

## **BIRTHS**

### **Source of Birth Data**

Information on South Dakota births is collected from the Certificate of Live Birth. Data for all births that occurred within the state of South Dakota, resident and nonresident, are collected. Data can be displayed by births to South Dakota residents (resident births) or by births occurring in South Dakota (occurrence births). Resident births also include births that occurred to residents while outside the state of South Dakota. Agreements between states allow for the exchange of vital record information about births to South Dakota residents that occurred in other states.

### **Populations**

The populations used to develop the South Dakota rates were based on the given year's estimate. For example, rates for 2009 were calculated using the 2009 population estimate from the US Census Bureau. Each vintage year's rates are based on the given year's population estimate, while the census years of 2000 and 2010 are based on the actual census totals for the given year. Please see <http://www.census.gov/popest/about/index.html> for an explanation of population estimates and the methodologies used in creating them.

### **Rates**

Absolute counts of births do not readily lend themselves to analysis and comparison between years and various geographic areas because of population differences. These demographic differences include total number, age and sex distributions, and ethnic or racial differentials. In order to assess the health status of a particular population at a specified time, the absolute number of events is converted to a relative number such as probability of living or dying, a rate, a ratio, or an index. This conversion is made by relating the crude number of events to the living population at risk in a particular area at a specified time.

### **Reliability of Rates**

All rates are subject to variation, and this variation is inversely related to the number of events used to calculate the rate. The smaller the number of events, the higher the variability. Rates based on a small number of events over a specified time period or for small populations vary considerably and should be viewed with caution. South Dakota contains many counties with sparse or small populations. Therefore, when calculating health status indicators for these sparsely populated counties, there will always be the possibility that the rate is just a chance variation.

### **Race/Ethnicity**

The race or ethnicity reported on the vital records reflects the opinion of the informant and does not follow any prescribed rules for the reporting of race or ethnicity. Birth data were tabulated using the race or ethnicity of the mother. No attempt is made to determine the race or ethnicity of the child from the race or ethnicity shown for the father and the mother. Race is assigned based on standards set forth by the National Center for Health Statistics and the US Census Bureau in order for South Dakota's race data to be comparable to other areas. All race data are categorized in the following manner:

- Single-race White
- Single-race American Indian
- Single-race Black
- Single-race Asian
- Single-race Pacific Islander
- and
- Two or more races

If any of these categories is not shown in a given table, they are included in the "Other" category.

### **Geographic Allocation**

In South Dakota, registration of vital events is classified geographically in two ways. The first way is by place of occurrence, i.e., the actual state and county in which the birth took place. The second and more customary way is by place of residence, i.e., the state or county stated to be the usual residence of the mother in the case of a newborn. Occurrence statistics have administrative value and statistical significance, especially when calculating accident statistics. Residence statistics are useful in determining health indices for planning and evaluation purposes. Allocation of vital events by place of residence is sometimes difficult, because classification depends entirely on the statement of the usual place of residence furnished by the informant at the time the original certificate is completed. For various reasons, this statement may be incorrect or incomplete. For example, mailing addresses very often differ from the actual geographic residence.

## **Confidentiality**

To maintain confidentiality and prevent the identification of an individual, the results of any search returning fewer than three events will be suppressed at the county level.

## **DEFINITIONS:**

**Age-Specific Birth Rate** – Number of live births to women in a specific age group per 1,000 female population in that age group.

**Birth Weight** – The first weight of the fetus or newborn obtained after birth. This weight should be measured, preferably, within the first hour of delivery before significant postnatal weight loss has occurred. Low birth weight babies are those born alive who weigh less than 2,500 grams (about 5 pounds 9 ounces).

**Birth Weight in Grams** – In order to provide data comparable to that published for the United States and other countries, birth weight is reported in grams. The equivalents of the gram intervals in pounds and ounces are as follows:

499 grams or less = 1 lb. 1 oz. or less  
500 - 999 grams = 1 lb. 2 ozs. – 2 lbs. 3 ozs.  
1,000 - 1,499 grams = 2 lbs. 4 ozs. – 3 lbs. 4 ozs.  
1,500 - 1,999 grams = 3 lbs. 5 ozs. – 4 lbs. 6 ozs.  
2,000 - 2,499 grams = 4 lbs. 7 ozs. – 5 lbs. 8 ozs.  
2,500 - 2,999 grams = 5 lbs. 9 ozs. – 6 lbs. 9 ozs.  
3,000 - 3,499 grams = 6 lbs. 10 ozs. – 7 lbs. 11 ozs.  
3,500 - 3,999 grams = 7 lbs. 12 ozs. – 8 lbs. 12 ozs.  
4,000 - 4,499 grams = 8 lbs. 13 ozs. – 9 lbs. 14 ozs.  
4,500 - 4,999 grams = 9 lbs. 15 ozs. – 11 lbs. 0 ozs.  
5,000 grams or more = 11 lbs. 1 oz. or more

**Crude Birth Rate** – The number of resident live births divided by the total resident population X 1,000.

**Fertility Rate** – The number of resident births divided by female population ages 15-44 X 1,000.

**Gestation** – Weeks of pregnancy as reported on the certificate of live birth. The clinical estimate of gestation is used to determine the length of gestation rather than the date of the last normal menstrual cycle. The clinical estimate of gestation is determined by the certifier of the birth.

**Live Birth** – The complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

**Low Birth Weight** – A birth weight under 2,500 grams or 5 pounds, 9 ounces.

**Preterm Birth** - A birth that is less than 37 weeks gestation.

For more information on statistical measures and definitions for vital statistics data, please visit [NAPHSIS.org](http://NAPHSIS.org) - under Resources choose 'Statistical Measures and Definitions'.

NAPHSIS (National Association of Public Health Statistics and Information Systems) is a professional association of state vital records and public health offices in the U.S.