

## PREGNANCY RATE

### 1. Definition:

PREGNANCY RATE is the total number of resident pregnancies including live births, induced abortions, and fetal deaths per 1,000 women aged 15-44 years for a specified geographical area (country, state, county etc.) during a specified time period.

### 2. Calculation:

(Number of resident pregnancies including live births, induced abortions, and fetal deaths /  
Number of women aged 15-44 years)  $\times$  1,000

$$\frac{\text{Number of resident pregnancies (live births+induced abortions+fetal deaths)}}{\text{Number of women aged 15-44 years}} \times 1,000$$

### 3. Example:

In the year 2008, number of Missouri resident pregnancies = 92,930

(Live births = 80,944) + (Induced abortions = 11,508) + (Fetal deaths = 478)

Women aged 15-44 years = 1,185,000

$$\text{Pregnancy rate} = \frac{92,930}{1,185,000} \times 1,000 = 78.4 \text{ per } 1,000 \text{ women aged } 15-44 \text{ years}$$

### 4. Technical notes:

- The number of resident births, fetal deaths and abortions can come from state vital statistics to produce state and county pregnancy rates. Computing pregnancy rates using vital statistics are appropriate for multi year and sub state comparisons. However, such rates are not comparable to the national pregnancy rate computed by the NCHS. As indicated below the NCHS uses estimates of fetal deaths and abortions that are not derived from vital statistics.
- In producing national pregnancy estimates, NCHS uses pregnancy history data collected in the National Survey of Family Growth (NSFG) to estimate the number of fetal deaths, and data from CDC's National Center for Chronic Disease and Health Promotion, adjusted to totals by the Guttmacher Institute, for abortion estimates. Thus, neither of these estimates are directly from vital statistics data. This approach is taken for two reasons: (1) Fetal losses are estimated from the NSFG because vital statistics data are generally limited to losses occurring at 20 weeks or more gestation, whereas the NSFG data include all gestations. The vast majority of fetal losses occur early in pregnancy before the reporting requirements for fetal losses are in effect. Further, even fetal losses of 20 weeks or more are underreported in vital statistics data. Other studies have used a formula to estimate the number of fetal losses of all gestational ages. For example, the Guttmacher Institute estimates of fetal losses are the sum of 20 percent of live births and 10 percent of induced abortions for each age, race, and Hispanic origin group. The NCHS

estimates of fetal losses, using the NSFG pregnancy history data, vary by age, race, and Hispanic origin. While these estimates are not available for states from the NSFG, they may be used to produce state-level estimates by applying the age/race/Hispanic origin specific levels of fetal losses to the data on live births for the respective jurisdiction. (2) Induced abortion data are not available for all states, including by residence status, in the official vital statistics. Thus, some jurisdictions may want to incorporate estimates of induced abortions from the Guttmacher Institute which are based in part on their periodic surveys of abortion providers.

- An estimated mid-year population of women age 15-44 years best serves as the denominator.
- In comparing pregnancy rates between states, it is important to understand state reporting differences. For example, some states only have recorded induced abortion data and the definition of fetal death varies among states.
- Not all pregnancies that do not end in a live born are reported as fetal deaths. The model law definition of a reportable fetal death is *...each fetal death of 350 grams or more, or if weight is unknown, of 20 completed weeks gestation or more, calculated from the date last normal menstrual period began to the date of delivery.*

[See page 8 of <http://www.cdc.gov/nchs/data/misc/mvsact92aacc.pdf> ]

- Trends in pregnancy rates may be affected by a number of factors. The role of these factors may differ by age and by population subgroups. Some of these factors include:
  - (a) Changes in sexual activity.
  - (b) Changes in marriage, divorce, and cohabitation, which affect both the patterns of intercourse and the social and economic context of childbearing.
  - (c) The introduction of new contraceptive methods.
  - (d) Changes in the use of existing contraceptive methods: the proportion of couples using any method, the methods used, and how consistently and effectively they are used. ([http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_15.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_15.pdf))
- Other fertility measures include the following: [crude birth rate](#), [general fertility rate](#) and [total fertility rate](#).