

Goal 4: Reduce Child Mortality

Snapshots

- Progress with improving child survival is slow in Asia and the Pacific region, as in all other developing regions. By 2010, only 4 of 43 economies had reduced their under-5 mortality rates (U5MRs) or child mortality rates to one-third of 1990 values, and 28 economies are not expected to meet the MDG target by 2015.
- From more than 100 children under-5 years dying for every 1,000 live births in 1990, the Maldives, Mongolia, and Timor-Leste have become early achievers.
- In the region in 2010, under-5 and infant mortality improved from the 1990 levels, but still in 2010 close to 3.2 million children under 5 years of age died, about 2.5 million of them before reaching 1 year. Compared to 1990, in 2010 the U5MR was halved in South Asia and was reduced by 25% in Central and West Asia. Infant deaths account for a significant proportion of under-5 mortality.
- In 2010, about 85% of the region's children had been immunized for measles, a leading cause of death among children. The People's Republic of China (PRC) has immunized 99% of its 1-year-old children against measles, one of the region's highest rates. The proportions of 1-year-olds immunized against measles are lowest in South Asia and the Pacific.

Introduction

The **Goal 4** target is to reduce the U5MR by two-thirds between 1990 and 2015.

Two related indicators are

- (i) to reduce *by two-thirds, between 1990 and 2015, the U5MR*; and
- (ii) to reduce *by two-thirds, between 1990 and 2015, the infant mortality rate (IMR)*.

A related indicator is the percentage of 1-year-old children who have been immunized against measles. Immunization against measles has a direct impact on child mortality, and the percentage of 1-year-olds who have been immunized is also a good indicator of the quality of the child health care system.

Key Trends

In Asia and the Pacific region in 2010, close to 3.2 million children died before reaching their 5th birthday. This is about 9,500 fewer child deaths each day than in the 1990 count. Compared with 1990, by 2010 South Asia had halved its U5MR and Central Asia has reduced about 25%. The *Asia Pacific Regional MDG Report 2011/2012* estimates that, given current trends, 12 million child deaths will occur during 2011–2015; however, if the MDG target is reached, more than 2 million lives can be saved (ESCAP, ADB, and UNDP 2012).

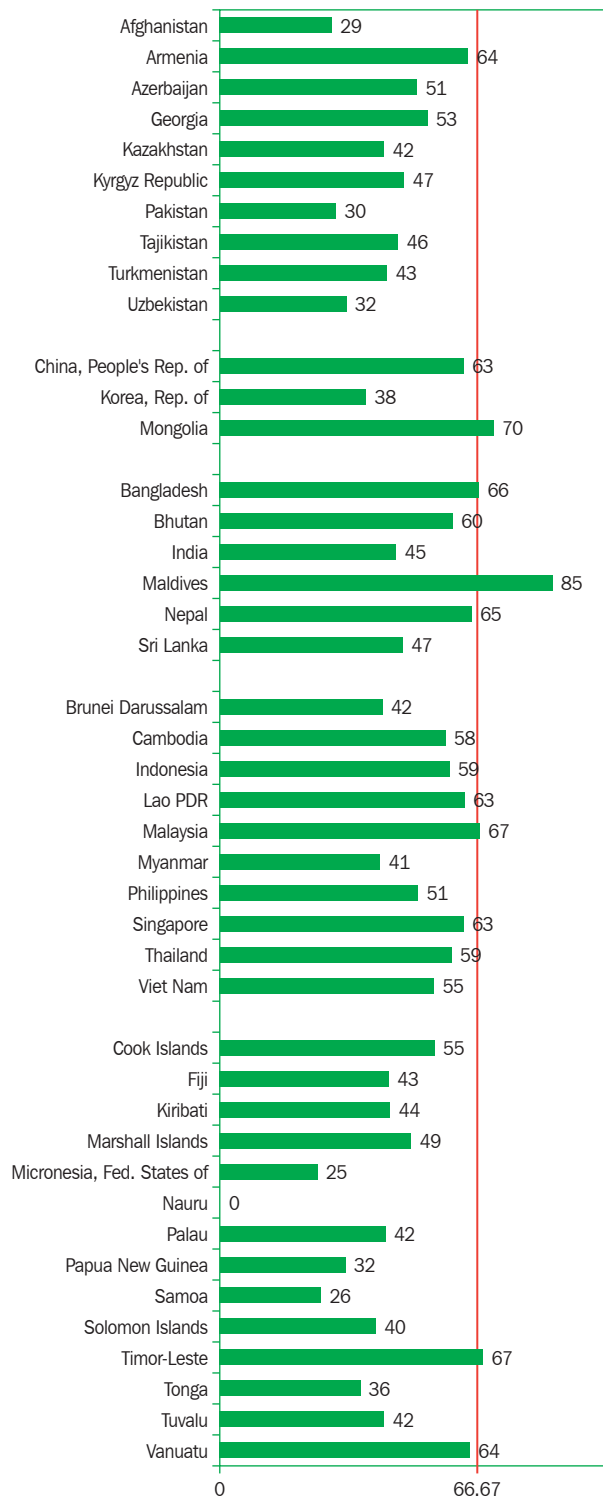
Figure 4.1 graphs the reduction in U5MRs from 1990 to 2010; the vertical line indicates the targeted two-thirds reduction. Four economies have reduced their 1990 U5MRs by at least two-thirds in 2010—Malaysia, the Maldives, Mongolia, and Timor-Leste. Ten economies are expected to meet the target by 2015, including 3 of the

