



A banker made redundant



China's mines: the deadliest in the world



Child labour: an Indian girl scavenges for coal

Reducing the health inequalities associated with employment conditions

Fair and efficient government policies on labour and welfare can reduce health inequalities that accompany poor employment conditions and unemployment, explain **Joan Benach** and colleagues

The current economic recession has caused striking levels of unemployment, underemployment, and job insecurity globally. The International Labour Organization (ILO) estimated that the number of unemployed people was 212 million in 2009, and it projects the global unemployment rate in 2010 to be 6.5%, with a confidence interval ranging from 6.1% to 7%. In rich countries in the Organization for Economic Co-operation and Development more than 57 million people, or 10%, are unemployed in 2010,¹ the current unemployment rate in Spain is 20%, and in the United States the rate is around 10% using conservative estimates. The ILO has predicted that the impact of the economic crisis on vulnerable employment is likely to have increased the number of working poor—those living on \$1.25 (€0.80; C0.90) a day—by 215 million workers between 2008 and 2009, and that in 2009 there were between 1.48 and 1.59 billion vulnerable workers worldwide.² These developments will increase global health inequalities, and inequalities between social classes within countries, because unemployment and underemployment cluster among lower income countries and workers.³ In this article we explore the relation between unemployment, poor working conditions, and health, and argue that governments and public health agencies should recognise that fair employment conditions should be regarded as a human right.

Globalisation increases inequalities

Globalisation has increased the inequality in working conditions across regions, countries, social groups, and occupations. It has also generated substantial social inequalities in health. Worldwide, about 1000 workers, mainly located in poor regions and countries, die every day because of unsafe working conditions, and an additional 5000 people die from work related diseases.^{4,5} In rich regions, such as the European Union, long established hazards at work—for example, exposure to chemical products, radiation, or vibrations—have remained stable or slightly decreased in the past decade. Studies, however, report the increase of other hazards, such as work intensification and non-standard employment, and the strong links between these different hazards and health inequalities. For example, working class people tend to be employed in jobs that have poor psychosocial working conditions, and large and persistent health inequalities exist.^{6,7} In middle and low income countries, most workers are employed in agriculture or manufacturing. They face heavy physical work, the risk of injury, and the risk of poisonings from pesticides and biological hazards. Workers are unequally exposed to hazardous working conditions within countries and as a result health inequalities vary across occupation, gender, ethnicity, migrant status, and other forms of social stratification.⁸

Employment conditions are related to working conditions, yet are different. They are the terms under which a person is engaged in a job. These may be, but are often not, prescribed by law under a contract. Employment conditions range from full time permanent employment, to precarious employment, informal employment, child labour, and slavery or bonded labour. Employment relations—the individual and collective power relations at work—also affect employment conditions. Both are influenced by the labour market and welfare state policies of individual countries.^{8,9}

Employment and working conditions

In wealthy countries, employment conditions are usually regulated. In poor countries, by contrast, employment agreements tend not to be explicitly regulated, and a high proportion of people work in the informal sector. In both rich and poor countries, groups with high unemployment rates include workers without credentials, single mothers, ethnic minorities, young adults, and recent immigrants. In rich countries, workers with only primary education are three times as likely to be unemployed as those with tertiary education (see box). In middle and low income countries between half and three quarters of workers are informally employed, with women being over-represented in this group.

Children are among the most affected by global labour market inequalities. More than 300 million children (aged between 5 and 17 years)



A German worker dies when scaffolding collapses



The Calcutta stock exchange



A worker sprays crops in Indonesia

are economically active, and over two thirds are child labourers. Between 12 and 28 million people globally are enslaved. Most of them are in Asia, and at least 2.4 million people, mainly women and girls, are in forced labour as a result of human trafficking.⁶

Most of the data that show a link between ill health and job insecurity, underemployment and precarious employment, informal employment, child labour, and forced labour come from wealthy countries; little research has been conducted in middle and low income countries.⁸ The box shows some of the evidence linking employment conditions and health by employment type.

Employment relations

The more support and protection people have from

the welfare state, the greater the extent to which they can maintain their way of living when they do not have a job. Where social safety nets are adequate workers can exit the labour market if they need to and avoid turning to hazardous work or adverse working environments. Although workers and employers have a shared interest and responsibility in maintaining a healthy working environment, only the employer controls the terms and conditions of service, and their over-riding concern is to maximise profits.²¹ The key to understanding employment relations and the impact they have on the health of workers is to realise the importance of the bargaining power that workers have; a leverage which allows them to push for a stronger welfare state and better working conditions.^{8,22}

In private market economies, labour unions and

pro-labour social movements are the most effective institutional means to ensure safety at work.^{22,23} The relative power of employers, workers, and different types of employees has a profound influence on health and safety at work across welfare state regimes. Research has shown the important role played by the psychosocial work environment, including the amount of control and participation employees have in the workplace.²⁴ For example, analyses on three cohorts of middle aged civil servants in England, Japan, and Finland found that there were significant grade differences in physical functioning in all cohorts and in both men and women. Those with low socioeconomic status had worst health. However, the differences in health among non-manual workers were smaller in the Finnish cohort, suggesting that more equitable

EVIDENCE ON EMPLOYMENT CONDITIONS AND HEALTH

UNEMPLOYMENT

- A study in the European Union identified unemployment as one of the 10 most important contributors to the total burden of disease in the 1990s.¹⁹ In Britain it has been estimated that the direct effect of reducing unemployment has prevented up to 2500 premature deaths a year, but the indirect effects of being employed are thought to be far greater.²¹
- Unemployment increases rates of depression, particularly in young people who have never worked and who are usually the worst hit when jobs are scarce. Parasuicide rates in young men who are unemployed are 9.5 to 25 times higher than in employed young men.¹²
- Unemployed people are more likely to be ill, especially those who have never worked or have only had jobs that are badly paid.¹³

