

## 5 Maternal and reproductive health

In 2005, 237,000 mothers in Asia and the Pacific died from causes related to pregnancy. This represents 44 per cent of the world's maternal deaths, lower than the region's share of total population. Nevertheless maternal mortality is a serious problem in many developing countries in the region, especially in South and South-West Asia.

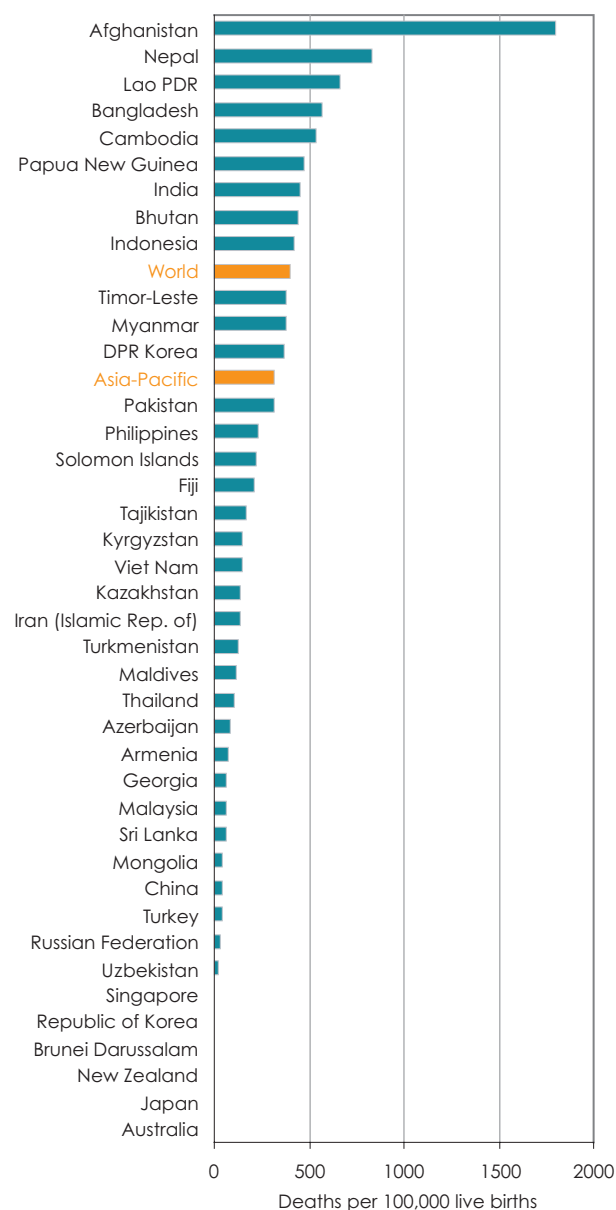
Maternal mortality is difficult to measure. Many countries, particularly those which have high maternal mortality rates, have weak systems for registering births and deaths so their coverage of these "vital events" is incomplete. In fact, as countries improve their systems they may report increasing numbers of maternal deaths even when the actual number is declining. The alternative is to estimate deaths using sample surveys, but for such estimates to be reliable the sample sizes need to be very large. Much research has been undertaken to estimate maternal mortality in a comparable manner across countries and over time – so as to better track progress towards the corresponding Millennium Development Goal, which is to reduce maternal mortality by three-quarters between 1990 and 2015.

The maternal mortality ratio (MMR) is the number of maternal deaths per 100,000 live births in a specified year. MMRs are highly correlated with per capita income. In 2005, globally the average ratio was 404, and across Asia and the Pacific it was 317. But in the region's high-income economies the ratio was only 5, compared with 273 in the middle-income economies, and 519 in the low-income economies.

By geographical region, MMRs ranged from a relatively low 48 in East and North-East Asia and 58 in North and Central Asia, to 302 in South-East Asia, 432 in the Pacific developing economies and 469 in South and South-West Asia. Some countries had very high ratios – above 500 in Afghanistan, Bangladesh, Cambodia, the Lao People's Democratic Republic and Nepal. Typically the rates were highest in the poorest countries, but even these