region's most populous ones—Bangladesh, the PRC, and Indonesia. Progress in reducing child mortality is slow for 28 economies. Nauru has recorded no progress.

The *Asia Pacific Regional MDG Report 2011/2012* also suggests that some economies that are progressing slowly could meet the target by saving 2 more children per 1,000 live births from dying per year. India could reach the target by reducing its rate by 5 deaths.

In Asia and the Pacific region in 2010, about 2.5 million children did not reach the age of 1. IMRs follow the trend of U5MRs. While there are improvements, the region's progress in reducing infant mortality is slightly slower than its progress toward the U5MR, with 34 economies not expected to reach the target by 2015.

Figure 4.1 Under-Five Mortality Rate, Percent Reduction between 1990 and 2010



Source: Table 4.1.

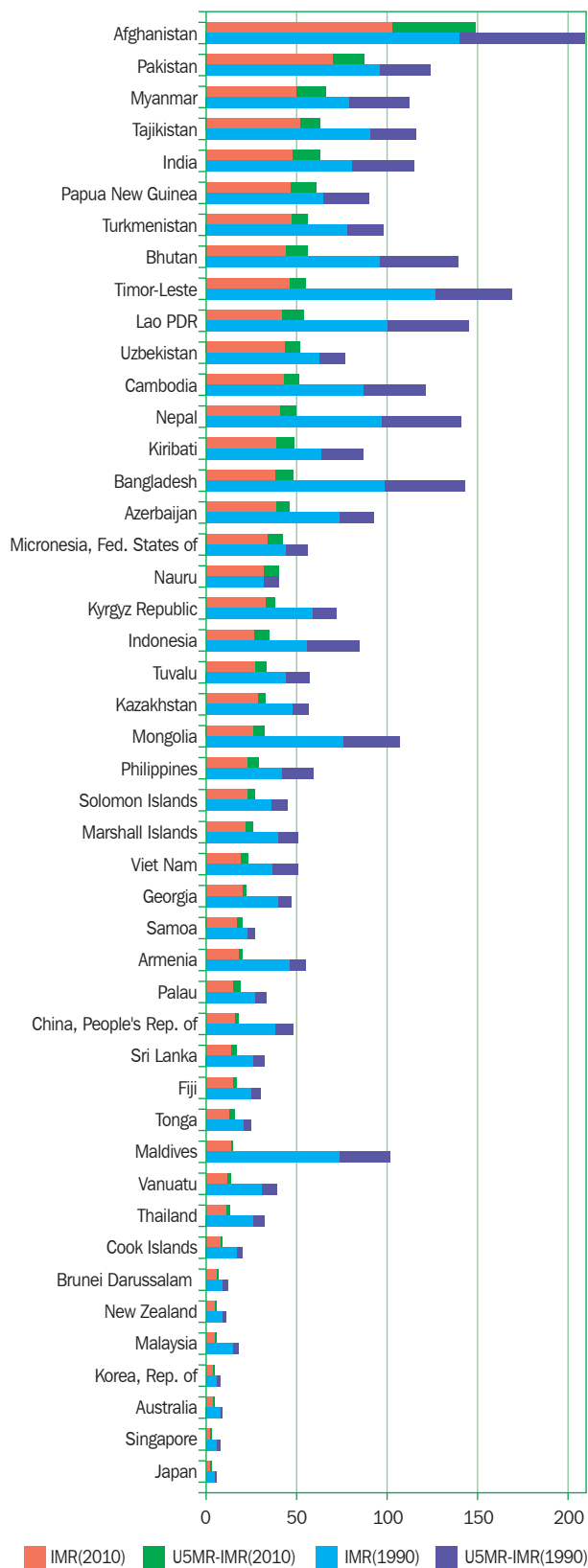
Figure 4.2 shows the U5MRs and IMRs in 1990 and 2010. Some economies were able to bring down their rates remarkably, from U5MRs exceeding 100 in 1990 to be early achievers or likely to meet the target by 2015. Economies that are early achievers or on track to meet the U5MR target are Bangladesh, Bhutan, the Lao PDR, the Maldives, Mongolia, Nepal, and Timor-Leste. For the IMR, Bangladesh, the Lao PDR, and Timor-Leste are on track or early achievers. Figure 4.2 also shows that infant deaths account for a significant proportion of under-5 mortality, so that increasing the chances of infant survival can have a strong impact on reducing child mortality. One measure to reduce child mortality is measles immunization.

Measles is a highly contagious viral respiratory infection that kills and can leave survivors with life-long disabilities. Most at risk are children under 5 who have not been vaccinated against the disease.

Figure 4.3 presents the proportion of 1-year-old children immunized against measles in the 1990s and 2010. For this indicator, 100% immunization is the desirable outcome. In 2010, all of the 46 economies reported at least a 50% immunization rate, and more than half of them reported at least 90% immunization rates. In 8 economies (including the PRC), the immunization rate is 99%. Four economies—Afghanistan, Cambodia, Georgia, and the Lao PDR—had at least doubled their 1990 immunization rates in 2 decades.

