

# Maternal and Newborn Health Disparities Kenya



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# Maternal and Newborn Health Disparities in Kenya

## Key Facts

### Kenya reference table

Demographic indicators		
Total population (thousands) <sup>1</sup>	2015	46,050
Total live births (thousands) <sup>1</sup>	2015	1,571
Total Fertility Rate (number of children per woman) <sup>1</sup>	2015	4
Adolescent birth rate (per 1,000 women 15-19) <sup>10</sup>	2013	101
Impact indicators		
Maternal mortality ratio (per 100,000 live births) <sup>4</sup>	2015	510
Average annual rate of MMR reduction between 1990 and 2015 (%) <sup>5</sup>	2015	1
Lifetime risk of maternal death: 1 in x <sup>4</sup>	2015	42
Stillbirth rate (per 1,000 total births) <sup>6</sup>	2015	23
Preterm birth rate (per 100 live births) <sup>7</sup>	2010	12
Under-five mortality rate (per 1,000 live births) <sup>3</sup>	2015	49
Under-five deaths that are newborn (%) <sup>3</sup>	2015	45
Neonatal mortality rate (per 1,000 live births) <sup>3</sup>	2015	22
Neonatal deaths (thousands) <sup>3</sup>	2015	34
Service Delivery		
Availability of EmONC Services (% of minimum acceptable level) <sup>8</sup>	2003	54
Physician density (per 1,000 population) <sup>9</sup>	2013	0.2
Nurse and midwife density (per 1,000 population) <sup>9</sup>	2013	0.9

# Maternal and Newborn Health Disparities

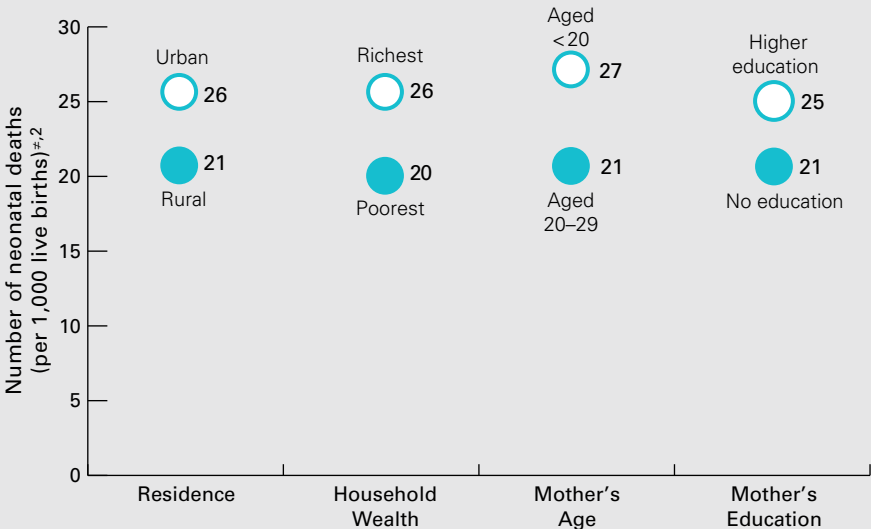
## Kenya

In 2015, approximately 1,600,000 babies were born in Kenya, or around 4,300 every day.<sup>1</sup>  
 Among young women (aged 20-24), 23 percent gave birth by age 18.<sup>2</sup>  
 Approximately 92 babies will die each day before reaching their first month<sup>3</sup>; 96 stillbirths occur every day.<sup>6</sup>

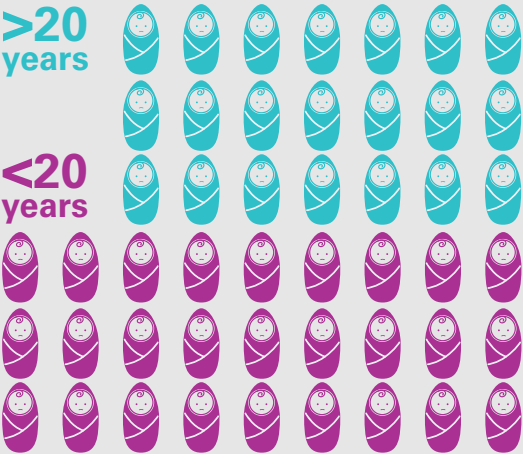
### Neonatal mortality rate:

