth outcomes in three years in the numerator and the total live births over the three years in the denominator.

- All counties are included in *County Rank and Comparison Plots*, but the Area and Comparison Area can still be selected. When doing so, those selected Area and Comparison Area will be displayed by "dots" with different colors, compared to non-selected counties, on Comparison Plot.

- When using the *County Rank and Comparison Plot* to compare a county with the region that contains the county, make sure that the region is chosen in the Selection form's first "Select an Area" box and the county of interest is chosen via the "Comparison Area" box. Otherwise the county may be obscured on the plot.

- The selection box for Minimum Age is 10 years old and for Maximum Age is 49 years old, on the basis of regular fertility age of women. But there may be a few extreme events, births to mothers aged at less than 10 years or over 49 years. The birth counts would include all-age births (by default), as shown in the selection boxes for both Min/Max ages and Age-group as "None selected", unless either the Min/Max or Age-group box has been selected.

- When selecting specific age group for analysis, the Age-group selection box will override the Min/Max age selection boxes. To be sure you are using the Min/Max age selection approach, set the Age Group box to "None Selected".

- Any of the By-variable selections, such as sex, race, mother's characteristics or birth risk factors, can be made for measuring birth outcome indicators, but only one BY-variable request can be made in a submitted query.

- More than one Outcome Indicator can be selected in some Presentation Types. To choose two or more indicators, use the Ctrl key and mouse click or shift and arrow keys/mouse click.

- A new Certificate of Live Birth was introduced in Tennessee on January 1, 2004. This new certificate is modeled after 2003 Revision of the United States Standard Certificate of Live Birth, which all states were encouraged to adopt. One of the major changes in 2004 is that the parents may specify more than one choice in response to the question regarding their races. To enable comparison between birth data for 2004 and later years and data for 2003 and earlier years when only one race could be reported, the National Center for Health Statistics provides a computer modeling program to all states to assign multiple race response to a single race based on a statistical algorithm. The original parental choices are maintained in our data files as well as the assigned race. The assigned race is for statistical tabulation purpose only and has no other use. The presentations of birth data for 2004 and later years show the same single race categories that we used previous to 2004. Hence, tabulations by race for 2004 and later will be comparable to earlier years. Presentations of birth data by race are based on the race of the mother. The revised U.S. Standard Certificate of Live Birth, with the revised race and Hispanic origin formats, may be found at: http://www.cdc.gov/nchs/vital_certs_rev.htm.

- Use caution in interpreting the rates of birth outcomes associated with medical risks over time. The classification of medical conditions of mother was modified for year 2004 and thereafter, compared to 2003 and earlier years (See Classifications of Medical Risk in Birth Data Manual 2003 and 2004 below).

- The questions to determine tobacco use during pregnancy were revised on the 2004 Birth Certificate. Instead of "Yes or No" to answer the question of tobacco use during pregnancy as was used on the 1990-2003 Birth Certificate, mothers needed to provide four answers for the tobacco use question on 2004 and later Birth Certificates: cigarettes per day three months before pregnancy and cigarettes per day during first, second, and third three months of pregnancy, respectively. In order to compare the numbers and rates of tobacco use during pregnancy across time, only those mothers who reported smoking during any trimester of pregnancy for 2004 and later are included in the HIT query system to determine the exposure status of tobacco use. The numbers and rates of tobacco use during pregnancy would increase if those mothers who reported smoking three months before pregnancy are included in the category of tobacco use during pregnancy.

- Adequacy of prenatal care is measured with the Kessner Index, which incorporates information from three items recorded on birth certificates, the length of pregnancy, timing of the first visit, and number of visits into one index (See Kessner Index - Criteria for Adequacy of Prenatal Care below).

- The weight of an infant at delivery is recorded in pounds and ounces or in grams. Low Birth Weight (LBW) is defined as below 2,500 grams (5 pounds, 8 ounces) and Very Low Birth Weight (VLBW) as less than 1,500 grams (3 pounds, 4 ounces), regardless of the period of gestation.

