

### Table 9 – Demographic Yearbook 2003

Table 9 presents live births and live-birth rates by urban/rural residence for as many years as possible between 1999 and 2003.

Description of variables: Live birth is defined as the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which after such separation, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movements of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered live-born<sup>1</sup>.

Statistics on the number of live births are obtained from civil registers unless otherwise noted. For those countries or areas where civil registration statistics on live births are considered reliable (estimated completeness of 90 per cent or more) the birth rates shown have been calculated on the basis of registered live births. However, for countries or areas where civil registration of live births is non-existent or considered unreliable (estimated completeness of less than 90 per cent or of unknown completeness), estimates provided by national statistical authorities are presented and are identified by the code "I" in the first column.

Rate computation: Crude live-birth rates are the annual number of live births per 1 000 mid-year population.

Rates by urban/rural residence are the annual number of live births, in the appropriate urban or rural category, per 1 000 corresponding mid-year population. Rates are calculated only for data considered complete, that is, coded with a "C" and for estimates, coded "I". These rates have been calculated by the Statistics Division of the United Nations Department for Economic and Social Affairs.

Rates presented in this table are limited to those countries or areas having a minimum number of 30 live births in a given year.

In addition, some rates were obtained from sample surveys, using different methods<sup>2</sup>; to distinguish them from civil registration data, estimated rates are identified by a footnote.

Reliability of data: Each country or area has been asked to indicate the estimated completeness of the live births recorded in its civil register. These national assessments are indicated by the quality codes (C) and (U) that appear in the first column of this table.

"C" indicates that the data are estimated to be virtually complete, that is, representing at least 90 per cent of the live births occurring each year, while "U" indicates that data are estimated to be incomplete, that is, representing less than 90 per cent of the live births occurring each year. A third code (...) indicates that no information was provided regarding completeness.

Data from civil registers that are reported as incomplete or of unknown completeness (coded "U" or "...") are considered unreliable. They appear in italics in this table and rates are not calculated for these data.

These quality codes apply only to data from civil registers. If data from other sources are presented, the symbol (I) is shown instead of the quality code. For more information about the quality of vital statistics data in general, and the information available on the basis of the completeness estimates in particular, see section 4.2 of the Technical Notes.

Limitations: Statistics on live births are subject to the same qualifications as have been set forth for vital statistics in general and birth statistics in particular as discussed in section 4 of the Technical Notes.

The reliability of data, an indication of which is described above, is an important factor in considering the limitations. In addition, some live births are tabulated by date of registration and not by date of occurrence; these have been indicated by a plus sign "+". Whenever the lag between the date of occurrence and date of registration is prolonged and, therefore, a large proportion of the live-birth registrations are delayed, birth statistics for any given year may be seriously affected.

Another factor that limits international comparability is the practice of some countries or areas not to include in live-birth statistics infants who were born alive but died before the registration of the birth or within the first 24 hours of life, thus underestimating the total number of live births. Statistics of this type are footnoted.

In addition, it should be noted that rates are affected also by the quality and limitations of the population estimates that are used in their computation. The problems of under-enumeration or over-enumeration and, to some extent, the differences in definition of total population have been discussed in section 3 of the Technical Notes dealing with population data in general, and specific information pertaining to individual countries or areas is given in the footnotes to table 3.

The rates estimated from the results of sample surveys are subject to possibilities of considerable error as a result of omissions in reporting of births, or as a result of erroneous reporting of births that occurred outside the reference period. However, rates estimated from sample surveys have the advantage of the availability of a built-in and strictly corresponding population base.

It should be emphasized that crude birth rates - like crude death, marriage and divorce rates - may be seriously affected by the age-sex structure of the populations to which they relate. Nevertheless, they do provide a simple measure of the level of and changes in natality.

The urban/rural classification of birth may refer to the residence of mother or the place of delivery, as the national practices vary and is provided by each country or area. In addition, the comparability of data by urban/rural residence is affected by the national definition of urban and rural used in tabulating these data. It is assumed, in the absence of specific information to the contrary, that the definitions of urban and rural used in connection with the national population census were also used in the compilation of the vital statistics for each country or area. However, it cannot be excluded that, for a given country or area, different definitions of urban and rural are used for the vital statistics data and the population census data respectively. When known, the definitions of urban used in national population census are presented at the end of the technical notes to table 6. As discussed in detail in the technical notes to table 6, these definitions vary considerably from one area or country to another. Urban/rural differentials in vital rates may also be affected by whether the vital events have been tabulated in terms of place of occurrence or place of usual residence. This problem is discussed in more detail in section 4.1.4.1 of the Technical notes.

Earlier data: Live births have been shown in each issue of the *Demographic Yearbook*. Data included in this table update the series covering a period of years as follows:

| Issue                                 | Years Covered |
|---------------------------------------|---------------|
| Special Edition on Natality, CD, 1999 |               |
| - Numbers                             | 1980 - 1999   |
| - Rates                               | 1985 - 1999   |
| Historical Supplement, CD, 1997       | 1948 - 1997   |
| 1992                                  | 1983 - 1992   |
| 1986                                  | 1967 - 1986   |
| 1981                                  | 1962 - 1981   |
| Historical Supplement, 1979           | 1948 - 1977   |

For further information on years covered prior to 1948, readers should consult the Historical Index.

---

## NOTES

<sup>1</sup> *Principles and Recommendations for a Vital Statistics System Revision 2*, Sales No. E. 01.XVII.10, United Nations, New York, 2001.

<sup>2</sup> *Manual X: Indirect Techniques for Demographic Estimation*, United Nations publication, Sales No. E.83.XIII.2, United Nations, New York, 1983.