PRECAARIOUS EMPLOYMENT

- Job insecurity and downsizing have negative effects on self reported morbidity and mental health. These effects tend to increase with chronic exposure, and their impact is more detrimental among manual workers.^{14,15}
- Temporary workers are exposed to more work hazards than workers on permanent contracts. These hazards may include being in painful and tiring positions, having to listen to intense noise, carrying out repetitive movements, and exposure to psychosocial stressors.¹⁶
- Job precariousness has a detrimental impact on self reported health and mental health.¹⁷ How precarious a job is will be affected by the labour market and power relations in the workplace.¹⁸

INFORMAL WORKERS

- Informal workers are often more exposed to dangerous work environments, have higher risk for occupational injuries or diseases, and less favourable health indicators than those holding formal jobs.⁸
- Informal work is associated with individuals rating their health as poor, and it also affects how those people living in the same house as an informal worker rate their health.¹⁹
- Workers with no social security have worse health indicators than workers with some form of social security through their employment.²⁰

CHILD LABOURERS⁸

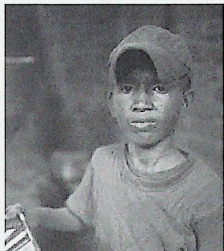
- More than one third of all child labourers are engaged in hazardous work.
- Exposure to hazards at work may be especially harmful to children. They are extremely vulnerable to biological or chemical agents because their immune system is immature, and they are not as capable as adults of supporting heavy workloads.

BONDED AND SLAVE LABOURERS⁸

- People in forced labour and slaves are exposed to the worst hazards, although information on these situations is extremely limited.



Human conveyor belts haul coal in China



A 13 year old unpaid apprentice in Bangladesh



A jeans factory in China

welfare regimes may help reduce the health gap.²⁵

The political tradition of a country is a key determinant of its labour laws, regulations, and level of social protection. Globally, the world may be divided into different types of labour markets, according to national incomes and countries' political economy.²⁶ These labour markets reflect the role of the state and, in wealthy countries, there is evidence that the relative power of labour institutions is linked to population health.²⁷ Wealthy countries with strong labour institutions, such as Sweden, tend to have the least harmful forms of employment relations, whereas equally wealthy but less labour friendly countries, such as the United States, have higher occupational fatality rates.^{22, 28} Only a few countries have policies for integrating employment policies into economic and social policies. These include the Netherlands and Denmark.²⁹ International institutions such as the United Nations, World Trade Organization, North American Free Trade Agreement, Association of Southeast Asian Nations, or the Southern Common Market should recognise fair employment conditions—that is, freedom from coercion, job security, a fair income, job protection, respect and dignity, workplace participation and enrichment, and lack of alienation—as universal human rights.⁴

Government policies

An important social effect of economic crises is the rapid increase in unemployment. This increase has direct and indirect effects on the health of workers. Direct effects include the generation of uncertainty, poverty, and social exclusion that can lead to mental health problems.^{17, 21} Indirectly, the pressure on workers increases. The threat of losing their jobs becomes a powerful disciplinary mechanism that is more powerful the higher the level of unemployment.³⁰ The social and population health impact of the present economic crisis will vary depending on which social policies are adopted in response.^{31, 32} Research suggests that the best way for govern-

ments to protect the health of their population is by investing in policies and practices that keep people employed, help those who lose their jobs cope with the negative effects of unemployment, and getting unemployed people back into work as soon as possible.³¹ Analyses also show that the beneficial effects of unemployment compensation are not equally distributed across different gender, family role, and social class categories—for example, the mediating role of social class in determining the impact of unemployment on mental health differs depending on sex and family roles.³³ Therefore unemployment insurance should be universal and achieve a substantial degree of income replacement to guarantee a healthy standard of living for all groups.

Governments can take action in several ways. They can make a large economic investments—for example, a “stimulus package,” and regulate the financial sector. They can also promote active labour policies, such as government led job creation, and pursue active labour market policies such as retraining and job placement.²⁹ Governments can also expand social protection through measures such as unemployment insurance, and income support.³² Research in 26 European countries suggests every \$10 per person investment in active labour market programmes reduces the effect of unemployment on suicides by 0.038%.

The role of health professionals

Health professionals play a crucial role in dealing with the health consequences of people who are unemployed, underemployed, or working in adverse environment or under less than optimal conditions. They must also be able to identify the employment and work related determinants leading to ill health in their patients. Health professionals can also assist in providing evidence to clarify the employment and work related health effects of the current crisis. They should also advocate for governments to adopt fairer and more effective

labour market and social policies to reduce employment related health inequalities.

Enacting such policies should be a central objective for governments. Multinational institutions, such as the ILO and WHO, can encourage this by setting out initiatives that prioritise the adoption of fair employment policies. At every level decision makers need to take on board the views of unions, social movements, and affected communities. International political, economic, and public health institutions should recognise fair employment conditions as universal human rights.³⁴ Healthy, fair employment will not occur if left to the market alone. It must be made a public health priority.

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- News: Doctors are one of the "linchpins" in closing the UK health inequalities gap (*BMJ* 2010;340:c3060)
- Observations: Crocodile tears for health inequality (*BMJ* 2010;340:c2970)



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- Professor Michael Marmot, chair of the World Health Organization's commission on social determinants of health, discusses the effect of the world's financial crisis on global health in a *BMJ* video at <http://www.bmj.com/video/>

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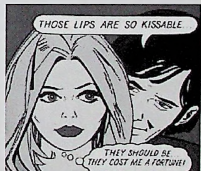
- This week's poll asks: "Is offering unemployment advice part of a family doctor's remit?"
- Cast your vote on [bmj.com](http://www.bmj.com)

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Things to be afraid of

Julian Sheather owns up to a fear of doctors. "I am a doctor myself—of philosophy, granted—and I work with doctors day in and day out. But put me in a patient's cap and wheel me before a medic and some traitor part of me will gibber and quake," he says. "It is not, I should stress, a fear of diagnosis, not a fear of bad news. It is a fear of doctors."

Joe Knight is concerned that media scares adversely affect teenagers like him: "Every day the government slaps yet more absurd age restrictions on the few fast activities where we can break a sweat and have fun. For example, a school ice skating trip had to be abandoned because the months of careful planning clearly weren't enough to prove that a small group of fourteen year old kids could safely navigate a skating session without someone dying or losing a vital limb."