- Use caution in interpreting the rates of Newborn Abnormal Conditions over time because the classification of Newborn Abnormal Conditions was modified for year 2004 and thereafter, compared to 2003 and earlier years (See Classifications of Newborn Abnormal Conditions in Birth Data Manual 2003 and 2004 below).

- APGAR is an acronym for: Activity (Muscle Tone), Pulse, Grimace (Reflex Irritability), Appearance (Skin Color), Respiration. It is a non-invasive clinical test designed by Dr. Virginia Apgar (1953) carried out immediately on a newborn. A score is given for each

sign at one minute and five minutes after birth. The points given in each category are added to gain a score with a maximum of 10. The test was designed to quickly evaluate a newborn's physical condition after delivery and to determine any immediate need for extra medical or emergency care.

- The APGAR test, currently, is generally done at one and five minutes after birth, and may be repeated later if the score is, and remains, low. A baby who scores a 7 or above on the test after birth is generally considered in good health. Low APGAR score (<7) on HIT site was determined by using test scores at five minutes after birth.

- When the output from a *Bar Chart* appears on your screen, the birth outcome percentage will appear in a status bar on the screen when you move your mouse's cursor over a "bar" for the chart.

- When the output from a *County Rank and Comparison Plot* appears on your screen, you can move your mouse's cursor over a "dot" for the plot and the county's name and birth outcome percentage will appear in a status bar on the screen, and if you click on the "dot", a link will lead you to the county profile pages.

- When the output from a *Time Trend Curve* appears on your screen, the area's name and birth outcome percentage in a year will appear in a status bar on the screen when you move your mouse's cursor over a "dot" for a time curve.

- When the output from a *Scatter Plot* appears on your screen, the counties' names and two birth outcome percentages that you selected will appear in a status bar on the screen when you move your mouse's cursor over a "dot" for the plot.

- Kessner Index - Criteria for Adequacy of Prenatal Care

    - Adequate Prenatal Care: initial visit in 1st trimester and:

Weeks of Gestation		Number of Prenatal Visits
13 or less	and	1 or more, or not stated
14-17	and	2 or more
18-21	and	3 or more
22-25	and	4 or more
26-29	and	5 or more
30-31	and	6 or more
32-33	and	7 or more
34-35	and	8 or more
36 or more	and	9 or more

    - Inadequate Prenatal Care: initial visit in 3rd trimester or:

Weeks of Gestation		Number of Prenatal Visits
14-21	and	0 or not stated
22-29	and	1 or less, or not stated
30-31	and	2 or less, or not stated
32-33	and	3 or less, or not stated

34 or more	and	4 or less, or not stated

- Intermediate Prenatal Care: all combinations other than specified above.

- Classifications of Medical Risk in Birth Data Manual 2003 and 2004

Medical Risks in 1990 - 2003	**Medical Risks in 2004 and After**
Anemia	Prepregnancy Diabetes
Cardiac Disease	Gestational Diabetes
Acute/Chronic lung Disease	Prepregnancy Hypertension
Diabetes	Gestational Hypertension
Active genital Herpes	Previous preterm Birth
Hydramnios	Previous Poor Outcome
Oligohydramnios	Vaginal Bleeding
Hemoglobinopathy	Infertility Treatment
Hypertension-Chronic	Previous Cesarean Delivery
Hypertension-Pregnancy Induced	
Eclampsia	
Incompetent Cervix	
Previous Delivery of Infant > 4000 g	
Previous Preterm Infant < 37 weeks	
Previous Small for Gestational Age	
Renal Disease	
RH Sensitization	
Uterine Bleeding	
Other	

- Classifications of Newborn Abnormal Conditions in Birth Data Manual 2003 and 2004

Newborn Abnormal Conditions in 1990 - 2003	**Newborn Abnormal Conditions in 2004 and After**
Anemia	Ventilation Required Immediately
Birth Injury	Ventilation Required > 6 Hours
Fetal Alcohol Syndrome	NICU Admission
Hyaline Membrane Disease	Surfactant Replacement Therapy
Meconium Aspiration Syndrome	Antibiotics Required by Child
Assisted Ventilation < 30 Minutes	Seizure
Assisted Ventilation > 30 Minutes	Birth Injury
Seizures	
Fetal Drug Syndrome	
Other	