

Skilled attendant at birth 2006 updates

Introduction

The maternal mortality ratio and the proportion of births attended by skilled health personnel are the two indicators used to monitor progress towards achievement of the 5th Millennium Development Goal (MDG) which aims to improve maternal health.

Measuring maternal mortality accurately is difficult, except where there is comprehensive registration of deaths and causes of death (Stanton et al. 1997, Stanton et al. 2000). In addition, although unacceptably high in developing countries, a maternal death is still a relatively rare event to capture changes during short intervals.



Among the potential process indicators to track changes in maternal mortality levels, “proportion of births attended by skilled health personnel” is being accepted to be the most relevant due to the historical data showing a correlation between having skilled care at delivery and declining maternal mortality (Graham et al. 2001). It is, therefore, a key indicator for the MDG 5 of improving maternal health and its target of reducing maternal mortality.

At a special session held by the United Nations General Assembly in 1999 as a five-year follow-up to the International Conference on Population and Development (ICPD) it was

agreed that all countries should continue their efforts so that globally, by 2005, 80% of all births should be assisted by skilled attendants, by 2010, 85%, and by 2015, 90% (United Nations 1999).

Here, we present nationally representative data of births attended by skilled health workers available up to 2005 together with global, regional and subregional estimates.

Definitions

The indicator “proportion of births attended by skilled health personnel” represents the percentage of all births attended by a skilled health worker. The term ‘skilled attendant’ refers to “an accredited health professional - such as a midwife, doctor or nurse - who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns” (WHO, 2004).

Traditional birth attendants (TBA) either trained or not, are excluded from the category of skilled health workers. Strictly, the term TBA refers only to traditional, independent (of the health system), non-formally trained and community-based providers of care during pregnancy, childbirth and the postnatal period (WHO, 2004).

Methodology

Data on the proportion of births attended by skilled health personnel were collected. Only nationally representative data were included. Most of the data were obtained from household surveys conducted to assess mother and

child's health status such as:

- Demographic and Health Surveys (DHS)
- Multiple Indicator Cluster Surveys (MICS)
- Reproductive Health Surveys (RHS)

In addition, WHO regional office databases and web pages were searched for available data and for published and unpublished documentation. These estimates also include data available from the WHO/EIP country consultation that took place in 2003. Countries are grouped according to the United Nations classification (United Nations 2003).

Global, regional and subregional estimates were calculated as population-weighted averages of collected country-specific proportions, the weights being the number of live births in each country. The number of live births used was that of the World Population Prospects, the 2002 Revision (United Nations 2003).

Results

Globally, the availability of nationally representative data for skilled attendant at birth is high and data are available for 96.6% of all live births. In America, Africa, Asia and Oceania data are available for virtually all live births.

World-wide, 61.5% of births were attended by a skilled health worker. Although virtually all births were attended by skilled health personnel in more developed countries, this proportion is 57.4% in less developed countries and only 33.7% in the least developed countries.

In Africa and Asia, only 46.7% and 58.3%, respectively, of women gave birth with professional assistance. In less developed regions, the lowest levels of skilled attendant at birth were in Eastern Africa (34.5%), South-Central Asia (38.9%) and Western Africa (40.9%) with the highest levels in South America (86.8%). Africa and Asia are furthest away from the ICPD + 5 target of 80% for 2005. Special efforts are needed to accelerate the slow progress in these regions.

The designations employed and the presentation of the material on these pages do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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Table 1

Global, regional and subregional estimates of the proportion of births with skilled attendant. The population coverage in terms of live births attained by the estimates are also shown for the world and by region and subregion.

Region/subregion	% births with skilled attendant	Coverage of estimates*
World total	61.5	96.6
More developed regions	99.1	68.3
Less developed regions	57.4	99.7
Least developed countries	33.7	100.0
Africa	46.7	99.4
Eastern Africa	34.5	99.8
Middle Africa	54.0	96.5
Northern Africa	70.3	99.8
Southern Africa	82.8	100.0
Western Africa	40.9	100.0
Asia	58.3	99.8
Eastern Asia	97.0	100.0
South-Central Asia	38.9	100.0
South-Eastern Asia	69.1	100.0
Western Asia	73.4	97.4
Europe	99.1	58.4
Eastern Europe	99.2	100.0
Northern Europe	99.2	79.7
Southern Europe	97.5	30.0
Western Europe	99.9	10.2
Latin America & The Caribbean	83.2	99.9
Caribbean	73.7	98.3
Central America	77.3	100.0
South America	86.8	100.0
Northern America	98.9	100.0
Oceania	83.9	98.3
Australia/New Zealand	100.0	100.0
Melanesia	61.2	100.0
Micronesia	93.9	48.8
Polynesia	97.6	84.2

*Proportion of live births for which data are available.