Meanwhile, Andrew Burd struggles to define cosmetic surgery. "I have spent a considerable amount of time over the years considering the word 'cosmetic' and putting this into some sort of context," he writes. "My first realisation about the sensitivity of the term was overhearing the heated tea/coffee room conversations of my seniors talking about territory, training, cowboys, etc. That was some 30 years ago, and nothing much has changed."

Joe Collier blogs about Tamiflu stockpiling: "Because of four key clauses in the pricing contract drawn up between government and the drugs industry, we in the United Kingdom stand to lose little or nothing. The four particular clauses form part of the 2009 Pharmaceutical Price Regulation Scheme. The scheme is an agreement between the UK government and each of the drug companies that sell brand name medicines to the NHS. In brief, the scheme states that, taking into account all the drugs a company will sell to the NHS in the forthcoming year, there will be an agreed target maximum amount the NHS will pay."

- Read these blogs and others at <http://blogs.bmj.com/bmj>

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Health inequities

In general, the global reporting of health indicators focuses on national averages. However, data on the distribution of health and health services within countries and between population subgroups are equally important. Such data help to identify health inequities – unfair and avoidable differences in health and health service provision – that arise for example from socioeconomic factors (such as level of education, occupation and household wealth or income), from geographical location, and from ethnicity and gender.

This section presents data from 93 countries using three health indicators – percentage of births attended by skilled health personnel, measles immunization coverage among 1-year-olds, and under-five mortality rate – disaggregated according to urban or rural residence, household wealth and maternal educational level.

The main sources of the data are the Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) conducted between 2000 and 2010. For disaggregation by household wealth, the total population is classified into wealth quintiles based on relative differences in household wealth within the country rather than on an absolute wealth criterion. Although the estimates are subject to normal sample variability (which are usually indicated by confidence intervals), only the point estimates are shown in this section.

The data presented refer to ratios and differences between the most-advantaged and least-advantaged groups. However, these measures do not reflect the situation across all population groups (such as groups falling into the middle of wealth or education distributions) for which other measures are used.

Source:

WORLD HEALTH STATISTICS 2011

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<http://www.who.int/whosis/whostat/en/>

8. Health inequities

STATISTICS
OF THE
WORLD

Member State	Year	fig. 8 Births attended by skilled health personnel ^{a,b} (%)											
		Place of residence				Wealth quintile				Educational level of mother ^a			
		Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest
Afghanistan		...	...	...	...	...	...	...	...	...	...	...	...
Albania ¹⁴	2008-2009	99	100	1.0	1	98	100	1.0	2	...	...	...	...
Algeria ^a	2006	92	98	1.1	6	...	...	...	...	...	...	...	...
Andorra		...	...	...	...	...	...	...	...	...	...	...	...
Angola		...	...	...	...	...	...	...	...	...	...	...	...
Antigua and Barbuda		...	...	...	...	...	...	...	...	...	...	...	...
Argentina		...	...	...	...	...	...	...	...	...	...	...	...
Armenia ⁴	2005	98	99	1.0	1	93	100	1.1	7	...	...	...	...
Australia		...	...	...	...	...	...	...	...	...	...	...	...
Austria		...	...	...	...	...	...	...	...	...	...	...	...
Azerbaijan	2006	81	97	1.2	16	78	100	1.3	22	83	89	1.1	5
Bahamas		...	...	...	...	...	...	...	...	...	...	...	...
Bahrain		...	...	...	...	...	...	...	...	...	...	...	...
Bangladesh	2007	13	37	2.8	23	5	51	10.3	46	5	33	7.4	29
Barbados		...	...	...	...	...	...	...	...	...	...	...	...
Belarus ^a	2005	100	100	1.0	0	100	100	1.0	0	...	...	...	...
Belgium		...	...	...	...	...	...	...	...	...	...	...	...
Belize ^b	2006	93	99	1.1	7	...	...	...	...	...	...	...	...
Benin	2006	74	86	1.2	12	56	97	1.7	42	72	98	1.4	26
Bhutan		...	...	...	...	...	...	...	...	...	...	...	...
Bolivia (Plurinational State of)	2008	51	88	1.7	38	38	99	2.6	61	40	91	2.3	51
Bosnia and Herzegovina ^a	2006	100	100	1.0	0	99	100	1.0	0	...	...	...	...
Botswana		...	...	...	...	...	...	...	...	...	...	...	...
Brazil		...	...	...	...	...	...	...	...	...	...	...	...
Brunei Darussalam		...	...	...	...	...	...	...	...	...	...	...	...
Bulgaria		...	...	...	...	...	...	...	...	...	...	...	...
Burkina Faso	2003	31	88	2.9	57	39	91	2.3	52	33	95	2.9	62
Burundi ^a	2005	32	75	2.4	43	25	55	2.2	30	30	84	2.8	54
Cambodia	2005	39	70	1.8	31	21	90	4.3	69	22	80	3.6	58
Cameroon	2004	44	84	1.9	40	29	95	3.2	65	23	92	4.0	69
Canada		...	...	...	...	...	...	...	...	...	...	...	...
Cape Verde ¹	2005	64	91	1.4	27	...	...	...	...	...	...	...	...
Central African Republic ^b	2006	35	83	2.4	48	27	89	3.3	62	34	88	2.6	55
Chad	2004	6	46	7.1	39	4	55	15.4	52	9	67	7.2	57
Chile		...	...	...	...	...	...	...	...	...	...	...	...
China		...	...	...	...	...	...	...	...	...	...	...	...
Colombia	2005	77	97	1.3	20	72	99	1.4	27	67	97	1.4	30
Comoros		...	...	...	...	...	...	...	...	...	...	...	...
Congo	2005	74	97	1.3	23	67	98	1.5	32	62	93	1.5	30
Cook Islands		...	...	...	...	...	...	...	...	...	...	...	...
Costa Rica		...	...	...	...	...	...	...	...	...	...	...	...
Côte d'Ivoire ^a	2006	40	84	2.1	44	29	95	3.3	66	47	87	1.8	40
Croatia		...	...	...	...	...	...	...	...	...	...	...	...
Cuba		...	...	...	...	...	...	...	...	...	...	...	...
Cyprus		...	...	...	...	...	...	...	...	...	...	...	...
Czech Republic		...	...	...	...	...	...	...	...	...	...	...	...
Democratic People's Republic of Korea		...	...	...	...	...	...	...	...	...	...	...	...
Democratic Republic of the Congo	2007	63	91	1.4	28	59	98	1.7	39	59	89	1.5	29
Denmark		...	...	...	...	...	...	...	...	...	...	...	...
Djibouti ¹	2006	40	95	2.3	54	...	...	...	...	...	...	...	...