Kenya's neonatal mortality rate (NMR)<sup>4</sup> is 22 deaths per 1,000 live births.<sup>3</sup>  
 NMR<sup>5</sup> in rural areas is 21 deaths per 1,000 live births and 26 deaths per 1,000 live births in urban areas for an urban-to-rural NMR ratio of 1.2.<sup>2</sup>  
 NMR<sup>5</sup> among the poorest households is 20 neonatal deaths per 1,000 live births, compared to 26 deaths per 1,000 live births among the richest households.<sup>2</sup>

### Neonatal mortality rates, by background characteristics, 2014



### Neonatal mortality rate for newborns with mothers:



The NMR for younger mothers (27 per 1,000 live births) is 1.3 times higher than for mothers aged 20-29 (21 per 1,000 live births).<sup>2</sup>

**1 in 4** young women (aged 20-24) have given birth by age 18.<sup>2</sup>

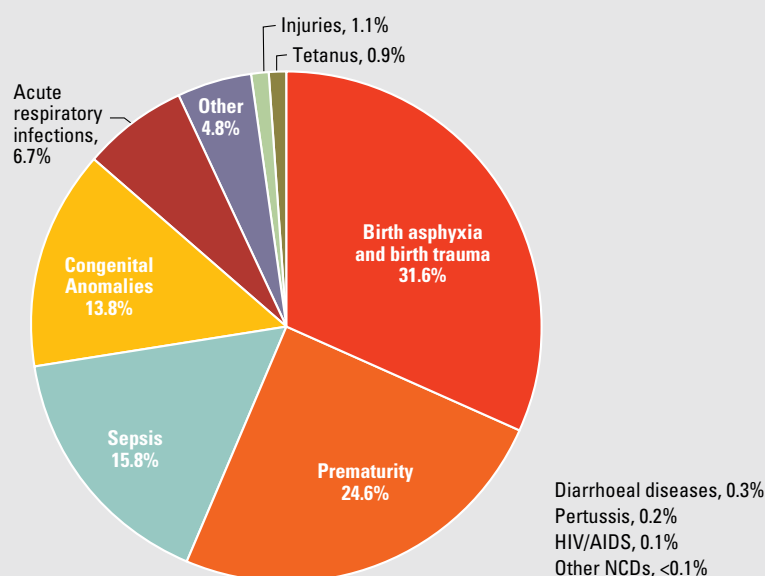
Newborns born to mothers with higher education are:

**1.2x**

more likely to die during the first month compared to those born to mothers with no education.<sup>2</sup>

## Kenya – Causes of Neonatal Mortality, 2015

In Kenya, the main causes of neonatal death in 2015 were birth asphyxia and birth trauma (31.6%), prematurity (24.6%), congenital anomalies (13.8%), and sepsis (15.8%).<sup>11</sup>



## Disparities in key maternal and newborn health interventions, Kenya, 2014<sup>2</sup>

		Coverage – care for mothers					Postnatal care of mothers within 2 days (%)
		Demand for family planning satisfied by modern methods (%)	Antenatal care coverage at least 4 times (%) <sup>a</sup>	Skilled attendant at birth (%)	Institutional delivery (%)	Delivered by caesarean section (%)	
<b>Residence</b>	Urban	76.7	67.7	82.4	82.0	14.7	67.5
	Rural	66.7	51.3	50.4	49.5	5.3	44.7
Residence ratio (urban to rural)		1.1	1.3	1.6	1.7	2.8	1.5
<b>Household Wealth</b>	Richest	78.8	75.0	92.7	92.7	19.0	74.4
	Poorest	45.6	44.0	31.1	30.1	2.1	31.0
Household wealth ratio (richest to poorest)		1.7	1.7	3.0	3.1	9.0	2.4
<b>Mother's age</b>	Less than 20		48.9	62.1	61.7	5.9	55.1
	20-34		59.9	63.1	62.5	9.0	53.5
	35-49		53.2	53.9	52.5	10.0	45.8
<b>Mother's education</b>	No education	35.8	43.1	26.4	24.9	2.2	21.3
	Primary	70.1	52.6	56.0	55.5	6.3	48.7
	Secondary	76.4		81.7	80.9	11.7	67.0
	Higher	77.9		94.7	94.4	25.1	80.0
Mother's education ratio (highest to lowest)		2.2		3.6	3.8	11.4	3.8