Table 2
Proportion of births with skilled attendant by country and the reference year

Country/region	% skilled attendant	Year
Afghanistan ¹	14.0	2003
Albania ²	94.0 ^a	2002
Algeria ³	92.0	2000
American Samoa ⁴	100.0	2002
Andorra	nd	-
Angola ⁵	47.1	2000
Anguilla ⁶	100.0	2004
Antigua and Barbuda ⁶	100.0	2004
Argentina ⁷	98.7 ^b	2004
Armenia ⁸	96.8	2000
Aruba ⁶	96.0	2002
Australia ⁴	99.3	2000
Austria	nd	-
Azerbaijan ⁹	84.0	2000
Bahamas ⁶	99.0	2003
Bahrain ¹⁰	99.0	2003
Bangladesh ¹¹	13.4	2004
Barbados ⁶	100.0	2003
Belarus ¹²	99.9	2002
Belgium	nd	-
Belize ¹³	83.8	1999
Benin ¹⁴	65.5	2001
Bhutan ¹⁵	23.7	2000
Bolivia ¹⁶	60.8 ^c	2004
Bosnia and Herzegovina ¹⁷	99.6	2000
Botswana ¹⁸	94.2	2000
Brazil ¹⁹	87.6 ^c	1996
British Virgin Islands ⁵	100.0	2004
Brunei Darussalam ⁴	100.0	2002
Bulgaria ²⁰	99.2	2002
Burkina Faso ²¹	56.5 ^d	2003
Burundi ²²	25.2	2000
Cambodia ²³	31.8	2000
Cameroon ²⁴	61.8	2004
Canada ²⁵	98.3	2001
Cape Verde ²⁶	88.5 ^a	1998
Cayman Islands ⁶	100.0	2004
Central African Republic ²⁷	44.0	2000
Chad ²⁸	14.4	2004
Channel Islands	nd	-
Chile ⁶	99.8	2003
China ²⁹	82.8 ^a	2004
China, Hong Kong SAR ⁴	100.0	2002
China, Macao SAR ⁴	100.0	2003
Colombia ³⁰	90.7 ^c	2005
Comoros ³¹	61.8	2000
Congo	nd	-
Cook Islands ⁴	98.0	2001
Costa Rica ⁶	97.5	2002
Cote d'Ivoire ³²	62.5	2000
Croatia ²⁰	99.9	2002
Cuba ⁶	99.9	2004
Cyprus	nd	-
Czech Republic ²⁰	99.9	2002
Democratic People's Republic of Korea ³³	96.7	2000
Democratic Republic of the Congo ³⁴	60.7	2001
Denmark	nd	-
Djibouti ³⁵	60.6	2003
Dominica ⁶	100.0	2003
Dominican Republic ³⁶	98.7	2002
Ecuador ³⁷	68.7	1999
Egypt ³⁸	69.4	2003
El Salvador ³⁹	69.4	2002-03
Equatorial Guinea ⁴⁰	64.6	2000
Eritrea ⁴¹	28.3	2002
Estonia ²⁰	99.6	2002
Ethiopia ⁴²	5.6	2000
Faeroe Islands	nd	-
Falkland Islands (Malvinas)	nd	-
Fiji ⁴	99.0	2000
Finland ⁴³	99.9	2002
France	nd	-
French Guiana ⁶	100.0	2003
French Polynesia ⁴	99.0	1999
Gabon ⁴⁴	85.5	2000
Gambia ⁴⁵	54.7	2000
Georgia ⁴⁶	96.4	1999
Germany	nd	-
Ghana ⁴⁷	47.1	2003
Greece	nd	-
Grenada ⁶	100.0	2003
Guadeloupe ⁶	100.0	2003
Guam ⁴	99.4	2001
Guatemala ⁴⁸	41.4	2002
Guinea ⁴⁹	34.8	1999
Guinea-Bissau ⁵⁰	34.7	2000
Guyana ⁵¹	85.6	2000
Haiti ⁵²	23.8	2000
Holy See	nd	-
Honduras ⁵³	55.7	2001
Hungary ²⁰	99.6	2002
Iceland	nd	-
India ⁵⁴	42.5	2000
Indonesia ⁵⁵	66.3	2002
Iran (Islamic Republic of) ⁵⁶	89.6	2000
Iraq ⁵⁷	72.1	2000
Ireland ⁵⁸	100.0	2002
Isle of Man	nd	-
Israel	nd	-
Italy	nd	-
Jamaica ⁵⁹	94.6	1997
Japan ³²	100.0	1996
Jordan ⁶⁰	99.5	2002
Kazakhstan ⁶¹	99.1	1999
Kenya ⁶²	41.6	2003
Kiribati ⁴	88.9	2002