WHO Measles immunization coverage among 1-year-olds ** (%)

Under-five mortality rate ** (probability of dying by age 5 per 1000 live births)

Measles immunization coverage among 1-year-olds ** (%)												Under-five mortality rate ** (probability of dying by age 5 per 1000 live births)											
Place of residence				Wealth quintile				Educational level of mother*				Place of residence				Wealth quintile				Educational level of mother*			
Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Rural	Urban	Ratio rural-urban	Difference rural-urban	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest
95	100	1.1	5	100	(100)	1.0	0	...	...	...	...	28	13	2.2	15	...	...	...	...	...	...	...	...
...
...
80	67	0.8	-13	72	(62)	0.8	-11	...	...	...	...	42	26	1.6	16	52	23	2.2	29	...	...	...
...
...
44	64	1.5	20	50	83	1.7	34	46	55	1.2	9	64	52	1.2	12	63	41	1.5	22	68	58	1.2	10
...
...
82	88	1.1	6	80	89	1.1	9	74	90	1.2	16	77	63	1.2	14	86	43	2.0	43	93	52	1.8	41
...
...
99	98	1.0	-1	100	98	1.0	-2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...
...
79	91	1.2	12	...	...	...	...	...	...	...	...	27	26	1.0	1	...	...	...	...	...	...	...	...
...
...
57	68	1.2	11	48	76	1.6	28	57	82	1.5	26	145	116	1.3	30	151	83	1.8	68	143	78	1.8	65
...
...
87	85	1.0	-2	88	88	1.0	0	89	87	1.0	-3	99	55	1.8	44	116	31	3.7	85	134	44	3.1	91
...
...
80	74	0.9	-6	72	76	1.1	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...
...
53	73	1.4	20	48	71	1.5	23	54	80	1.5	26	202	136	1.5	65	206	144	1.4	62	198	108	1.8	90
...
...
78	85	1.1	7	77	79	1.0	3	74	87	1.2	13	178	137	1.3	41	190	128	1.5	62	195	55	3.5	140
...
...
77	79	1.0	3	70	82	1.2	13	64	91	1.4	27	111	76	1.5	35	127	43	3.0	84	136	53	2.6	83
...
...
58	73	1.2	14	52	83	1.6	31	46	79	1.7	33	169	119	1.4	50	189	88	2.2	101	186	93	2.0	92
...
...
87	90	1.0	3	...	...	...	...	...	...	...	...	44	53	0.8	-9	...	...	...	...	...	...	...	...
...
...
19	38	2.0	18	8	38	4.6	30	18	54	3.0	36	208	179	1.2	28	176	187	0.9	-11	200	143	1.4	57
...
...
76	85	1.1	9	69	90	1.3	21	70	86	1.2	16	33	23	1.4	10	39	16	2.4	23	51	20	2.5	30
...
...
57	76	1.3	20	49	84	1.7	36	44	75	1.7	31	136	108	1.3	28	135	85	1.6	51	202	101	2.0	101
...
...
78	94	1.2	16	69	98	1.4	29	80	95	1.2	16	...	...	...	...	...	...	...	...	...	...	...	...
...
...
56	73	1.3	17	51	85	1.7	34	49	77	1.6	28	177	122	1.5	55	184	97	1.9	87	209	112	1.9	97
...
...
...	...	...	...	...	...	...	...	...	...	...	...	73	95	0.8	-22	...	...	...	...	...	...	...	...

