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Health gaps by income and gender

	Survey year	Prevalence of child malnutrition		Child immunization rate				Infant mortality rate		Under-five mortality rate	
		Underweight % of children under age 5		% of children ages 12–23 months ^a				per 1,000 live births		per 1,000	
		Poorest quintile	Richest quintile	Measles		DPT		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile
				Poorest quintile	Richest quintile	Poorest quintile	Richest quintile				
Armenia	2000	3	1	68	74 ^b	89	84 ^b	52	27	61	30
Bangladesh	2004	41	24	60	91	71	91	90	65	121	71
Benin	2001	22	9	57	83	63	89	112	50	198	93
Bolivia	2003	10	1	62	74	64	85	87	32	119	37
Brazil	1996	10	3	78	90	66	82	83	29	99	33
Burkina Faso	2003	26	16	48	71	45	73	97	78	206	144
Cambodia	2000	35	28	44	82	39	75	110	50	155	64
Cameroon	2004	22	5	57	86	55	86	101	52	189	88
Central African Republic	1994–95	25	15	31	80	27	76	132	54	193	98
Chad	2004	27	19	8	38	5	42	109	101	176	187
Colombia	2005	11	3	70	91	73	91	32	14	39	16
Comoros	1996	22	14	51	86	58	92	87	65	129	87 ^b
Côte d'Ivoire	1994	21	10	31	79	26	74	117	63	190	97
Dominican Republic	2002	9	1	83	94	46	66	50	20	66	22
Egypt, Arab Rep.	2000	5	2	95	99	94	93	76	30	98	34
Eritrea	1995	27	19	37	92	30	89	74	68	152	104
Ethiopia	2000	32	29	18	52	14	43	93	95	159	147
Gabon	2000	15	7	34	71	18	49	57	36	93	55
Ghana	2003	22	10	74	88	64	87	61	58	128	88
Guatemala	1998–99	26	10	80	91	74	76	58	39	78	39
Guinea	1999	22	13	33	73	30	69	119	70	230	133
Haiti	2000	18	6	43	63	31	58	100	97	164	109
India	1998–99	33	21	28	81	36	85	97	38	141	46
Indonesia	2002–03	..	..	59	85	42	72	61	17	77	22
Jordan	1997	7	3	90	93	98	93	35	23	42	25
Kazakhstan	1999	5	6	74	76 ^b	90	82 ^b	68	42	82	45
Kenya	2003	22	7	54	88	56	73	96	62	149	91
Kyrgyz Republic	1997	10	7	82	81	82	87	83	46	96	49
Madagascar	1997	29	24	32	79	32	81	119	58	195	101
Malawi	2000	24	11	80	90	79	93	132	86	231	149
Mali	2001	26	13	40	77	28	71	137	90	248	148
Mauritania	2000–01	23	15	42	86	18	61	61	62	98	79
Morocco	2003–04	13	3	83	98	89	98	62	24	78	26
Mozambique	2003	21	7	61	96	52	96	143	71	196	108
Namibia	2000	22	10	76	86	76	83	36	23	55	31
Nepal	2001	40	26	61	83	62	85	86	53	130	68
Nicaragua	2001	13	2	76	94	77	83	50	16	64	19
Niger	1998	30	26	23	66	9	68	131	86	282	184
Nigeria	2003	24	10	16	71	7	61	133	52	257	79
Pakistan	1990–91	33	19	28	75	24	64	89	63	125	74
Paraguay	1990	5	1	48	69	40	69	43	16	57	20
Peru	2000	13	1	81	92	76	93	64	14	93	18
Philippines	2003	..	..	70	89	64	92	42	19	66	21
Rwanda	2000	19	12	84	89	80	89	139	88	246	154
Senegal	1997	..	..	..	..	..	..	85	45	181	70
South Africa	1998	..	..	74	85	64	85	62	17	87	22
Tanzania	2004	20	11	65	91	34	36	88	64	137	93
Togo	1998	23	10	35	63	29	68	84	66	168	97
Turkey	1998	13	3	64	89	45	81	68	30	85	33
Turkmenistan	2000	12	10	91	80	97	86	89	58	106	70
Uganda	2000–01	21	10	49	65	35	55	106	60	192	106
Uzbekistan	1996	15	10	96	93	89	82	54	46	70	50
Vietnam	2002	..	..	64	98	53	94	39	14	53	16
Yemen, Rep.	1997	36	24	16	73	14	71	109	60	163	73
Zambia	2001–02	24	17	81	88	74	89	115	57	192	92
Zimbabwe	1999	16	6	80	86	81	86	59	44	100	62