Country/region	% skilled attendant	Year
Kuwait ¹⁰	100.0	2003
Kyrgyzstan ⁶³	98.1	1997
Lao People's Democratic Republic ⁶⁴	19.4	2001
Latvia ²⁰	100.0	2002
Lebanon ¹⁰	93.0	2001
Lesotho ⁶⁵	55.4	2004
Liberia ⁶⁶	50.9	2000
Libyan Arab Jamahiriya ⁶⁷	94.4	1995
Liechtenstein	nd	-
Lithuania ²⁰	100.0	2002
Luxembourg ⁶⁸	99.9	2002
Madagascar ⁶⁹	51.3	2003-04
Malawi ⁷⁰	60.5	2002
Malaysia ⁷¹	97.0	2002
Maldives ⁷²	70.3	2001
Mali ⁷³	40.6	2001
Malta	nd	-
Marshall Island ⁴	95.0	2002
Martinique ⁶	100.0	2003
Mauritania ⁷⁴	56.9 ^a	2001
Mauritius ⁷⁵	98.5	1998
Mexico ⁷⁶	85.5	1997
Micronesia (Federated States) ⁴	87.7	2001
Monaco	nd	-
Mongolia ⁷⁷	99.2	2003
Montserrat ⁶	98.0	2004
Morocco ⁷⁸	62.6	2003-04
Mozambique ⁷⁹	47.7	2003
Myanmar ⁸⁰	56.4	1997
Namibia ⁸¹	75.5	2000
Nauru	nd	-
Nepal ⁸²	10.9	2001
Netherlands ⁸³	99.9	1995
Netherlands Antilles	nd	-
New Caledonia	nd	-
New Zealand ⁸⁴	100.0	1995
Nicaragua ⁸⁵	66.9 ^b	2001
Niger ⁸⁶	15.7	2000
Nigeria ⁸⁷	35.2	2003
Niue ⁴	100.0	2002
Northern Mariana Island ⁴	99.6	2000
Norway	nd	-
Oman ⁸⁹	94.7	2000
Pakistan ⁹⁰	23.0	2001-02
Palau ⁴	100.0	2002
Panama ⁹¹	92.5	2003
Papua New Guinea ⁹²	53.2	1996
Paraguay ⁹³	77.2	2004
Peru ⁹⁴	71.1 ⁱ	2004
Philippines ⁹⁵	59.8	2003
Pitcairn	nd	-
Poland ²⁰	99.8	2002
Portugal ⁹⁶	99.7	2000
Puerto Rico ⁶	99.8	2003

Qatar ¹⁰	100.0	2002
Republic of Korea ⁴	100.0	2000
Republic of Moldova ⁹⁷	99.1	1997
Reunion	nd	-
Romania ⁹⁸	97.9	1999
Russian Federation ²⁰	99.3	2002
Rwanda ⁹⁹	31.3	2000
Saint Kitts and Nevis ⁶	100.0	2004
Saint Lucia ⁶	99.0	2003
Saint Vincent and the Grenadine ⁶	100.0	2004
Samoa ⁴	100.0	2003
San Marino	nd	-
Sao Tome and Principe ¹⁰⁰	78.6	2000
Saudi Arabia ¹⁰	93.0	2002
Senegal ¹⁰¹	57.8	2000
Serbia and Montenegro ²⁰	92.6	2001
Seychelles	nd	-
Sierra Leone ¹⁰²	41.7	2000
Singapore ⁴	100.0	2003
Slovakia ²⁰	99.4	2002
Slovenia ²⁰	99.8	2002
Solomon Islands ⁸⁴	85.0	1999
Somalia ¹⁰³	34.2	1999
South Africa ¹⁰⁴	84.4	1998
Spain	nd	-
Sri Lanka ¹⁰⁵	96.6	2000
St. Helena	nd	-
Sudan ¹⁰⁶	56.9 ^j	1997
Suriname ¹⁰⁷	84.5	2000
Swaziland ¹⁰⁸	70.0	2000
Sweden	nd	-
Switzerland	nd	-
Syrian Arab Republic ¹⁰⁰	70.0	2002
Tajikistan ¹⁰⁹	71.1	2000
TFYR Macedonia ¹¹⁰	98.2	2002
Thailand ¹¹¹	99.3	2000
Timor-Leste ¹¹²	23.6	2002
Togo ¹¹³	48.6	2000
Tokelau ³²	100.0	1999
Tonga ⁴	91.3	2002
Trinidad and Tobago ¹¹⁴	96.0	2000
Tunisia ¹¹⁵	89.8	2000
Turkey ¹¹⁶	83.0	2003
Turkmenistan ¹¹⁷	97.2	2000
Turks and Caicos Islands ⁶	100.0	2004
Tuvalu ⁴	100.0	2002
Uganda ¹¹⁸	39.0	2000
Ukraine ¹¹⁹	99.0	1999
United Arab Emirates ¹⁰	100.0	2003
United Kingdom ¹²⁰	99.0	1998
United Rep. of Tanzania ¹²¹	46.3	2004-05
United States of America ¹²²	99.0	2001
United States Virgin Islands ⁶	98.3	2002
Uruguay ⁶	99.4	2002
Uzbekistan ¹²³	95.6	2000
Vanuatu ⁴	87.0	2003