Table 8

8. Health inequities

Member State	Year	Moms: Births attended by skilled health personnel ^{a,b} (%)											
		Place of residence				Wealth quintile				Educational level of mother ^a			
		Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest
Dominica		...	...	...	...	...	...	...	...	...	...	...	...
Dominican Republic	2007	94	96	1.0	2	89	98	1.1	9	86	97	1.1	12
Ecuador		...	...	...	...	...	...	...	...	...	...	...	...
Egypt	2008	72	90	1.2	18	55	97	1.8	42	60	87	1.5	28
El Salvador		...	...	...	...	...	...	...	...	...	...	...	...
Equatorial Guinea		...	...	...	...	...	...	...	...	...	...	...	...
Eritrea	2002	10	65	6.2	54	6	85	14.7	79	12	88	7.3	76
Estonia		...	...	...	...	...	...	...	...	...	...	...	...
Ethiopia	2005	3	45	16.6	42	1	27	29.7	26	2	58	24.0	55
Fiji		...	...	...	...	...	...	...	...	...	...	...	...
Finland		...	...	...	...	...	...	...	...	...	...	...	...
France		...	...	...	...	...	...	...	...	...	...	...	...
Gabon	2000	69	93	1.3	24	67	97	1.4	30	84	93	1.1	9
Gambia ^a	2006	43	83	1.9	40	28	89	3.1	60	49	85	1.7	36
Georgia ^a	2005	98	99	1.0	1	95	99	1.0	3	...	...	...	...
Germany		...	...	...	...	...	...	...	...	...	...	...	...
Ghana	2008	43	84	2.0	41	24	95	3.9	70	36	78	2.2	42
Greece		...	...	...	...	...	...	...	...	...	...	...	...
Grenada		...	...	...	...	...	...	...	...	...	...	...	...
Guatemala		...	...	...	...	...	...	...	...	...	...	...	...
Guinea	2005	26	81	3.1	55	15	87	6.0	73	33	84	2.6	51
Guinea-Bissau ^a	2006	27	69	2.6	42	19	79	4.0	59	28	80	2.9	52
Guyana ^a	2006	82	89	1.1	7	64	93	1.5	29	...	...	...	...
Haiti	2005-2006	15	47	3.0	31	6	68	10.5	61	9	60	6.6	51
Honduras	2005-2006	50	90	1.8	40	33	99	3.0	65	37	96	2.6	59
Hungary		...	...	...	...	...	...	...	...	...	...	...	...
Iceland		...	...	...	...	...	...	...	...	...	...	...	...
India	2005-2006	37	73	2.0	36	19	89	4.6	69	26	75	2.9	49
Indonesia	2007	63	88	1.4	25	44	96	2.2	52	31	87	2.8	56
Iran (Islamic Republic of)		...	...	...	...	...	...	...	...	...	...	...	...
Iraq ^a	2006	78	95	1.2	17	...	...	...	...	79	96	1.2	17
Ireland		...	...	...	...	...	...	...	...	...	...	...	...
Israel		...	...	...	...	...	...	...	...	...	...	...	...
Italy		...	...	...	...	...	...	...	...	...	...	...	...
Jamaica ^a	2005	94	99	1.0	4	...	...	...	...	...	...	...	...
Japan		...	...	...	...	...	...	...	...	...	...	...	...
Jordan	2007	99	99	1.0	1	98	100	1.0	2	94	99	1.1	5
Kazakhstan ^a	2006	100	100	1.0	0	100	100	1.0	0	...	...	...	...
Kenya	2008-2009	37	75	2.0	38	21	82	3.9	61	20	73	3.7	54
Kiribati		...	...	...	...	...	...	...	...	...	...	...	...
Kuwait		...	...	...	...	...	...	...	...	...	...	...	...
Kyrgyzstan ^a	2006	96	100	1.0	4	93	100	1.1	7	...	...	...	...
Lao People's Democratic Republic ^a	2006	11	68	6.2	57	3	81	27.1	78	3	63	18.5	59
Latvia		...	...	...	...	...	...	...	...	...	...	...	...
Lebanon		...	...	...	...	...	...	...	...	...	...	...	...
Lesotho ^a	2009	54	88	1.6	35	35	90	2.6	55	40	80	2.0	41
Liberia	2007	32	79	2.5	47	26	81	3.2	56	36	75	2.1	39
Libyan Arab Jamahiriya		...	...	...	...	...	...	...	...	...	...	...	...
Lithuania		...	...	...	...	...	...	...	...	...	...	...	...
Luxembourg		...	...	...	...	...	...	...	...	...	...	...	...

Measles immunization coverage among 1-year-olds^{a,c} (%)Under-five mortality rate^{a,c} (probability of dying by age 5 per 1000 live births)

Measles immunization coverage among 1-year-olds ^{a,c} (%)								Under-five mortality rate ^{a,c} (probability of dying by age 5 per 1000 live births)															
Place of residence				Wealth quintile				Educational level of mother ^a				Place of residence				Wealth quintile				Educational level of mother ^a			
Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Rural	Urban	Ratio rural-urban	Difference rural-urban	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest
81	78	1.0	-3	73	87	1.2	14	53	83	1.6	30	37	37	1.0	1	53	28	1.9	25	57	29	2.0	28
98	98	1.0	0	97	99	1.0	2	98	99	1.0	1	36	29	1.3	8	49	19	2.6	30	44	26	1.7	18
9	94	1.2	15	80	95	1.2	15	77	96	1.2	19	117	86	1.4	31	100	65	1.5	35	121	59	2.1	62
32	65	2.0	33	25	53	2.1	28	30	63	2.1	33	135	98	1.4	37	130	92	1.4	38	139	54	2.6	85
37	61	1.6	24	34	71	2.1	37	42	64	1.5	22	100	88	1.1	12	93	55	1.7	38	112	87	1.3	25
93	91	1.0	-3	95	91	1.0	-3	92	95	1.0	2	150	96	1.6	54	158	72	2.2	86	140	66	2.1	74
88	93	1.1	5	88	95	1.1	7	86	93	1.1	7	91	75	1.2	16	103	60	1.7	43	103	67	1.5	35
49	55	1.1	6	42	57	1.4	15	48	68	1.4	20	204	133	1.5	71	217	113	1.9	104	194	92	2.1	102
72	83	1.2	11	70	90	1.3	20	72	87	1.2	15	253	250	1.0	3	...	...	...	...	...	...	...	...
96	95	1.0	-1	94	100	1.1	6	...	...	...	...	50	34	1.5	16	...	...	...	...	...	...	...	...
56	62	1.1	6	50	67	1.3	17	52	68	1.3	16	114	78	1.5	36	125	55	2.3	70	123	65	1.9	57
86	84	1.0	-2	85	86	1.0	0	81	86	1.1	5	43	29	1.5	14	50	20	2.5	30	55	20	2.8	35
54	72	1.3	18	40	85	2.1	45	41	80	2.0	39	94	61	1.5	33	118	39	3.0	78	106	49	2.2	57
73	82	1.1	10	63	85	1.3	22	49	83	1.7	34	60	38	1.6	22	77	32	2.4	46	94	38	2.5	56
60	76	1.3	16	...	...	...	...	60	79	1.3	19	41	41	1.0	0	...	...	...	...	49	37	1.3	12
95	88	0.9	-7	...	...	...	...	...	...	...	...	25	36	0.7	-11	...	...	...	...	...	...	...	...
91	95	1.0	4	92	96	1.0	4	85	95	1.1	10	27	22	1.2	5	30	27	1.1	3	...	...	...	...
99	100	1.0	0	100	99	1.0	-1	...	...	...	...	43	30	1.4	12	...	...	...	...	...	...	...	...
83	90	1.1	7	76	94	1.2	18	79	92	1.2	13	86	75	1.1	11	98	69	1.4	29	86	59	1.5	27
38	54	1.4	17	33	60	1.8	27	31	55	1.8	24	50	35	1.4	15	...	...	...	...	...	...	...	...
78	90	1.2	13	68	92	1.4	24	...	...	...	...	110	89	1.2	21	107	80	1.3	27	76	88	0.9	-12
56	77	1.4	20	45	86	1.9	41	58	78	1.3	20	146	132	1.1	15	138	117	1.2	21	151	119	1.3	33

