

## REVERSE PROJECTION TECHNIQUES

If there are no available data on fertility, births can be estimated using the population age distribution and women's summary birth histories provided these include numbers of children ever born and surviving. Children aged under 5 at the time of survey are the survivors of all births over the previous five years (assuming a population with no migration) and can be used to estimate the number of births in the past five-year interval once survival rates are allowed for. Survivorship among children ever born to women aged 30-34 is considered a robust indicator of the level of child mortality under a wide variety of conditions. Reverse projection can be used to check on the completeness of births identified through the census.

### Guidelines

UN (2004) Handbook on the collection of fertility and mortality data. Department of Economic and Social Affairs, Statistics Division. Series F No.92; ST/ESA/STAT/SER.F/92. New York: United Nations.

[http://unstats.un.org/unsd/demographic/standmeth/handbooks/Handbook Fertility Mortality.pdf](http://unstats.un.org/unsd/demographic/standmeth/handbooks/Handbook_Fertility_Mortality.pdf)

UN (1983) Manual X: indirect techniques for demographic estimation. Department of Economic and Social Affairs. Population Studies, No. 81. ST/ESA/SER.A/81.

[http://www.un.org/esa/population/publications/Manual X/Manual X.htm](http://www.un.org/esa/population/publications/Manual_X/Manual_X.htm)

### Scientific articles

Brass W, (1975) Methods for estimating fertility and mortality from limited and defective data. Chapel Hill, NC: Carolina Population Center, University of North Carolina.

For examples of how to use reverse projection techniques for evaluating census data:

Hill K, Stanton C, Gupta N (2001) Measuring maternal mortality from a census: Guidelines for potential users. Chapel Hill: MEASURE Evaluation.

<http://www.cpc.unc.edu/measure/publications/pdf/ms-01-04.pdf>