Figure 5.1

Maternal mortality ratios, Asia and the Pacific, 2005

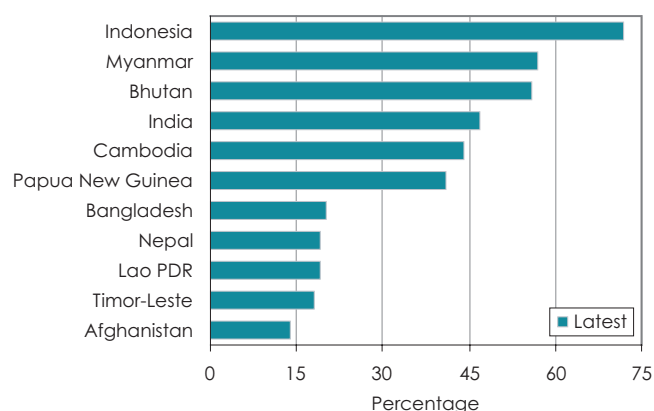


countries can reduce deaths by using specific reproductive health interventions. Thus although Viet Nam has a lower per capita income than Indonesia its MMR was only 150, compared with 420 in Indonesia.

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**Figure 5.2**

**Proportions of births attended by skilled health personnel, in countries with high MMRs, 2000-2006**



The most effective way to reduce maternal mortality is to have births attended by skilled health personnel. Countries with high MMRs tend to have a low proportion of births assisted in this way – 14 per cent in Afghanistan, 20 per cent in Bangladesh, 44 per cent in Cambodia and 19 per cent in the Lao People’s Democratic Republic. On the other hand, two low-income economies with relatively low MMRs both have high proportions of births attended by skilled personnel: Sri Lanka, 96 per cent; and Viet Nam, 88 per cent.

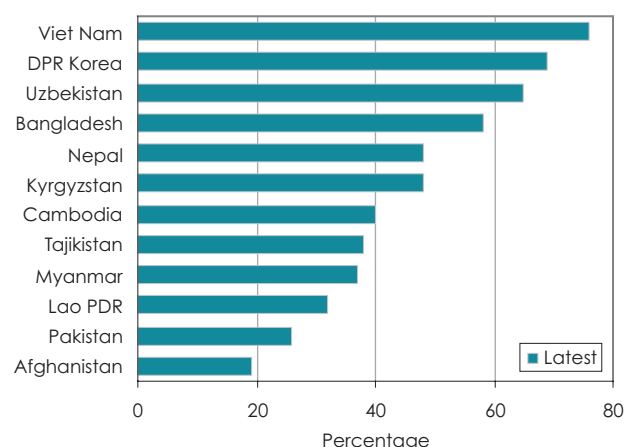
Another important step is to provide contraception to women who wish to delay or stop bearing children. Except for Bangladesh, the countries in which the MMR exceeds 500 all have contraceptive prevalence rates below 50 per cent. Even the poorest countries, however, can achieve higher prevalence rates – as in Sri Lanka (70 per cent) and Viet Nam (76 per cent) – countries that have achieved low levels of maternal mortality through effective health interventions.

A further way of reducing maternal mortality is to ensure that pregnant women have access to antenatal care. In most of the countries in the region for which data are available, more than 90 per cent of pregnant women make at least one visit to a medical centre for antenatal care. In South and South-West Asia, however, that proportion is often quite low – less than 50 per cent in Afghanistan, Bangladesh, Nepal and Pakistan.

The women at lower risk are those in richer households and in urban areas which have better access to reproductive health care. For example, in the Philippines in 2003, for women in the richest quintile the proportion of births attended by skilled personnel was 92 per cent but for women in the poorest quintile the proportion was only 25 per

