

Maternal and Newborn Health Disparities

# Ethiopia



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# Maternal and Newborn Health Disparities in Ethiopia

## Key Facts

### Ethiopia reference table

Demographic indicators		
Total population (thousands) <sup>1</sup>	2015	99,391
Total live births (thousands) <sup>1</sup>	2015	3,176
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	71
Impact indicators		
Maternal mortality ratio (per 100,000 live births) <sup>4</sup>	2015	353
Average annual rate of MMR reduction between 1990 and 2015 (%) <sup>5</sup>	2015	5
Lifetime risk of maternal death: 1 in x <sup>4</sup>	2015	64
Stillbirth rate (per 1,000 total births) <sup>6</sup>	2015	30
Preterm birth rate (per 100 live births) <sup>7</sup>	2010	10
Under-five mortality rate (per 1,000 live births) <sup>3</sup>	2015	59
Under-five deaths that are newborn (%) <sup>3</sup>	2015	47
Neonatal mortality rate (per 1,000 live births) <sup>3</sup>	2015	28
Neonatal deaths (thousands) <sup>3</sup>	2015	87
Service Delivery		
Availability of EmONC Services (% of minimum acceptable level) <sup>8</sup>	2008	11
Physician density (per 1,000 population) <sup>9</sup>	2009	<0.1
Nurse and midwife density (per 1,000 population) <sup>9</sup>	2009	0.3

# Maternal and Newborn Health Disparities

## Ethiopia

In 2015, 3,200,000 babies were born in Ethiopia, or approximately 8,700 every day.<sup>1</sup>

Among young women (aged 20-24), 22 percent gave birth by age 18.<sup>2</sup>

Nearly 240 babies will die each day before reaching their first month<sup>3</sup>; 258 stillbirths occur every day.<sup>6</sup>

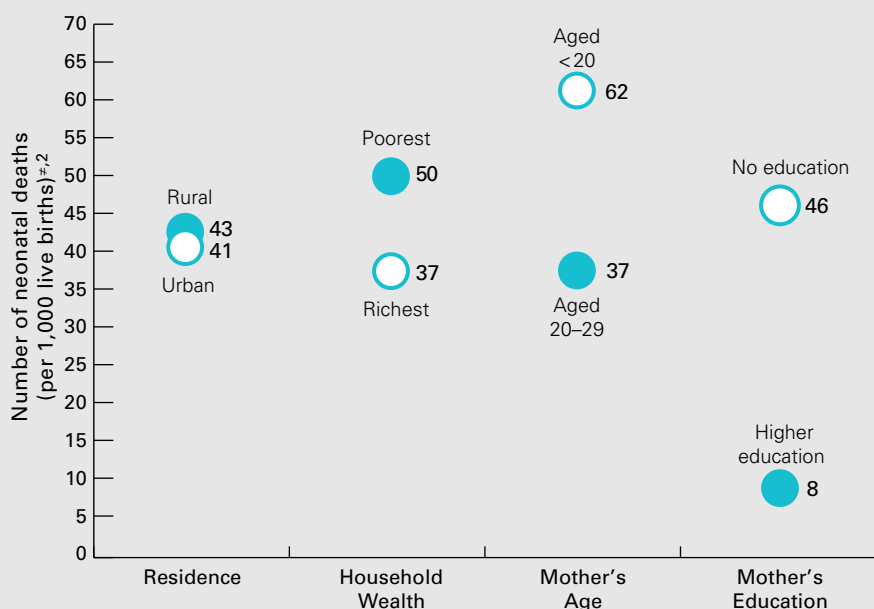
### Neonatal mortality rate:

Ethiopia's neonatal mortality rate (NMR)<sup>4</sup> is 28 deaths per 1,000 live births.<sup>3</sup>

NMR<sup>5</sup> in rural areas is 43 deaths per 1,000 live births and 41 deaths per 1,000 live births in urban areas.<sup>2</sup>

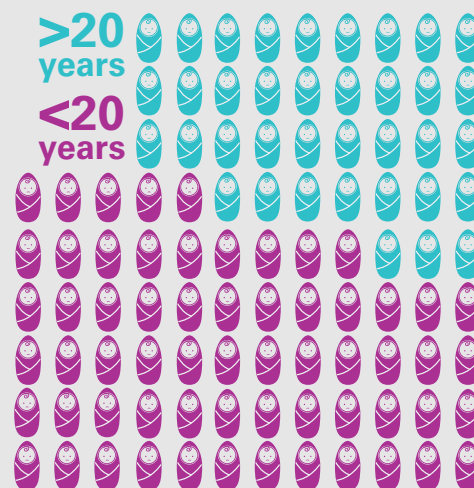
NMR<sup>5</sup> among the poorest households is 50 neonatal deaths per 1,000 live births, compared to 37 deaths per 1,000 live births among the richest households.<sup>2</sup>