## Maternal and newborn health coverage indicators

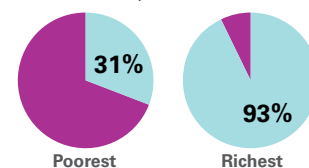
### By residence:<sup>2</sup>

- In rural areas, 51 percent of women made at least 4 antenatal care (ANC) visits compared to 68 percent in urban areas.
- Coverage of skilled attendance at birth is 50 percent in rural areas, compared to 82 percent in urban areas.
- 30 percent of newborns in rural areas receive postnatal care (PNC) within 2 days after birth, compared to 45 percent in urban areas.

### By household wealth:<sup>2</sup>

- Only 31 percent of deliveries in the poorest households had a skilled attendant at birth, compared to 93 percent of deliveries among the richest households.
- 50 percent of newborns in the richest households receive PNC within 2 days after birth, compared to 24 percent among the poorest households.
- Nearly all (96 percent) of newborns in the richest households were weighed at birth, compared to 36 percent of newborns among the poorest households.

Only **31%** of deliveries in the poorest households had a **skilled attendant at birth**, compared to...



...**93%** of deliveries in the richest households.

Coverage – care for newborns								Other	
Postnatal care of newborns within 2 days (%)	Newborn weighed at birth (%)	Early initiation of breast-feeding (%)	Exclusive breast-feeding (<6 months) (%)	BCG vaccine for newborn (%)	DPT 1 vaccination received (%)**	Tetanus protection for newborns (%)	Birth registration (%)	Births by age 18 (%) <sup>a,#</sup>	
45.1	85.7	60.5		97.7	98.0	76.4	78.8	17.8	Urban
30.3	54.3	63.1		96.1	97.3	75.1	61.0	28.5	Rural
1.5	1.6	1.0		1.0	1.0	1.0	1.3	0.6	Residence ratio (urban to rural)
50.1	95.7	58.8		98.4	97.8	81.1	88.7	12.2	Richest
23.5	35.9	66.7		92.8	94.8	69.5	52.1	37.4	Poorest
2.1	2.7	0.9		1.1	1.0	1.2	1.7	0.3	Household wealth ratio (richest to poorest)
34.3	66.3					73.4			Less than 20
36.9	66.7					76.2			20-34
28.4	58.6					74.4			35-49
19.1	30.4	76.0		89.9	91.4	66.9		44.6	No education
32.8	61.3	61.4		96.9	98.3	75.3		38.3	Primary
46.1	83.3	59.5		99.2	99.0	77.5			Secondary
43.9	96.4	56.4		97.3	96.6	81.7			Higher
2.3	3.2	0.7		1.1	1.1	1.2			Mother's education ratio (highest to lowest)

Key for tables:

0-24 %

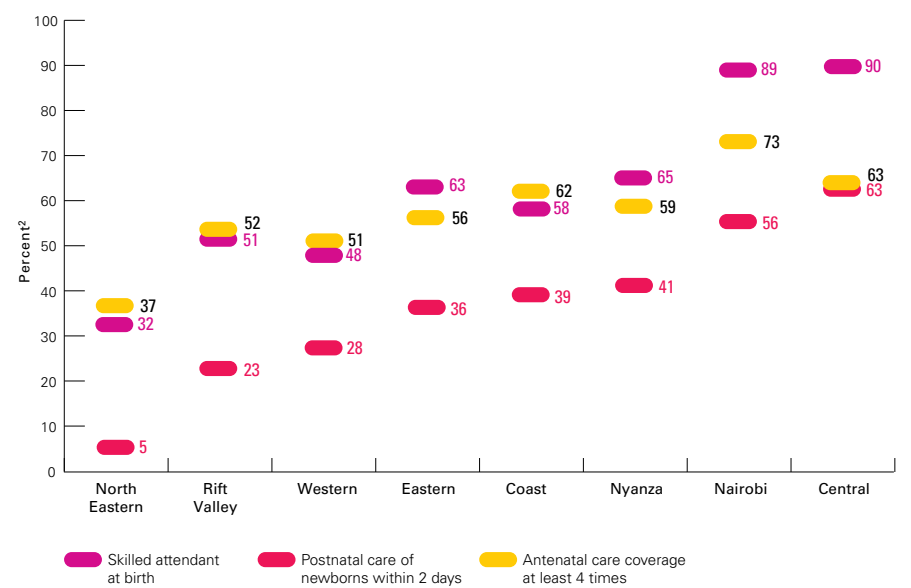
25-49 %

50-74 %

75-100%

Data not available

## Selected maternal and newborn health indicators, by region, 2014



## By mother's age:<sup>2</sup>



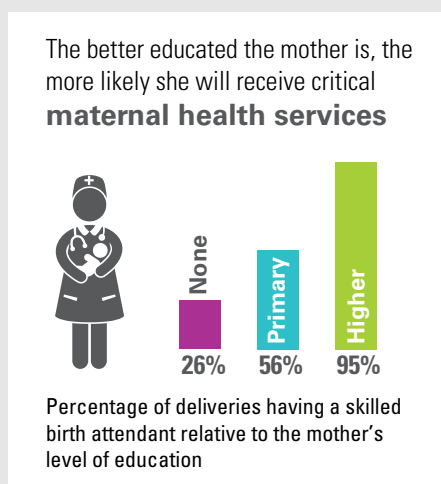
- Deliveries among mothers aged 20-34 and younger mothers (aged less than 20) have similar levels of skilled attendance at birth (63 percent and 62 percent, respectively).
- Their newborns receive low levels of postnatal care: 37 percent and 34 percent, respectively.
- Younger mothers (aged less than 20) and mothers aged 20-34 see similar rates of newborns weighed at birth (66 and 67 percent, respectively).

## Disparities in key maternal and newborn health interventions, Kenya, 2014<sup>2</sup>

Coverage – care for mothers						
	Demand for family planning satisfied by modern methods (%)	Antenatal care coverage at least 4 times (%) <sup>a</sup>	Skilled attendant at birth (%)	Institutional delivery (%)	Delivered by caesarean section (%)	Postnatal care of mothers within 2 days (%)
<b>National estimate</b>	70.7	57.6	61.8	61.2	8.7	52.9
Coast	58.4	62.3	58.2	57.7	7.0	49.5
North Eastern	10.2	36.8	32.4	29.2	2.9	14.9
Eastern	77.2	56.3	63.3	62.7	11.7	61.1
Central	83.9	63.4	89.7	90.2	15.7	71.9
Rift Valley	62.3	51.7	51.3	50.2	5.6	45.9
Western	71.8	51.3	47.8	47.0	4.3	34.6
Nyanza	67.4	58.7	65.0	64.8	5.1	61.0
Nairobi	81.5	73.1	89.1	88.7	20.7	71.6
<b>Regional performance</b>						
Highest value	Central	Nairobi	Central	Central	Nairobi	Central
	83.9	73.1	89.7	90.2	20.7	71.9
Lowest value	North Eastern	North Eastern	North Eastern	North Eastern	North Eastern	North Eastern
	10.2	36.8	32.4	29.2	2.9	14.9
Ratio (highest to lowest)	8.2	2.0	2.8	3.1	7.1	4.8

## By mother's education:<sup>2</sup>

- Only 26 percent of deliveries among mothers with no education had a skilled attendant at birth, compared to 56 percent of deliveries among mothers with primary education and 95 percent of deliveries among mothers with a higher education.
- 19 percent of newborns are checked within two days after birth if their mothers have no education, compared to 33 percent of mothers with a primary education and 44 percent of mothers who received higher education.
- 96 percent of newborns born to mothers with higher education were weighed at birth, compared to 30 percent of newborns born to mothers with no education.



## By geographic regions:<sup>2</sup>

- Nairobi saw the highest rate of antenatal care coverage (at least four visits) of 73 percent, compared to the lowest coverage of 37 percent in North Eastern.
- The region with the highest coverage of skilled birth attendance is Central with 90 percent; the lowest coverage is North Eastern with 32 percent – a difference of nearly 3 times.
- Central has the highest coverage of PNC for newborns (within 2 days after birth) with 63 percent while North Eastern has the lowest coverage at 5 percent – a difference of more than 12 times.