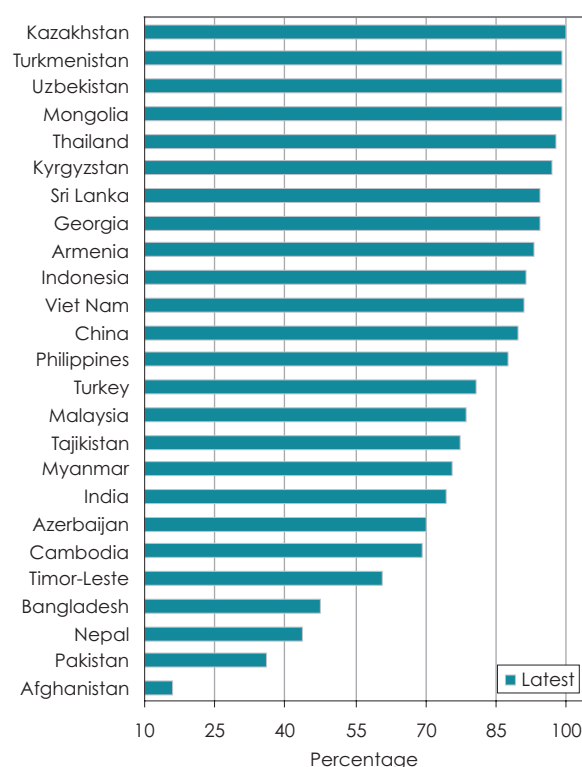
**Figure 5.3**

**Contraceptive prevalence rates in low-income economies, 2000-2006**



**Figure 5.4**

**Proportion of pregnant women receiving antenatal care at one visit to a medical centre, 2000-2006**



cent. Similarly, in urban areas the proportion was 79 per cent but in the rural areas only 41 per cent.

The risk of both maternal mortality and infant mortality is much greater for births occurring to women below age 20. For this reason, another effective policy measure is to reduce adolescent fertility. Adolescent fertility remains high in several countries in South and South-West Asia, as well as in the Lao People’s Democratic Republic and Papua New Guinea.

**Maternal mortality ratio (number; deaths per 100,000 live births.)**

Number of maternal deaths per 100,000 live births during a specified time period, usually 1 year. Related terms: Maternal death is the death of a woman while pregnant or within 42 days after termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

**Aggregates:** Number: Sum of individual country values; Ratio: Averages are calculated using the total number of births as weight. **Source:** Number: Calculated by ESCAP using data from United Nations Millennium Development Goals Indicators; Ratio: United Nations Millennium Development Goals Indicators (online database, accessed on 4 August 2008).

**Proportions of births attended by skilled health personnel (percentage)**

Percentage of births attended by skilled health personnel (doctors, nurses or midwives). Skilled health personnel include those who are trained in: providing life-saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, labour and the post-partum period; conducting deliveries on their own; and caring for newborns. Traditional birth attendants, even if they receive a short training course, are not included. **Aggregates:** None. **Source:** United Nations Millennium Development Goals Indicators (online database, accessed on 5 August 2008).

**Proportion of births attended by skilled health personnel: poorest and richest quintiles (percentage)**

See definition of *proportions of births attended by skilled health personnel*. Disaggregation is provided for the lowest and richest wealth quintile of the population. **Aggregates:** None. **Source:** WHO Statistical Information System (WHOSIS) (online database, accessed on 4 June 2008).

**Proportions of births attended by skilled health personnel. Urban/Rural (percentage)**

See definition of *proportions of births attended by skilled health personnel*. Disaggregation is provided for urban and rural areas. **Aggregates:** None. **Source:** United Nations

Millennium Development Goals Indicators (online database, accessed on 5 August 2008).

**Contraceptive prevalence rate (percentage)**

Contraceptive prevalence is the percentage of women married or in union aged 15 to 49 who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used. For analytical convenience, contraceptive methods are often classified as either modern or traditional. Modern methods of contraception include female and male sterilization, oral hormonal pills, the intra-uterine device (IUD), the male condom, injectables, the implant (including Norplant), vaginal barrier methods, the female condom and emergency contraception. Traditional methods of contraception include the rhythm (periodic abstinence), withdrawal, lactational amenorrhea method (LAM) and folk methods.

**Aggregates:** None. **Source:** United Nations Millennium Development Goals Indicators (online database, accessed on 5 August 2008).

**Pregnant women receiving antenatal care coverage: one visit and four visits (percentage)**

Antenatal care coverage (at least one visit) is the percentage of women aged 15-49 with a live birth in a given time period that received antenatal care provided by skilled health personnel (doctors, nurses, or midwives) at least once during pregnancy, as a percentage of women age 15-49 years with a live birth in a given time period. Antenatal care coverage (at least four visits) is the percentage of women aged 15-49 with a live birth in a given time period that received antenatal care four or more times with any provider (whether skilled or unskilled), as a percentage of women age 15-49 years with a live birth in a given time period. A skilled health worker/attendant is 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 newborn children. **Aggregates:** None. **Source:** United Nations Millennium Development Goals Indicators (online database, accessed on 4 August 2008).