8. Health inequities

Member State	Year	Births attended by skilled health personnel** (%)											
		Place of residence				Wealth quintile				Educational level of mother*			
		Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest
Madagascar	2008-2009	39	82	2.1	42	22	90	4.1	68	23	76	3.3	53
Malawi	2004	53	84	1.6	31	47	85	1.8	38	43	83	2.0	41
Malaysia	...	...	...	...	...	...	...	...	...	...	...	...	...
Maldives	2009	94	99	1.1	6	90	99	1.1	9	86	99	1.2	13
Mali	2006	38	80	2.1	42	35	86	2.5	51	44	92	2.1	48
Malta	...	...	...	...	...	...	...	...	...	...	...	...	...
Marshall Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Mauritania ^b	2007	39	90	2.3	51	21	95	4.6	75	45	92	2.0	47
Mauritius	...	...	...	...	...	...	...	...	...	...	...	...	...
Mexico	...	...	...	...	...	...	...	...	...	...	...	...	...
Micronesia (Federated States of)	...	...	...	...	...	...	...	...	...	...	...	...	...
Monaco	...	...	...	...	...	...	...	...	...	...	...	...	...
Mongolia ^b	2005	99	100	1.0	1	98	100	1.0	2	...	...	...	...
Montenegro ^{b,c}	2005	98	100	1.0	2	98	100	1.0	3	...	...	...	...
Morocco	2003-2004	40	85	2.2	46	30	95	3.2	66	49	94	1.9	46
Mozambique	2003	34	81	2.4	47	25	89	3.6	64	31	95	3.0	63
Myanmar	...	...	...	...	...	...	...	...	...	...	...	...	...
Namibia	2006-2007	74	94	1.3	20	60	98	1.6	38	50	92	1.8	42
Nauru	...	...	...	...	...	...	...	...	...	...	...	...	...
Nepal	2006	19	52	2.8	33	5	58	12.0	53	11	53	4.7	41
Netherlands	...	...	...	...	...	...	...	...	...	...	...	...	...
New Zealand	...	...	...	...	...	...	...	...	...	...	...	...	...
Nicaragua	2001	83	97	1.2	13	78	99	1.3	22	77	98	1.3	21
Niger	2006	8	71	8.5	62	5	59	11.8	54	13	81	6.1	67
Nigeria	2008	28	65	2.4	38	8	86	10.3	77	12	77	6.6	65
Niue	...	...	...	...	...	...	...	...	...	...	...	...	...
Norway	...	...	...	...	...	...	...	...	...	...	...	...	...
Oman	...	...	...	...	...	...	...	...	...	...	...	...	...
Pakistan	2006-2007	30	60	2.0	30	16	77	4.8	61	27	74	2.8	47
Palau	...	...	...	...	...	...	...	...	...	...	...	...	...
Panama	...	...	...	...	...	...	...	...	...	...	...	...	...
Papua New Guinea	...	...	...	...	...	...	...	...	...	...	...	...	...
Paraguay	...	...	...	...	...	...	...	...	...	...	...	...	...
Peru ¹	2009	61	94	1.5	33	54	100	1.9	46	55	93	1.7	39
Philippines	2008	98	99	1.0	1	97	100	1.0	2	90	99	1.1	10
Poland	...	...	...	...	...	...	...	...	...	...	...	...	...
Portugal	...	...	...	...	...	...	...	...	...	...	...	...	...
Qatar	...	...	...	...	...	...	...	...	...	...	...	...	...
Republic of Korea	...	...	...	...	...	...	...	...	...	...	...	...	...
Republic of Moldova ¹	2005	99	100	1.0	0	99	100	1.0	1	100	100	1.0	-1
Romania	...	...	...	...	...	...	...	...	...	...	...	...	...
Russian Federation	...	...	...	...	...	...	...	...	...	...	...	...	...
Rwanda	2007-2008	49	70	1.4	21	43	71	1.7	28	39	82	2.1	43
Saint Kitts and Nevis	...	...	...	...	...	...	...	...	...	...	...	...	...
Saint Lucia	...	...	...	...	...	...	...	...	...	...	...	...	...
Saint Vincent and the Grenadines	...	...	...	...	...	...	...	...	...	...	...	...	...
Samoa ¹	2009	78	94	1.2	17	66	95	1.4	29	...	...	...	...
San Marino	...	...	...	...	...	...	...	...	...	...	...	...	...
Sao Tome and Principe ¹	2008-2009	75	89	1.2	14	74	93	1.3	19	73	88	1.2	15
Saudi Arabia	...	...	...	...	...	...	...	...	...	...	...	...	...

Measles immunization coverage among 1-year-olds^{a,c} (%)Under-five mortality rate^{a,d} (probability of dying by age 5 per 1000 live births)