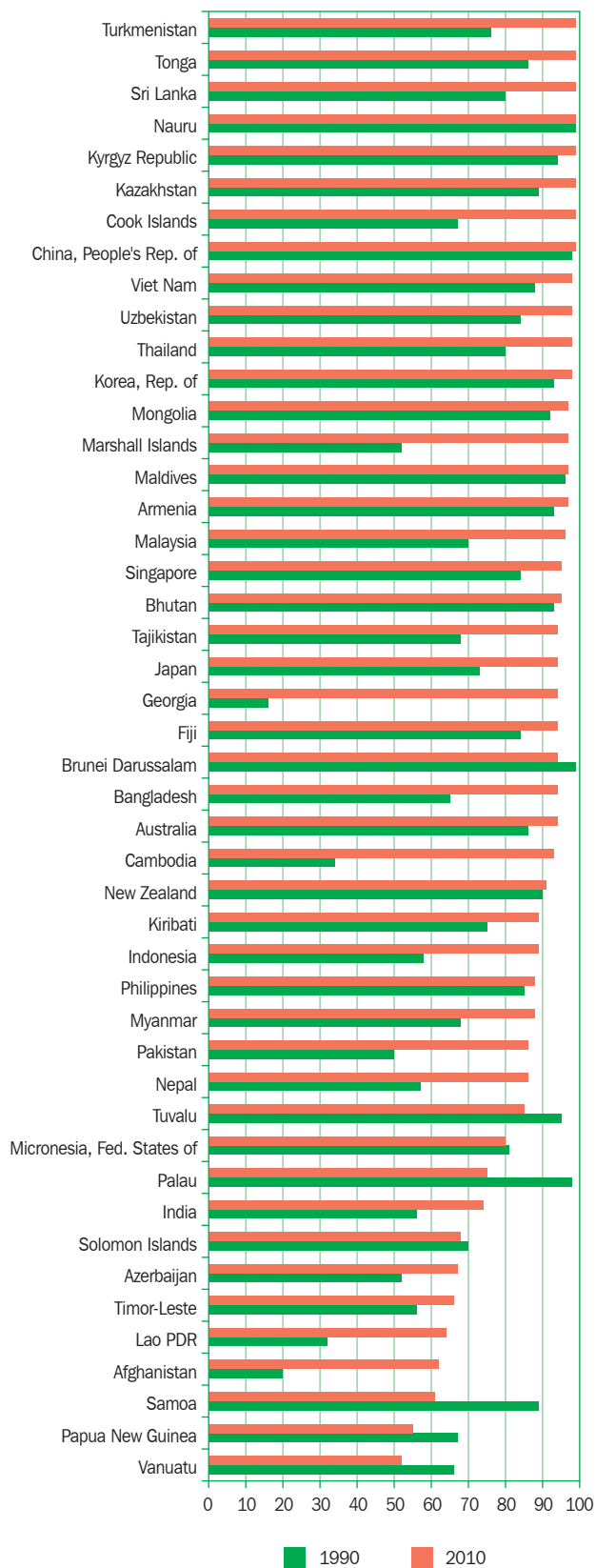
Eight economies—7 of them from the Pacific—showed a decline in the proportion of 1-year-olds immunized against measles. Palau, Papua New Guinea, and Vanuatu showed a steady decrease; the Federated States of Micronesia, Samoa, and the Solomon Islands' proportion of immunized children had increased by 2000 but then had regressed by 2010. Tuvalu's fell from a high of 95% in 1990 to 81% in 2000 and recovered to 85% in 2010.

Figure 4.2 Under-Five and Infant Mortality Rates, 1990 and 2010



Source: Table 4.1.

Figure 4.3 Proportion of 1-Year-Old Children Immunized Against Measles, 1990 or Earliest Year and 2010 (%)



Source: Table 4.1.

Data Issues and Comparability

In more developed economies, data on mortality are usually taken from vital statistics registration records. Most developing economies lack fully functional vital registration systems; thus, censuses and household surveys such as Demographic and Health Surveys and Multiple Indicator Cluster Surveys have become primary sources of data, although with some limitations as to their quality. Because the surveys may not be held each year, econometric estimation techniques may be used to produce a consistent time series. For these reasons, mortality data are of varying quality in Asia and the Pacific region.

Data on immunization may be provided directly by the health workers and clinics providing inoculation or, more commonly in the Asian region, the information is collected from samples of households in health and demographic surveys. As with mortality data, estimation techniques will often be used to convert partial data into comprehensive estimates.

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Goal 4 Target and Indicators