### Neonatal mortality rates, by background characteristics, 2011



### Neonatal mortality rate

for newborns with mothers:



The NMR for younger mothers (62 per 1,000 live births) is 1.7 times higher than for mothers aged 20-29 (37 per 1,000 live births).<sup>2</sup>

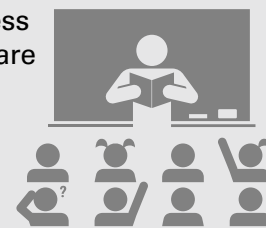
**1 in 5**

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



Newborns with less educated mothers are

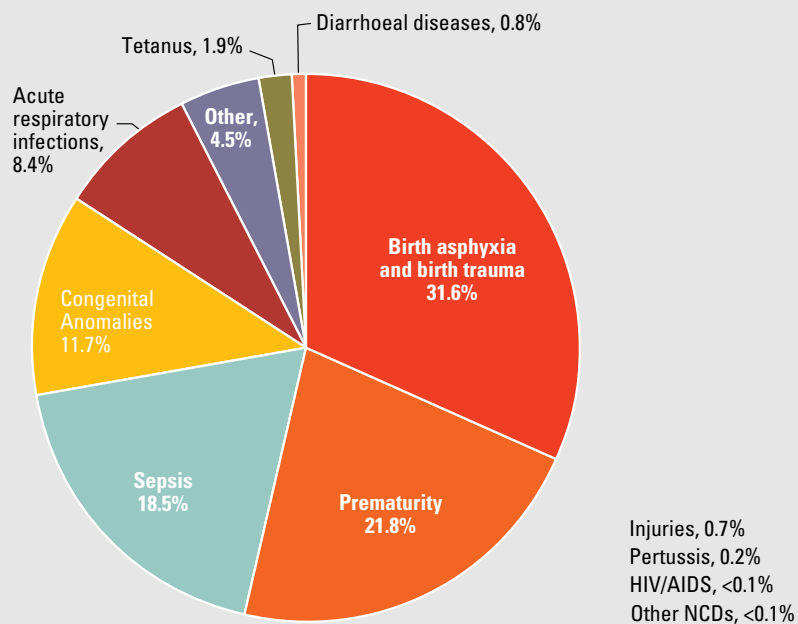
**6x**



more likely to die during the first month compared to those born to mothers with higher education.<sup>2</sup>

## Ethiopia – Causes of Neonatal Mortality, 2015

In Ethiopia, the main causes of neonatal deaths in 2015 were birth asphyxia (31.6 percent), prematurity (21.8 percent) and sepsis (18.5 percent).<sup>11</sup>



## Disparities in key maternal and newborn health interventions, Ethiopia, 2011<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>Residence</b>	Urban	72.8	45.5	51.5	49.8	8.1	32.1
	Rural	43.2	14.4	4.8	4.1	0.5	2.7
Residence ratio (urban to rural)		1.7	3.2	10.7	12.1	16.2	11.9
<b>Household Wealth</b>	Richest	72.1	46.0	46.2	45.0	7.2	28.1
	Poorest	28.7	8.3	2.1	2.0	0.1	2.8
Household wealth ratio (richest to poorest)		2.5	5.5	22.0	22.5	72.0	10.0
<b>Mother's age</b>	Less than 20		16	10.7	9.6	1.3	5.6
	20-34		20.6	11.6	10.7	1.6	7.4
	35-49		14.7	6.6	6.4	1.3	4.4
<b>Mother's education</b>	No education	43.8	12.2	5.3	4.7	0.4	3.0
	Primary	53.6	27.5	16.3	14.9	2.4	8.8
	Secondary	76.1		72.1	69.6	14.6	42.6
	Higher	76.5		77.5	75.5	13.7	54.6
Mother's education ratio (highest to lowest)		1.7		14.6	16.1	34.3	18.2

## Maternal and newborn health coverage indicators

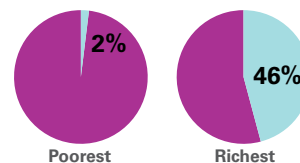
### By residence:<sup>2</sup>

- In rural areas, 14 percent of women made at least 4 antenatal care (ANC) visits compared to 46 percent in urban areas.
- Coverage of skilled attendance at birth is 5 percent in rural areas, compared to 52 percent in urban areas.
- Less than 1 percent of newborns in rural areas receive postnatal care (PNC) within 2 days after birth, compared to just 1 percent in urban areas.