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	Survey year	Prevalence of child malnutrition		Child immunization rate				Infant mortality rate		Under-five mortality rate	
		Underweight % of children under age 5		% of children ages 12–23 months ^a				per 1,000 live births		per 1,000	
		Male	Female	Measles		DPT		Male	Female	Male	Female
				Male	Female	Male	Female				
Armenia	2000	2	3	71	79	90	89	46	42	51	45
Bangladesh	2004	34	35	76	76	81	81	80	64	102	91
Benin	2001	19	17	69	67	74	71	98	92	162	163
Bolivia	2003	6	6	65	63	70	73	71	64	94	91
Brazil	1996	6	5	87	87	82	80	52	44	60	53
Burkina Faso	2003	25	23	54	58	57	57	95	89	195	192
Cambodia	2000	32	33	57	54	50	47	103	82	133	110
Cameroon	2004	14	15	65	66	65	68	88	74	154	141
Central African Republic	1994–95	21	19	52	53	49	46	109	94	165	152
Chad	2004	23	23	23	23	20	21	122	108	207	198
Colombia	2005	6	6	83	82	84	81	26	18	30	21
Comoros	1996	19	17	63	64	68	69	93	75	122	103
Côte d'Ivoire	1994	19	16	54	52	49	45	99	83	163	137
Dominican Republic	2002	5	5	89	88	54	61	38	31	46	40
Egypt, Arab Rep.	2000	4	3	97	97	94	94	55	55	69	70
Eritrea	1995	26	27	52	50	49	49	82	69	163	141
Ethiopia	2000	32	31	28	26	22	19	124	101	197	178
Gabon	2000	10	9	55	55	40	33	74	49	103	80
Ghana	2003	17	17	82	83	81	77	70	59	111	108
Guatemala	1998–99	21	18	82	87	73	74	50	48	64	65
Guinea	1999	17	19	52	52	46	47	112	101	202	188
Haiti	2000	14	13	54	54	43	43	97	83	143	132
India	1998–99	28	30	52	50	56	54	75	71	98	105
Indonesia	2002–03	..	..	73	71	58	59	46	40	58	51
Jordan	1997	4	5	90	90	96	96	34	23	38	30
Kazakhstan	1999	4	4	79	78	89	88	62	47	72	53
Kenya	2003	18	14	73	72	71	74	84	67	122	103
Kyrgyz Republic	1997	11	8	84	85	83	81	72	60	81	70
Madagascar	1997	27	27	47	45	48	49	109	90	176	152
Malawi	2000	20	19	83	83	84	85	117	108	207	199
Mali	2001	24	21	49	48	41	38	136	116	250	226
Mauritania	2000–01	22	22	61	63	39	41	74	59	110	94
Morocco	2003–04	9	8	88	92	95	95	51	37	59	48
Mozambique	2003	18	17	77	76	73	71	127	120	181	176
Namibia	2000	19	18	79	82	78	81	45	34	67	54
Nepal	2001	35	36	73	69	74	70	79	75	105	112
Nicaragua	2001	9	7	87	86	84	81	39	32	48	41
Niger	1998	29	30	36	34	25	25	141	131	299	306
Nigeria	2003	19	20	34	38	19	24	116	102	222	212
Pakistan	1990–91	27	27	55	46	45	40	102	86	122	119
Paraguay	1990	3	4	56	61	50	57	39	33	49	45
Peru	2000	6	6	84	85	85	84	46	40	64	57
Philippines	2003	..	..	78	81	78	80	35	25	48	34
Rwanda	2000	19	19	86	88	85	87	123	112	215	198
Senegal	1997	..	..	..	..	..	..	74	65	144	134
South Africa	1998	..	..	84	81	74	78	49	35	66	48
Tanzania	2004	18	18	80	80	37	33	83	82	135	130
Togo	1998	19	18	45	40	43	41	89	71	156	132
Turkey	1998	7	7	79	78	60	57	51	46	61	58
Turkmenistan	2000	11	10	87	88	93	92	83	60	101	76
Uganda	2000–01	18	17	56	57	45	48	93	85	164	149
Uzbekistan	1996	15	13	91	92	87	90	50	37	65	46
Vietnam	2002	..	..	84	82	72	73	25	25	34	31
Yemen, Rep.	1997	33	30	45	40	41	39	98	80	128	114
Zambia	2001–02	21	21	83	86	78	82	95	93	176	160
Zimbabwe	1999	12	11	77	81	80	82	63	56	95	85



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Health gaps by income and gender