Table 4.1 Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Regional Member	4.1 Under-Five Mortality Rate (per 1,000 live births)			4.2 Infant Mortality Rate (per 1,000 live births)			4.3 Proportion of 1-Year-Old Children Immunized against Measles (%)		
	1990	2000	2010	1990	2000	2010	1990	2000	2010
Developing Member Economies									
Central and West Asia^a	120	101	89	92	78	69	55	61	84
Afghanistan	209	151	149	140	104	103	20	27	62
Armenia	55	33	20	46	29	18	93 (1992)	92	97
Azerbaijan	93	67	46	74	56	39	52 (1992)	67	67
Georgia	47	33	22	40	29	20	16 (1992)	73	94
Kazakhstan	57	44	33	48	38	29	89 (1992)	99	99
Kyrgyz Republic	72	52	38	59	44	33	94 (1992)	98	99
Pakistan	124	101	87	96	80	70	50	59	86
Tajikistan	116	93	63	91	75	52	68 (1992)	88	94
Turkmenistan	98	74	56	78	61	47	76 (1992)	96	99
Uzbekistan	77	63	52	63	53	44	84 (1992)	99	98
East Asia^a	47	32	18	37	26	16	98	84	99
China, People's Rep. of	48	33	18	38	27	16	98	84	99
Hong Kong, China	...	...	...	6	3	2	...	...	...
Korea, Rep. of	8	58	5	6	5	4	93	95	98
Mongolia	107	61	32	76	47	26	92	92	97
Taipei, China	...	...	...	5	6	4	...	...	...
South Asia^a	118	85	61	83	63	46	57	58	77
Bangladesh	143	86	48	99	63	38	65	72	94
Bhutan	139	89	56	96	65	44	93	78	95
India	115	86	63	81	63	48	56	55	74
Maldives	102	47	15	74	37	14	96	99	97
Nepal	141	84	50	97	64	41	57	77	86
Sri Lanka	32	23	17	26	19	14	80	99	99
Southeast Asia^a	72	48	32	50	35	25	70	81	91
Brunei Darussalam ^b	12	9	7	9	7	6	99	99	94
Cambodia	121	103	51	87	77	43	34	65	93
Indonesia	85	54	35	56	38	27	58	74	89
Lao PDR	145	88	54	100	64	42	32	42	64
Malaysia	18	11	6	15	9	5	70	88	96
Myanmar	112	87	66	79	64	50	68	84	88
Philippines	59	40	29	42	30	23	85	80	88
Singapore	8	4	3	6	3	2	84	96	95
Thailand	32	18	13	26	15	11	80	94	98
Viet Nam	51	35	23	37	27	19	88	97	98
The Pacific^a	89	69	53	66	53	42	61	65	60
Cook Islands	20	13	9	17	11	8	67	76	99
Fiji	30	23	17	25	19	15	84	81	94
Kiribati	87	65	49	64	50	39	75	80	89
Marshall Islands	51	37	26	40	30	22	52	94	97
Micronesia, Fed. States of	56	49	42	44	39	34	81	85	80
Nauru	40	40	40	32	32	32	99 (1997)	7	99
Palau	33	25	19	27	20	15	98	83	75
Papua New Guinea	90	74	61	65	55	47	67	62	55
Samoa	27	23	20	23	20	17	89	93	61
Solomon Islands	45	35	27	36	28	23	70	85	68
Timor-Leste	169	104	55	127	82	46	...	56 (2002)	66
Tonga	25	20	16	21	17	13	86	95	99
Tuvalu	57	44	33	44	35	27	95	81	85
Vanuatu	39	23	14	31	20	12	66	61	52
Developed Member Economies^a	7	5	4	6	3	3	76	95	94
Australia	9	6	5	8	5	4	86	91	94
Japan	6	5	3	5	3	2	73	96	94
New Zealand	11	7	6	9	6	5	90	85	91
DEVELOPING MEMBER ECONOMIES^a	88	66	48	63	50	38	73	69	85
REGIONAL MEMBERS^a	86	65	47	62	49	37	73	70	86
WORLD	88	73	57	61	51	40	72	72	85

... = Data not available at cutoff date.

a Aggregates are derived for reporting economies only.

b Brunei Darussalam is a regional member of ADB, but it is not classified as a developing member.

Sources: Millennium Indicators Database Online (UNSD 2012); for Hong Kong, China: Census and Statistics Department; for Taipei, China: Directorate-General of Budget, Accounting and Statistics; ADB staff estimates.