



Maternal Mortality in 2000:

Estimates developed by
WHO, UNICEF, UNFPA

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World Health Organization, Geneva

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Abbreviations

CEE/CIS	Central and Eastern Europe/Commonwealth of Independent States
DHS	Demographic and Health Surveys
EIP	WHO Evidence and Information for Health Policy Cluster
GFR	general fertility rate
LASSAME	Countries in Latin America and the Caribbean, sub-Saharan Africa and the Middle East
MDG	Millennium Development Goal
MMR	maternal mortality ratio
OECD	Organisation for Economic Co-operation and Development
PMDf	proportion maternal among deaths of women of reproductive age
RAMOS	reproductive age mortality study
TFR	total fertility rate
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization



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Executive summary

Reduction of maternal mortality is one of the major goals of several recent international conferences and has been included in the Millennium Development Goals (MDGs). However, because measuring maternal mortality is difficult and complex, reliable estimates of the dimensions of the problem are not generally available, and assessing progress towards the goal is difficult. In recent years, new ways of measuring maternal mortality have been developed, bearing in mind the needs and constraints of developing countries in particular. As a result, there is considerably more information available today than was the case even a few years ago. Nonetheless, problems of underreporting and misclassification are endemic to all methods, and estimates that are based on household surveys are subject to wide margins of uncertainty because of sample size issues. For all these reasons, it is difficult to compare the data obtained from different sources and to assess the overall magnitude of the problem.

In response to these challenges and in order to improve the information base, WHO, UNICEF and UNFPA have developed an approach to estimating maternal mortality that seeks both to generate estimates for countries with no data and to correct available data for underreporting and misclassification. A dual strategy is used which involves adjusting available country data and developing a simple model to generate estimates for countries without reliable information. The approach, with some variations, was used to develop estimates for maternal mortality in 1990 and 1995 and has been used again for generating these estimates for the year 2000.

On the basis of the present exercise, the estimated number of maternal deaths in 2000 for the world was 529,000 (Table 1). These deaths were almost equally divided between Africa (251,000) and Asia (253,000), with about 4% (22,000) occurring in Latin America and the Caribbean, and less than 1% (2,500) in the more developed regions of the world. In terms of the maternal mortality ratio (MMR), the world figure is estimated to be 400 per 100,000 live births. By region, the MMR was highest in Africa (830), followed by Asia (330), Oceania (240), Latin America and the Caribbean (190), and the developed countries (20).

The country with the highest estimated number of maternal deaths is India (136,000), followed by Nigeria (37,000), Pakistan (26,000), the Democratic Republic of the Congo and Ethiopia (24,000 each), the United Republic of Tanzania (21,000), Afghanistan (20,000), Bangladesh (16,000), Angola, China and Kenya (11,000 each), Indonesia and Uganda (10,000 each). These 13 countries account for 67% of all maternal deaths.

However, the number of maternal deaths is the product of the total number of births and obstetric risk per birth, described by the MMR. On a risk-per-birth basis, the list looks rather different. With the sole exception of Afghanistan, the countries with the highest MMRs are in Africa. The highest MMRs of 1,000 or greater, are, in order of magnitude, Sierra Leone (2,000), Afghanistan (1,900), Malawi (1,800), Angola (1,700), Niger (1,600), the United Republic of Tanzania (1,500), Rwanda (1,400), Mali (1,200), Central African Republic, Chad, Guinea-Bissau, Somalia and Zimbabwe (1,100 each).

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