	Survey year	Pregnant women receiving prenatal care		Contraceptive prevalence		Births attended by skilled health staff ^c		Total fertility rate ^d		Exclusive breastfeeding	
		%		% of married women ages 15–49		% of total		births per woman		% of children under 4 months	
		Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile	Poorest quintile	Richest quintile
Armenia	2000	85	97	16	29	93	100	2.5	1.6	..	..
Bangladesh	2004	25	81	45	50	3	39	4.1	2.2	62	31
Benin	2001	73	100	4	15	50	99	7.2	3.5	50	42 ^b
Bolivia	2003	62	98	23	49	27	98	6.7	2.0	79	31
Brazil	1996	72	98	56	77	72	99	4.8	1.7	33	60 ^b
Burkina Faso	2003	56	96	2	27	19	84	6.6	3.6	17	28
Cambodia	2000	22	80	13	25	15	81	4.7	2.2	14	18
Cameroon	2004	65	97	2	27	29	95	6.5	3.2	33	30 ^b
Central African Republic	1994–95	39	91	1	9	14	82	5.1	4.9	9	4
Chad	2004	9	77	0	7	1	51	5.1	6.0	1	2
Colombia	2005	84	99	60	72	72	99	4.1	1.4	60	64
Comoros	1996	67	95	7	19	26	85	6.4	3.0	3 ^b	..
Côte d'Ivoire	1994	62	98	1	13	17	84	6.4	3.7	0	5
Dominican Republic	2002	97	99	59	70	94	100	4.5	2.1	18	6
Egypt, Arab Rep.	2000	31	84	43	61	31	94	4.0	2.9	72	57
Eritrea	1995	34	90	0 ^e	19	5	74	8.0	3.7	64	73
Ethiopia	2000	15	60	3	23	1	25	6.3	3.6	63	46
Gabon	2000	85	98	6	18	67	97	6.3	3.0	6	5 ^b
Ghana	2003	83	98	9	26	21	90	6.4	2.8	62 ^b	..
Guatemala	1998–99	37	97	55	32	9	92	7.6	2.9	62	..
Guinea	1999	58	97	1	9	12	82	5.8	4.0	9	8
Haiti	2000	65	91	17	24	4	70	6.8	2.7	40	15 ^b
India	1998–99	44	93	29	55	16	84	3.4	1.8	64	37
Indonesia	2002–03	78	99	49	58	40	94	3.0	2.2	58	35
Jordan	1997	93	97	28	47	91	99	5.2	3.1	14	14 ^b
Kazakhstan	1999	97	91	49	55	99	99	3.4	1.2	..	..
Kenya	2003	75	94	12	44	17	75	7.6	3.1	22	17
Kyrgyz Republic	1997	96	99	44	54	96	100	4.6	2.0	18 ^b	..
Madagascar	1997	67	96	2	24	30	89	8.1	3.4	57	65
Malawi	2000	89	98	20	40	43	83	7.1	4.8	53	72
Mali	2001	42	92	4	18	22	89	7.3	5.3	38	18
Mauritania	2000–01	33	89	0 ^e	17	15	93	5.4	3.5	28	30
Morocco	2003–04	40	93	51	57	29	95	3.3	1.9	53	36
Mozambique	2003	67	98	14	37	25	89	6.3	3.8	47	27
Namibia	2000	81	96	29	64	55	97	6.0	2.7	100 ^b	85 ^b
Nepal	2001	30	80	24	55	4	45	5.3	2.3	76	67
Nicaragua	2001	69	97	50	71	78	99	5.6	2.1	53	15 ^b
Niger	1998	24	85	1	18	4	63	8.4	5.7	1	3
Nigeria	2003	37	96	4	21	13	85	6.5	4.2	15	34
Pakistan	1990–91	8	72	1	23	5	55	5.1	4.0	36	9
Paraguay	1990	73	98	21	46	41	98	7.9	2.7	7	0
Peru	2000	41	74	37	58	13	88	5.5	1.6	88	59
Philippines	2003	72	97	24	35	25	92	5.9	2.0	60	20
Rwanda	2000	90	95	2	15	17	60	6.0	5.4	89	79
Senegal	1997	67	97	1	24	20	86	7.4	3.6	13	19
South Africa	1998	96	94	34	70	68	98	4.8	1.9	15	11 ^b
Tanzania	2004	91	97	11	36	31	87	7.3	3.3	58	55
Togo	1998	69	97	3	13	25	91	7.3	2.9	7	34
Turkey	1998	38	96	24	48	53	98	3.9	1.7	10	4 ^b
Turkmenistan	2000	98	97	51	50	97	98	3.4	2.1	11	28 ^b
Uganda	2000–01	88	98	11	41	20	77	8.5	4.1	73	59
Uzbekistan	1996	93	96	46	52	92	100	4.4	2.2	..	..
Vietnam	2002	68	100	58	52	58	100	2.2	1.4	18 ^b	..
Yemen, Rep.	1997	17	68	1	24	7	50	7.3	4.7	20	13
Zambia	2001–02	89	99	11	53	20	91	7.3	3.6	39	70 ^b
Zimbabwe	1999	94	97	41	67	57	94	4.9	2.6	36	46 ^b

a. Refers to children who were immunized at any time before the survey. b. Data contain large sampling errors because of the small number of cases. c. Based on births in the five years before the survey. d. Based on information in the three years before the survey. e. Less than 0.5.