Measles immunization coverage among 1-year-olds ^{a,c} (%)								Under-five mortality rate ^{a,d} (probability of dying by age 5 per 1000 live births)															
Place of residence				Wealth quintile				Educational level of mother ^e				Place of residence				Wealth quintile				Educational level of mother ^e			
Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Rural	Urban	Ratio rural-urban	Difference rural-urban	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest
68	87	1.3	20	51	91	1.8	40	48	87	1.8	39	84	63	1.3	21	106	48	2.2	58	98	54	1.8	44
78	87	1.1	9	67	88	1.3	21	72	94	1.3	22	164	116	1.4	48	183	111	1.6	72	183	86	2.1	97
95	94	1.0	-2	96	94	1.0	-2	90	95	1.1	5	28	23	1.2	5	28	21	1.4	8	47	12	3.8	35
66	76	1.2	10	68	78	1.2	11	66	90	1.4	24	234	158	1.5	76	233	124	1.9	110	223	102	2.2	122
...
79	72	0.9	-7	67	79	1.2	12	70	80	1.1	10	127	114	1.1	14	144	87	1.6	57	118	89	1.3	29
...
86	90	1.0	4	88	91	1.0	3	...	...	...	...	69	31	2.2	38	...	...	...	...	...	...	...	...
82	84	1.0	3	(83)	(78)	0.9	-4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
86	94	1.1	8	83	98	1.2	15	88	95	1.1	9	69	38	1.8	31	78	26	3.0	52	63	27	2.3	36
71	91	1.3	20	61	96	1.6	36	66	99	1.5	34	192	143	1.3	49	196	108	1.8	88	201	86	2.3	115
82	86	1.0	4	70	95	1.4	25	57	91	1.6	34	76	60	1.3	16	92	30	3.1	63	79	54	1.5	25
85	89	1.1	4	73	95	1.3	21	78	99	1.3	21	84	47	1.8	36	98	47	2.1	51	93	32	2.9	60
...
74	77	1.0	3	76	94	1.2	18	69	73	1.0	3	55	34	1.6	21	64	19	3.3	45	72	25	2.9	47
42	72	1.7	30	32	74	2.3	41	43	84	2.0	42	231	139	1.7	91	206	157	1.3	49	222	92	2.4	130
34	59	1.8	25	17	75	4.3	58	19	69	3.6	50	191	121	1.6	70	219	87	2.5	132	210	107	2.0	103
...
56	69	1.2	13	36	76	2.1	39	51	81	1.6	31	100	78	1.3	21	121	60	2.0	61	102	62	1.6	40
...
77	76	1.0	-2	75	79	1.0	3	65	77	1.2	12	35	21	1.7	14	34	17	2.0	17	...	...	...	...
82	87	1.1	5	71	91	1.3	20	33	89	2.8	57	46	28	1.7	19	59	17	3.4	41	136	30	4.5	106
...
92	88	1.0	-4	(91)	91	1.0	0	...	...	...	...	30	20	1.5	9	29	17	1.7	12	...	...	...	...
...
90	92	1.0	2	89	92	1.0	3	86	95	1.1	9	142	87	1.6	55	161	84	1.9	77	174	43	4.0	131
...
67	48	0.7	-19	65	67	1.0	3	...	...	...	...	17	3	5.7	14	23	7	3.3	16	...	...	...	...
86	82	0.9	-4	79	84	1.1	5	...	...	...	...	69	74	0.9	-5	90	28	3.2	62	138	49	2.8	89
...

8. Health inequities

Member State	Year	Fig. 8.1 Births attended by skilled health personnel ** (%)											
		Place of residence				Wealth quintile				Educational level of mother†			
		Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest
Senegal	2005	33	85	2.5	51	20	89	4.4	69	42	88	2.1	45
Serbia ^b	2005	99	99	1.0	0	98	100	1.0	2	...	...	...	...
Seychelles	...	...	...	...	...	...	...	...	...	...	...	...	...
Sierra Leone	2008	33	67	2.0	34	28	71	2.5	43	36	73	2.0	37
Singapore	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovakia	...	...	...	...	...	...	...	...	...	...	...	...	...
Slovenia	...	...	...	...	...	...	...	...	...	...	...	...	...
Solomon Islands	...	...	...	...	...	...	...	...	...	...	...	...	...
Somalia ^b	2006	15	65	4.5	51	11	77	7.2	66	25	73	3.0	48
South Africa ¹	2003	85	94	1.1	9	...	...	...	...	...	...	...	...
Spain	...	...	...	...	...	...	...	...	...	...	...	...	...
Sri Lanka	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudan	...	...	...	...	...	...	...	...	...	...	...	...	...
Suriname ^b	2006	82	95	1.2	13	81	96	1.2	15	75	95	1.3	20
Swaziland	2006-2007	70	88	1.3	18	51	92	1.8	42	57	84	1.5	27
Sweden	...	...	...	...	...	...	...	...	...	...	...	...	...
Switzerland	...	...	...	...	...	...	...	...	...	...	...	...	...
Syrian Arab Republic ^b	2006	88	98	1.1	9	78	99	1.3	21	...	...	...	...
Tajikistan ^a	2005	81	89	1.1	8	70	91	1.3	21	...	...	...	...
Thailand ^a	2005-2006	97	99	1.0	3	93	100	1.1	7	81	99	1.2	18
The former Yugoslav Republic of Macedonia ^a	2005-2006	98	98	1.0	0	95	100	1.0	5	89	100	1.1	11
Timor-Leste ¹	2009-2010	21	59	2.9	38	11	69	6.5	58	14	50	3.7	36
Togo ^b	2006	40	93	2.3	54	30	97	3.3	67	44	89	2.0	45
Tonga	...	...	...	...	...	...	...	...	...	...	...	...	...
Trinidad and Tobago ^{2b}	2006	...	...	...	...	98	100	1.0	2	...	...	...	...
Tunisia ^a	2006	...	...	...	...	...	...	...	...	...	...	...	...
Turkey ¹	2003	69	90	1.3	21	...	...	...	...	...	...	...	...
Turkmenistan	2000	97	98	1.0	2	97	98	1.0	2	93	97	1.0	5
Tuvalu	...	...	...	...	...	...	...	...	...	...	...	...	...
Uganda	2006	38	80	2.1	43	28	77	2.7	48	26	76	2.9	50
Ukraine	2007	98	99	1.0	1	97	99	1.0	2	100	99	1.0	-1
United Arab Emirates	...	...	...	...	...	...	...	...	...	...	...	...	...
United Kingdom	...	...	...	...	...	...	...	...	...	...	...	...	...
United Republic of Tanzania	2004-2005	47	83	1.8	36	39	90	2.3	51	40	89	2.2	49
United States of America	...	...	...	...	...	...	...	...	...	...	...	...	...
Uruguay	...	...	...	...	...	...	...	...	...	...	...	...	...
Uzbekistan ^a	2006	100	100	1.0	0	100	100	1.0	0	...	...	...	...
Vanuatu ^{6a}	2007	72	87	1.2	15	55	90	1.6	35	51	86	1.7	35
Venezuela (Bolivarian Republic of)	...	...	...	...	...	...	...	...	...	...	...	...	...
Viet Nam ¹	2002	82	99	1.2	17	58	100	1.7	42	42	94	2.3	52
Yemen ^a	2006	26	62	2.3	35	17	74	4.3	57	27	61	2.3	34
Zambia	2007	31	83	2.7	52	27	91	3.4	64	24	73	3.1	49
Zimbabwe	2005-2006	58	94	1.6	36	46	95	2.1	49	35	81	2.3	46