## 5. Maternal and reproductive health

### 5.1 Maternal mortality and antenatal care

	Maternal mortality		Proportions of births attended by skilled health personnel					
	Number	Deaths per 100,000 live births	Total		Poorest quintile	Richest quintile	Rural	Urban
			Earliest	Latest	Percentage		Latest	Latest
	2005	2005			Latest	Latest		
<b>East and North-East Asia</b>	<b>9 149</b>	<b>48</b>						
China	7 786	45	94 (90)	98 (05)				
DPR Korea	1 209	370	98 (90)	97 (04)				
Hong Kong, China								
Japan	66	6	100 (90)	100 (96)				
Macao, China								
Mongolia	22	46	94 (98)	99 (06)				
Republic of Korea	65	14						
<b>South-East Asia</b>	<b>34 503</b>	<b>302</b>						
Brunei Darussalam	1	13	98 (94)	99 (99)				
Cambodia	2 014	540	34 (98)	44 (05)	21 (05)	90 (05)	39 (05)	70 (05)
Indonesia	18 738	420	41 (90)	72 (04)	40 (03)	94 (03)	55 (03)	79 (03)
Lao PDR	1 024	660		19 (01)				
Malaysia	345	62	93 (90)	98 (05)				
Myanmar	3 428	380	46 (91)	57 (01)				
Philippines	5 266	230	53 (93)	60 (03)	25 (03)	92 (03)	41 (03)	79 (03)
Singapore	5	14		100 (98)				
Thailand	1 034	110	99 (00)	97 (06)				
Timor-Leste	167	380	26 (97)	18 (03)				
Viet Nam	2 480	150	77 (97)	88 (06)	58 (02)	100 (02)	82 (02)	99 (02)
<b>South and South-West Asia</b>	<b>190 816</b>	<b>469</b>						
Afghanistan	22 180	1 800	12 (00)	14 (03)				
Bangladesh	22 966	570	10 (94)	20 (06)	3 (04)	40 (04)	9 (04)	30 (04)
Bhutan	55	440	15 (94)	56 (03)				
India	122 686	450	34 (93)	47 (06)	19 (06)	89 (06)	38 (06)	74 (06)
Iran (Islamic Rep. of)	1 917	140	86 (97)	90 (00)				
Maldives	8	120	90 (94)	84 (04)				
Nepal	6 527	830	7 (91)	19 (06)	5 (06)	58 (06)	19 (06)	52 (06)
Pakistan	13 699	320	19 (91)	31 (05)	5 (91)	55 (91)	8 (91)	42 (91)
Sri Lanka	173	58	94 (93)	96 (00)				
Turkey	605	44	76 (93)	83 (03)			69 (03)	90 (03)
<b>North and Central Asia</b>	<b>1 739</b>	<b>58</b>						
Armenia	27	76	96 (97)	98 (05)	93 (05)	100 (05)	98 (05)	99 (05)
Azerbaijan	103	82	100 (98)	100 (04)				
Georgia	32	66	97 (90)	99 (03)				
Kazakhstan	390	140	100 (95)	100 (06)	99 (99)	99 (99)	100 (99)	98 (99)
Kyrgyzstan	166	150	98 (97)	98 (06)	96 (97)	100 (97)	98 (97)	99 (97)
Russian Federation	418	28	99 (90)	99 (03)				
Tajikistan	315	170	79 (96)	83 (05)				
Turkmenistan	140	130	96 (96)	100 (06)	97 (00)	98 (00)	97 (00)	98 (00)
Uzbekistan	148	24	98 (96)	100 (06)				
<b>Pacific</b>	<b>992</b>	<b>185</b>						
Australia	10	4	100 (91)	100 (99)				
American Samoa								
Cook Islands			99 (91)	98 (01)				
Fiji	38	210	100 (98)	99 (00)				
French Polynesia								
Guam								
Kiribati			72 (94)	85 (98)				
Marshall Islands				95 (98)				
Micronesia (F.S.)			93 (99)	88 (01)				
Nauru								
New Caledonia								
New Zealand	5	9	95 (94)	100 (95)				
Niue			99 (90)	100 (02)				
Northern Mariana Is.								
Palau			99 (90)	100 (02)				
Papua New Guinea	905	470	53 (96)	41 (00)				
Samoa			76 (90)	100 (98)				
Solomon Islands	33	220	85 (94)	85 (99)				
Tonga			92 (91)	95 (00)				
Tuvalu			100 (90)	100 (02)				
Vanuatu			87 (94)	88 (99)				
<b>Asia and the Pacific</b>	<b>237 199</b>	<b>317</b>						
LLDC	31 097	842						
LDC	58 403	773						
ASEAN	34 337	302						
ECO	39 663	410						
SAARC	188 294	497						
Central Asia	1 321	88						
Pacific island dev. econ.	977	432						
Low-income	77 095	519						
Middle-income	159 951	273						
High-income	153	8						
<b>Other world regions</b>								
Africa	282 428	828						
Europe	520	9						
Latin America & Carib.	15 301	133						
North America	487	11						
Other countries/areas	7 408	214						
<b>World</b>	<b>543 342</b>	<b>404</b>						