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

- Only 2 percent of deliveries in the poorest households had a skilled attendant at birth, compared to 46 percent of deliveries in the richest households.
- 1 percent of newborns in the richest households receive PNC within 2 days after birth, compared to 0.1 percent among the poorest households.
- 70 percent of newborns in the richest households received tetanus protection at birth, compared to 37 percent of newborns among the poorest households.

Only **2%** of deliveries in the poorest households had a **skilled attendant at birth**, compared to...



...**46%** 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>	
0.9	31.9	57.1		81.6	79.8	67.5		10.7	Urban
0.2	1.3	50.6		63.8	60.9	44.9		26.7	Rural
4.5	24.5	1.1		1.3	1.3	1.5		0.4	Residence ratio (urban to rural)
1.0	28.7	57.8		82.6	84.6	68.8		11.8	Richest
0.1	0.5	48.5		58.0	55.0	36.6		31.6	Poorest
10.0	57.4	1.2		1.4	1.5	1.9		0.4	Household wealth ratio (richest to poorest)
0.5	5.8					42.8			Less than 20
0.3	5.6					49.8			20-34
0.3	2.5					45.8			35-49
0.2	1.3	50.7		60.1	56.8	40.8		34.8	No education
0.6	7.9	51.5		75.4	75.0	60.5		20.7	Primary
0.5	49.7	63.4		99.8	99.2	78.1			Secondary
0.3	73.0	65.5		(99.4)	(81.5)	82.5			Higher
1.5	56.2	1.3		1.7	1.4	2.0			Mother's education ratio (highest to lowest)

Key for tables:

0-24 %

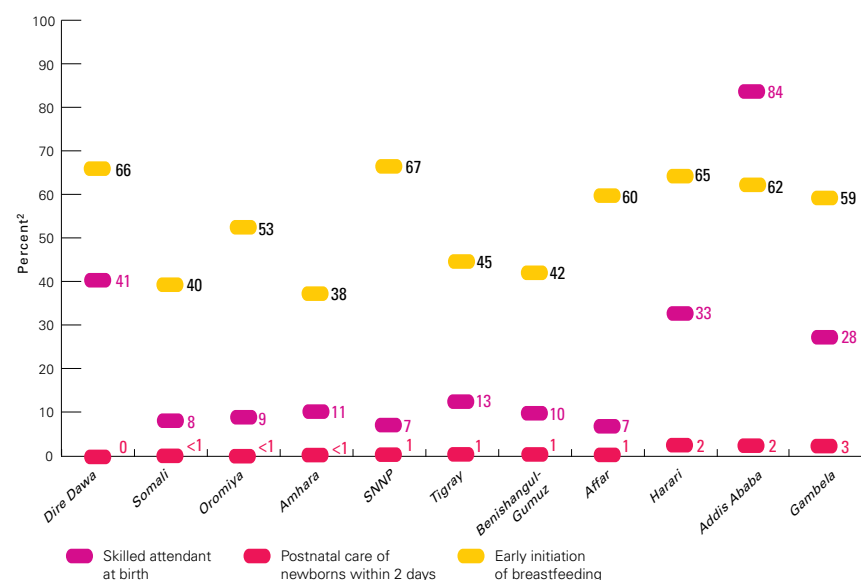
25-49 %

50-74 %

75-100%

Data not available

## Selected maternal and newborn health indicators, by region, 2011



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



- Mothers aged 20-34 and younger mothers (aged less than 20) have similar levels of skilled attendance at birth (12 percent and 11 percent, respectively).
- Their newborns receive low levels of postnatal care: 0.3 percent and 0.5 percent, respectively.
- Approximately 6 percent of newborns born to mothers aged less than 20 and mothers aged 20-34 were weighed at birth.