About the data

The data in the table describe the health status and use of health services by individuals in different socioeconomic groups within countries. The data are from Demographic and Health Surveys conducted by Macro International with the support of the U.S. Agency for International Development. These large-scale household sample surveys, conducted periodically in developing countries, collect information on a large number of health, nutrition, and population measures as well as on respondents' social, demographic, and economic characteristics using a standard set of questionnaires. The data presented here draw on responses to individual and household questionnaires.

The table defines socioeconomic status in terms of a household's assets, including ownership of consumer items, features of the household's dwelling, and other characteristics related to wealth. Each household asset on which information was collected was assigned a weight generated through principal-component analysis. The resulting scores were standardized in relation to a standard normal distribution with a mean of zero and a standard deviation of one. The standardized scores were then used to create break-points defining wealth quintiles, expressed as quintiles of individuals in the population rather than quintiles of individuals at risk with respect to any one health indicator.

The choice of the asset index for defining socioeconomic status was based on pragmatic rather than conceptual considerations: Demographic and Health Surveys do not provide income or consumption data but do have detailed information on households' ownership of consumer goods and access to a variety of goods and services. Like income or consumption, the asset index defines disparities in primarily economic terms. It therefore excludes other possibilities of disparities among groups, such as those based on gender, education, ethnic background, or other facets of social exclusion. To that extent the index provides only a partial view of the multidimensional concepts of poverty, inequality, and inequity.

Creating one index that includes all asset indicators limits the types of analysis that can be performed. In particular, the use of a unified index does not permit a disaggregated analysis to examine which asset indicators have a more or less important association with health status or use of health services. In addition, some asset indicators may reflect household wealth better in some countries than in others—or reflect different degrees of wealth in different countries. Taking such information into

account and creating country-specific asset indexes with country-specific choices of asset indicators might produce a more effective and accurate index for each country. The asset index used in the table does not have this flexibility.

The analysis was carried out for 56 countries, with the results issued in country reports. The table shows the estimates for the poorest and richest quintiles and by sex only; the full set of estimates for up to 117 indicators is available in the country reports (see *Data sources*). The data in this table will differ from data for similar indicators in preceding tables either because the indicator refers to a period a few years preceding the survey date or because the indicator definition or methodology is different.

Definitions

- **Survey year** is the year in which the underlying data were collected.
- **Prevalence of child malnutrition** is the percentage of children under age five whose weight for age is between two and three standard deviations below the median reference standard for their age as established by the World Health Organization, the U.S. Centers for Disease Control and Prevention, and the U.S. National Center for Health Statistics. These data may differ from those in table 2.17.
- **Child immunization rate** is the percentage of children ages 12–23 months at the time of the survey who received vaccinations at any time before the survey for four diseases—measles and diphtheria, pertussis (whooping cough), and tetanus (DPT). These data may differ from those in table 2.15.
- **Infant mortality rate** is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. Data in the table are based on births in the 10 years preceding the survey and may therefore differ from the estimates in table 2.20.
- **Under-five mortality rate** is the probability that a newborn baby will die before reaching age five, if subject to current age-specific mortality rates. The probability is expressed as a rate per 1,000. Data in the table are based on births in the 10 years preceding the survey and may therefore differ from the estimates in table 2.20.
- **Pregnant women receiving prenatal care** are the percentage of women with one or more births during the five years preceding the survey, who were attended at least once during pregnancy by skilled health personnel for reasons related to pregnancy. These data may differ from those in table 2.16.
- **Contraceptive prevalence** is the percentage of women married or in-union ages 15–49 who are practicing, or whose

sexual partners are practicing, any modern method of contraception. These data may differ from those in table 2.16.

- **Births attended by skilled health staff** are the percentage of deliveries attended by personnel trained to give the necessary supervision, care, and advice to women during pregnancy, labor, and the postpartum period; to conduct deliveries on their own; and to care for newborns. Skilled health staff include doctors, nurses, and trained midwives, but exclude trained or untrained traditional birth attendants. Data in the tables are based on births in the five years preceding the survey and may therefore differ from the estimates in table 2.16.
- **Total fertility rate** is the number of children that would be born to a woman if she were to live to the end of her child-bearing years and bear children in accordance with current age-specific fertility rates. Data in the table are based on the information in the three years preceding the survey and may therefore differ from the estimates in table 2.16.
- **Exclusive breastfeeding** refers to the percentage of children ages 0–3 months who received only the breast milk in the 24 hours preceding the survey. These data differ from those in table 2.17 because the definition differs.

Data sources

Data on health gaps by income and gender are from an analysis of Demographic and Health Surveys by the World Bank and Macro International. Country reports are available at www.worldbank.org/povertyandhealth/countrydata.