Coverage – care for newborns									Other	
Postnatal care of newborns within 2 days (%)	Newborn weighed at birth (%)	Early initiation of breast-feeding (%)	Exclusive breast-feeding (<6 months) (%)	BCG vaccine for newborn (%)	DPT 1 vaccination received (%)**	Tetanus protection for newborns (%)	Birth registration (%)	Births by age 18 (%) <sup>a,#</sup>		
35.6	65.7	62.2	61.4	96.7	97.5	75.6	66.9	23.3	National estimate	
39.0	73.2	62.1		97.1	97.2	83.7	74.8	19.6	Coast	Region
5.1	27.4	80.8		83.4	87.5	59.9	61.8	23.2	North Eastern	
36.3	66.7	64.9		98.7	99.0	79.1	75.1	20.8	Eastern	
62.8	95.6	48.1		99.6	99.4	79.7	89.7	13.3	Central	
22.7	53.9	69.4		96.7	97.4	74.3	62.9	24.0	Rift Valley	
27.6	51.1	52.8		95.9	96.8	66.9	53.2	28.2	Western	
41.2	69.2	58.4		95.6	98.5	70.1	54.1	39.7	Nyanza	
55.5	87.9	60.8		97.6	97.3	83.0	79.5	17.6	Nairobi	
Central	Central	North Eastern		Central	Central	Coast	Central	Nyanza	Highest value	
62.8	95.6	80.8		99.6	99.4	83.7	89.7	39.7		
North Eastern	North Eastern	Central		North Eastern	North Eastern	North Eastern	Western	Central	Lowest value	
5.1	27.4	48.1		83.4	87.5	59.9	53.2	13.3		
12.3	3.5	1.7		1.2	1.1	1.4	1.7	3.0	Ratio (highest to lowest)	

Key for tables:

0-24 %

25-49 %

50-74 %

75-100%

Data not available

## Sources:

- 1 United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Prospects: The 2015 Revision.
- 2 Kenya Demographic and Health Survey 2014 via the DHS Program STATcompiler. (<http://www.statcompiler.com>).\*
- 3 United Nations Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, United Nations Population Division and the World Bank).
- 4 United Nations Maternal Mortality Estimation Inter-agency Group (WHO, UNICEF, UNFPA, United Nations Population Division and the World Bank).
- 5 Trends in maternal mortality: 1990 to 2015: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.
- 6 Lawn JE, Blencowe H, Waiswa P, et al, for The Lancet Ending Preventable Stillbirths Series study group with The Lancet Stillbirth Epidemiology investigator group. Stillbirths: rates, risk factors, and acceleration towards 2030. Lancet 2016; published online Jan 18. [http://dx.doi.org/10.1016/S0140-6736\(15\)00837-5](http://dx.doi.org/10.1016/S0140-6736(15)00837-5).
- 7 Blencowe H, Cousens S, Oestergaard M, Chou D, Moller AB, Narwal R, Adler A, Garcia CV, Rohde S, Say L, Lawn JE. National, regional and worldwide estimates of preterm birth rates in the year 2010 with time trends since 1990 for selected countries: a systematic analysis and implications. The Lancet, June 9 2012, 379(9832): 2162-72.
- 8 Averting Maternal Death and Disability, United Nations Children's Fund, and United Nations Population Fund special data compilation, 2015.
- 9 Global Health Workforce Statistics database, World Health Organization, Geneva. (<http://www.who.int/hrh/statistics/hwfstats/>).
- 10 United Nations, Department of Economic and Social Affairs, Population Division (2015). 2015 Update for the MDG Database.
- 11 WHO-MCEE estimates for child causes of death, 2000-2015. ([http://www.who.int/healthinfo/global\\_burden\\_disease/estimates\\_child\\_cod\\_2015/](http://www.who.int/healthinfo/global_burden_disease/estimates_child_cod_2015/))

## Notes:

- \* DHS data drawn from STATcompiler which employs standard indicator definitions to allow for comparability between countries and year. As such, data herein may not reflect data included in the final report. For further information please visit <http://goo.gl/jXJ5SW>. MICS data reflect final report figures where available.
- \*\* DPT schedule includes the hepatitis B vaccine.
- a Data from UNICEF reanalysis of Kenya Demographic and Health Survey 2014.
- ^ Reference period: five years preceding the survey.
- ≠ Reference period: ten years preceding the survey.
- # Births by age 18 among 20-24 year olds.
- () Based on small denominators (typically 25-49 unweighted cases). No data based on fewer than 25 unweighted cases are displayed.