Country/region	% skilled attendant	Year
Venezuela ¹²⁴	94.0	2000
Viet Nam ¹²⁵	85.0	2002
Wallis and Futuna Islands	nd	-
West Bank and Gaza Strip ⁸⁸	97.4	2000
Western Sahara	nd	-
Yemen ¹²⁶	21.6	1997
Zambia ¹²⁷	43.4	2001-02
Zimbabwe ¹²⁸	72.5	1999

(Endnotes)

^a Institutional birth

^b Excludes “comadre”

^c Excludes “partera”

^d Includes “trained traditional birth attendant”

^e Includes “parteira”

^f Includes “comadrona/partera”

^g Includes “matrone”

^h Excludes “comadrona/partera”

ⁱ Excludes “sanitario/promotora/partera/comadrona”

^j Covers Northern and selected sites in Southern Sudan

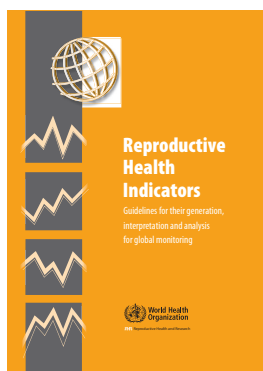
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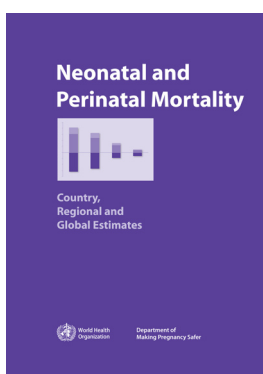
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Publications



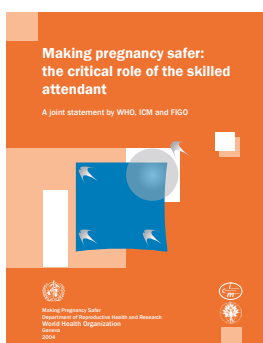
Reproductive health indicators - Guidelines for their generation, interpretation and analysis for global monitoring

This document is intended for national public health administrators and health programme managers. It briefly reviews theoretical and practical considerations of indicators, followed by a discussion of the definition, data sources, collection methods, periodicity of collection, disaggregation, use, limitations and common pitfalls for each of the shortlisted indicators. It is hoped that the document will contribute towards a consistent global monitoring and evaluation of reproductive health.



Neonatal and perinatal mortality - Country, Regional and Global Estimates

The report provides neonatal and perinatal mortality estimates by country, regional groupings and globally. For countries that do not have data, models were developed to estimate mortality. Since data on deaths come from a number of different sources, the methods used to obtain the estimates are also described. Country-specific estimates of stillbirth and early neonatal deaths are published here for the first time. Estimates of stillbirth deaths that occur during delivery (intrapartum) by regional groupings, as well as estimates of sex ratio in neonatal, early neonatal and stillbirth mortality for the developing world are other recent contributions to the understanding of early mortality that are presented in this document.



Making Pregnancy Safer: The critical role of the skilled attendant

A joint statement by WHO, the International Confederation of Midwives (ICM) and the International Federation of Gynecology and Obstetrics (FIGO)

This document is especially aimed at countries in which the coverage of skilled attendance at birth is below 85%. It defines clearly who is a skilled attendant, what skills she/he should have and how she/he should be trained and supported.

Pour une grossesse à moindre risque : Le rôle capital de l'accoucheur qualifié

Une déclaration conjointe OMS, ICM, FIGO

Ce document est particulièrement destinée aux pays dont le taux de couverture en soins obstétricaux par des accoucheurs qualifiés est inférieur à 85%. Cette déclaration définit clairement ce qu'est un accoucheur qualifié, ce qu'elle/il doit avoir comme compétences et comment elle/il devra être formé(e) et appuyé(e).

These publications are accessible through the WHO web site www.who.int/reproductive-health

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