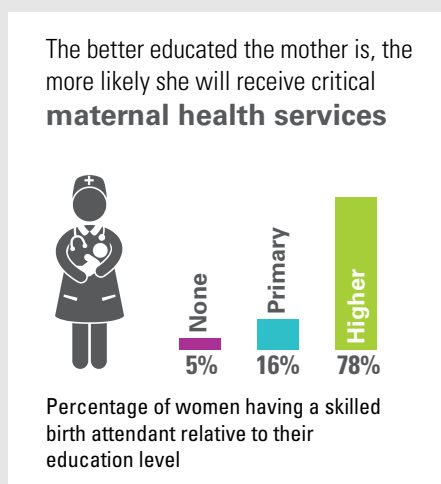
## Disparities in key maternal and newborn health interventions, Ethiopia, 2011<sup>2</sup>

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>	49.8	19.1	10.8	9.9	1.5	6.7
<b>Region</b>						
Tigray	46.6	30.8	12.6	11.6	2.9	13.1
Affar	34.5	11.4	7.1	6.8	2.0	6.0
Amhara	57.4	12.4	10.5	10.2	1.3	5.1
Oromiya	43.8	18.6	9.0	8.0	0.5	5.0
Somali	13.3	7.0	8.2	7.6	0.7	5.4
Benishangul-Gumuz	50.2	15.9	10.1	9.1	1.3	6.5
SNNP	47.6	17.7	7.3	6.2	1.2	5.5
Gambela	61.3	30.8	27.5	27.5	8.7	18.8
Harari	52.9	35	32.7	32.4	7.0	28.4
Addis Ababa	77.1	86.4	83.9	82.3	21.8	47.7
Dire Dawa	57.4	38.9	40.5	39.7	6.2	18.7
<b>Regional performance</b>						
Highest value	Addis Ababa	Addis Ababa	Addis Ababa	Addis Ababa	Addis Ababa	Addis Ababa
	77.1	86.4	83.9	82.3	21.8	47.7
Lowest value	Somali	Somali	Affar	SNNP	Oromiya	Oromiya
	13.3	7.0	7.1	6.2	0.5	5.0
Ratio (highest to lowest)	5.8	12.3	11.8	13.3	43.6	9.5



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

- Only 5 percent of mothers with no education had a skilled attendant at birth, compared to 16 percent with primary education and 78 percent for mothers with higher education.
- 0.2 percent of newborns are checked within two days after birth if their mothers have no education, compared to 0.6 percent of mothers with a primary education and 0.3 percent of mothers who received higher education.
- 73 percent of newborns born to mothers with higher education were weighed at birth, compared to 1 percent of newborns born to mothers with no education.



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

- The region with the highest coverage of skilled birth attendance is Addis Ababa with 84 percent; the lowest coverage is Affar with 7 percent – a difference of nearly 12 times.
- Gambela has the highest coverage of PNC for newborns (within 2 days after birth) with 3 percent while Dire Dawa has the lowest coverage at 0 percent.
- 82 percent of newborns received tetanus protection at birth in Addis Ababa, compared to 27 percent of newborns in Affar.

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>	
0.3	5.2	51.5	52.0	66.3	63.5	48.3		22.2	National estimate
0.6		44.7		95.9	93.8	68.0		30.4	Tigray
0.6		59.6		38.1	30.4	26.7		30.9	Affar
0.2		37.5		67.7	68.6	43.2		25.3	Amhara
0.1		52.6		57.4	50.4	45.9		22.6	Oromiya
0.1		39.6		45.7	41.4	33.7		30.2	Somali
0.6		42.2		68.7	73.3	48.1		34.8	Benishangul-Gumuz
0.5		66.5		73.4	74.7	50.8		18.2	SNNP
2.6		59.3		72.0	72.4	58.4		29.6	Gambela
2.4		64.6		72.9	76.4	69.5		24.4	Harari
2.4		62.0		97.5	94.5	82.3		5.5	Addis Ababa
0.0		66.0		87.5	90.2	58.7		12.4	Dire Dawa
Gambela		SNNP		Addis Ababa	Addis Ababa	Addis Ababa		Benishangul-Gumuz	Highest value
2.6		66.5		97.5	94.5	82.3		34.8	
Dire Dawa		Amhara		Affar	Affar	Affar		Addis Ababa	Lowest value
0.0		37.5		38.1	30.4	26.7		5.5	
		1.8		2.6	3.1	3.1		6.3	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 Ethiopia Demographic and Health Survey 2011 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).
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- 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 Ethiopia Demographic and Health Survey 2011.
- ^ 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.