Measles immunization coverage among 1-year-olds^{1,2} (%)Under-five mortality rate^{3,4} (probability of dying by age 5 per 1000 live births)

Measles immunization coverage among 1-year-olds ^{1,2} (%)								Under-five mortality rate ^{3,4} (probability of dying by age 5 per 1000 live births)															
Place of residence				Wealth quintile				Educational level of mother ⁵				Place of residence				Wealth quintile				Educational level of mother ⁵			
Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Rural	Urban	Ratio rural-urban	Difference rural-urban	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest	Lowest	Highest	Ratio lowest-highest	Difference lowest-highest
71	77	1.1	6	71	81	1.1	10	69	95	1.4	26	160	91	1.8	69	183	64	2.8	119	152	60	2.5	92
89	85	1.0	-4	87	84	1.0	-3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58	65	1.1	6	56	68	1.2	13	56	75	1.3	19	168	167	1.0	1	211	145	1.5	66	170	130	1.3	40
23	40	1.8	17	22	47	2.1	25	24	48	2.0	25	136	134	1.0	2	...	...	...	...	...	...	...	...
68	59	0.9	-9	...	...	...	...	...	...	...	...	57	51	1.1	6	...	...	...	...	...	...	...	...
80	82	1.0	2	...	...	...	...	80	82	1.0	3	39	38	1.0	1	...	...	...	...	...	...	...	...
91	95	1.0	4	89	93	1.0	4	84	93	1.1	9	105	107	1.0	-2	118	101	1.2	17	150	95	1.6	55
91	94	1.0	3	89	97	1.1	9	...	...	...	...	24	19	1.3	5	22	20	1.1	2	...	...	...	...
90	96	1.1	6	89	96	1.1	8	...	...	...	...	83	70	1.2	13	...	...	...	...	...	...	...	...
96	96	1.0	0	96	99	1.0	3	90	96	1.1	6	...	...	...	...	...	...	...	...	...	...	...	...
88	89	1.0	2	80	93	1.2	13	71	92	1.3	21	26	10	2.6	16	...	...	...	...	...	...	...	...
66	74	1.1	9	54	75	1.4	21	59	76	1.3	17	87	61	1.4	26	87	52	1.7	35	...	...	...	...
61	67	1.1	6	57	72	1.3	15	50	82	1.6	32	143	73	2.0	70	150	62	2.4	88	145	64	2.3	81
97	99	1.0	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
69	84	1.2	15	...	...	...	...	...	...	...	...	50	30	1.7	20	...	...	...	...	...	...	...	...
92	82	0.9	-10	91	80	0.9	-11	74	88	1.2	14	100	73	1.4	27	106	70	1.5	36	133	88	1.5	45
67	77	1.1	10	66	73	1.1	7	64	82	1.3	18	147	115	1.3	32	172	108	1.6	64	164	91	1.8	73
78	90	1.2	12	65	91	1.4	26	65	90	1.4	25	138	108	1.3	31	137	93	1.5	44	160	76	2.1	84
98	97	1.0	0	97	98	1.0	1	...	...	...	...	59	51	1.2	8	72	42	1.7	30	...	...	...	...
53	50	0.9	-3	41	(51)	1.2	10	(28)	49	1.7	21	32	27	1.2	5	...	...	...	...	...	...	...	...
81	94	1.2	14	64	98	1.5	33	49	93	1.9	44	36	16	2.2	19	53	16	3.3	37	66	29	2.3	38
59	80	1.4	22	52	86	1.6	33	60	81	1.4	21	86	57	1.5	29	118	37	3.2	81	...	...	...	...
84	89	1.1	5	88	94	1.1	7	82	90	1.1	8	139	132	1.1	7	124	110	1.1	14	144	105	1.4	39
63	72	1.1	8	54	74	1.4	20	30	71	2.3	41	72	64	1.1	8	72	57	1.3	15	69	68	1.0	1

8. Health inequities

SDG 3: GOOD HEALTH AND WELL-BEING
 Target 3.6: HALVE GLOBAL ROAD TRAFFIC DEATHS AND INJURIES BY 2020

Member State	Year	MDG: Births attended by skilled health personnel** (%)											
		Place of residence				Wealth quintile				Educational level of mother†			
		Rural	Urban	Ratio urban-rural	Difference urban-rural	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest	Lowest	Highest	Ratio highest-lowest	Difference highest-lowest

RANGES OF COUNTRY VALUES

Minimum	3	37	...	...	1	27	...	...	2	33	...	...
Median	63	89	...	...	45	95	...	...	40	88	...	...
Maximum	100	100	...	...	100	100	...	...	100	100	...	...

Mid		Measles immunization coverage among 1-year-olds ** (%)				High		Under-five mortality rate** (probability of dying by age 5 per 1000 live births)			
Place of residence		Wealth quintile		Educational level of mother*		Place of residence		Wealth quintile		Educational level of mother*	
Rural	Urban	Lowest	Highest	Lowest	Highest	Rural	Urban	Lowest	Highest	Lowest	Highest
Ratio urban-rural	Ratio urban-rural	Ratio highest-lowest	Ratio highest-lowest	Ratio highest-lowest	Ratio highest-lowest	Ratio rural-urban	Ratio rural-urban	Ratio lowest-highest	Ratio lowest-highest	Ratio lowest-highest	Ratio lowest-highest
Difference urban-rural	Difference urban-rural	Difference highest-lowest	Difference highest-lowest	Difference highest-lowest	Difference highest-lowest	Difference rural-urban	Difference rural-urban	Difference lowest-highest	Difference lowest-highest	Difference lowest-highest	Difference lowest-highest
19	38	8	38	18	48	17	3	22	7	44	12
78	84	70	86	64	85	24	63	112	59	186	64
9	100	100	100	98	99	253	250	233	187	223	143

Table 8