## 5.2 Reproductive health

	Contraceptive prevalence rate		Pregnant women receiving antenatal care coverage			
	Percentage		Four visits		One visit	
	Earliest	Latest	Percentage		Percentage	
	Earliest	Latest	Earliest	Latest	Earliest	Latest
<b>East and North-East Asia</b>						
China	85 (92)	87 (01)			90 (01)	90 (05)
DPR Korea	62 (92)	69 (02)				
Hong Kong, China	86 (92)	84 (02)				
Japan	58 (90)	54 (05)				
Macao, China						
Mongolia	65 (94)	66 (06)			90 (98)	99 (06)
Republic of Korea	79 (91)	81 (97)				
<b>South-East Asia</b>						
Brunei Darussalam						
Cambodia	13 (95)	40 (05)		27 (05)	34 (98)	69 (05)
Indonesia	50 (91)	58 (05)		81 (02)	76 (91)	92 (02)
Lao PDR	19 (93)	32 (00)				
Malaysia	55 (94)				74 (03)	79 (05)
Myanmar	17 (91)	37 (01)			76 (97)	76 (01)
Philippines	40 (93)	51 (06)		70 (03)	83 (93)	88 (03)
Singapore	65 (92)	62 (97)				
Thailand	74 (93)	72 (06)			86 (96)	98 (06)
Timor-Leste	25 (91)	10 (03)		30 (03)	71 (97)	61 (03)
Viet Nam	65 (94)	76 (06)		29 (02)	71 (97)	91 (06)
<b>South and South-West Asia</b>						
Afghanistan	5 (00)	19 (06)			37 (00)	16 (03)
Bangladesh	40 (91)	58 (04)		16 (04)	26 (94)	48 (06)
Bhutan	19 (94)	31 (00)				
India	41 (93)	56 (06)		51 (06)	49 (93)	74 (06)
Iran (Islamic Rep. of)	65 (92)	74 (00)				
Maldives	23 (91)	39 (04)				
Nepal	23 (91)	48 (06)		29 (06)	15 (91)	44 (06)
Pakistan	12 (91)	26 (06)	14 (91)		26 (91)	36 (05)
Sri Lanka	66 (93)	70 (00)			80 (93)	95 (00)
Turkey	63 (93)	71 (03)		54 (03)	62 (93)	81 (03)
<b>North and Central Asia</b>						
Armenia	61 (00)	53 (05)		71 (05)	82 (97)	93 (05)
Azerbaijan	55 (00)	55 (01)		30 (99)	98 (97)	70 (01)
Georgia	41 (00)	47 (05)		75 (05)	74 (97)	94 (05)
Kazakhstan	59 (95)	51 (06)		70 (99)	93 (95)	100 (06)
Kyrgyzstan	60 (97)	48 (06)		81 (97)	97 (97)	97 (06)
Russian Federation	63 (93)	73 (99)				
Tajikistan	34 (00)	38 (05)			71 (00)	77 (05)
Turkmenistan		62 (00)		83 (00)	98 (00)	99 (06)
Uzbekistan	56 (96)	65 (06)	79 (96)		95 (96)	99 (06)
<b>Pacific</b>						
Australia	67 (95)	71 (02)				
American Samoa						
Cook Islands	63 (96)	43 (99)				
Fiji						
French Polynesia						
Guam		67 (02)				
Kiribati		36 (00)				
Marshall Islands						
Micronesia (F.S.)						
Nauru						
New Caledonia						
New Zealand	74 (95)					
Niue						
Northern Mariana Is.						
Palau		33 (03)				
Papua New Guinea	26 (96)					
Samoa						
Solomon Islands						
Tonga						
Tuvalu						
Vanuatu	39 (95)					
<b>Asia and the Pacific</b>						
LLDC						
LDC						
ASEAN						
ECO						
SAARC						
Central Asia						
Pacific island dev. econ.						
Low-income						
Middle-income						
High-income						
<b>Other world regions</b>						
Africa						
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Other countries/areas						
<b>World</b>						