

Maternal and Newborn Health Disparities

Zambia



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Maternal and Newborn Health Disparities in Zambia

Key Facts

Zambia reference table

Demographic indicators		
Total population (thousands) ¹	2015	16,212
Total live births (thousands) ¹	2015	645
Total Fertility Rate (number of children per woman) ¹	2015	5
Adolescent birth rate (per 1,000 women 15-19) ¹⁰	2012	145
Impact indicators		
Maternal mortality ratio (per 100,000 live births) ⁴	2015	224
Average annual rate of MMR reduction between 1990 and 2015 (%) ⁵	2015	4
Lifetime risk of maternal death: 1 in x ⁴	2015	79
Stillbirth rate (per 1,000 total births) ⁶	2015	21
Preterm birth rate (per 100 live births) ⁷	2010	13
Under-five mortality rate (per 1,000 live births) ³	2015	64
Under-five deaths that are newborn (%) ³	2015	34
Neonatal mortality rate (per 1,000 live births) ³	2015	21
Neonatal deaths (thousands) ³	2015	13
Service Delivery		
Availability of EmONC Services (% of minimum acceptable level) ⁸	2005	41
Physician density (per 1,000 population) ⁹	2012	0.2
Nurse and midwife density (per 1,000 population) ⁹	2010	0.8

Maternal and Newborn Health Disparities

Zambia

In 2015, approximately 645,000 babies were born in Zambia, or around 1,800 every day.¹

Among young women (aged 20-24), 31 percent gave birth by age 18.²

Approximately 36 babies will die each day before reaching their first month³; 36 stillbirths occur every day.⁶

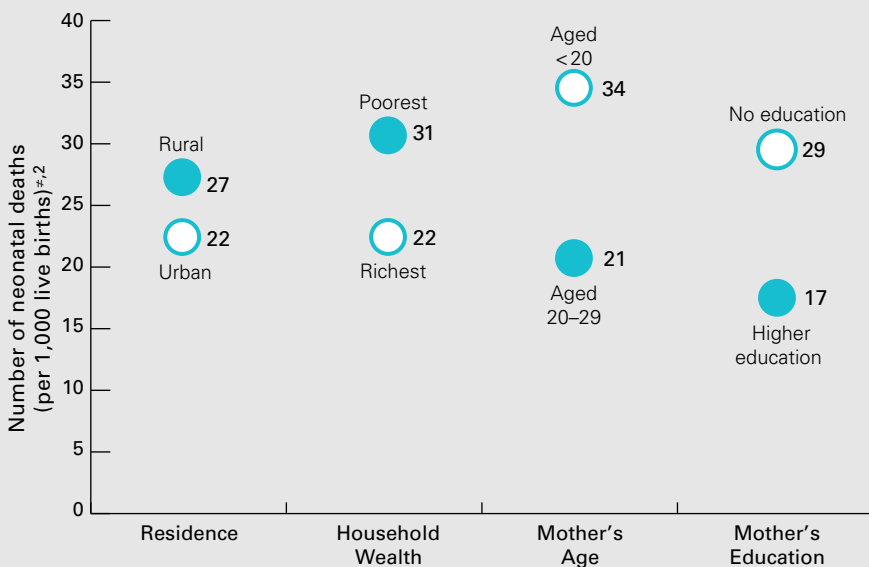
Neonatal mortality rate:

Zambia's neonatal mortality rate (NMR)⁴ is 21 deaths per 1,000 live births.³

NMR⁵ in rural areas is 27 deaths per 1,000 live births and 22 deaths per 1,000 live births in urban areas for an urban-to-rural ratio of 0.8.²

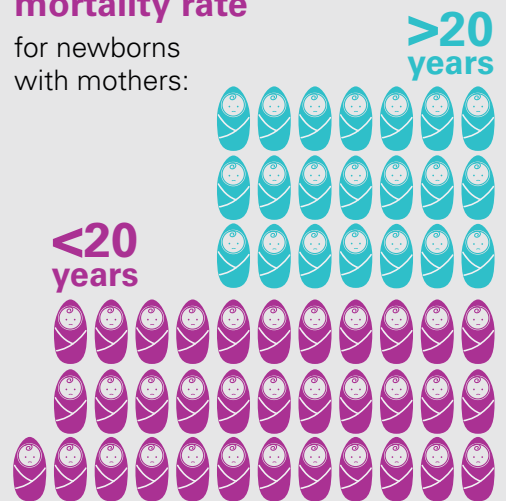
NMR⁵ among the poorest households is 31 neonatal deaths per 1,000 live births, compared to 22 deaths per 1,000 live births among the richest households.²

Neonatal mortality rates, by background characteristics, 2013-2014



Neonatal mortality rate

for newborns with mothers:



The NMR for younger mothers (34 per 1,000 live births) is 1.6 times higher than for mothers aged 20-29 (21 per 1,000 live births).²

3 in 10

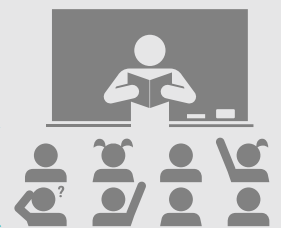
young women (aged 20-24) have given birth by age 18.²



Newborns with less educated mothers are

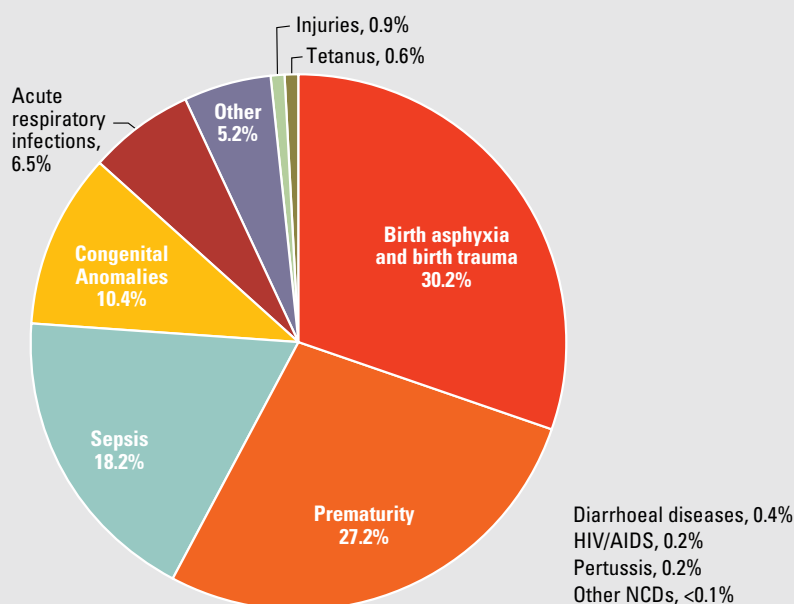
1.7x

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



Zambia – Causes of Neonatal Mortality, 2015

In Zambia, the main causes of neonatal deaths in 2015 were birth asphyxia (30.2 percent), prematurity (27.2 percent) and sepsis (18.2 percent).¹¹



Disparities in key maternal and newborn health interventions, Zambia, 2013-2014²

		Coverage – care for mothers					
		Demand for family planning satisfied by modern methods (%)	Antenatal care coverage at least 4 times (%) ^a	Skilled attendant at birth (%)	Institutional delivery (%)	Delivered by caesarean section (%)	Postnatal care of mothers within 2 days (%)
Residence	Urban	72.8	55.9	88.5	88.9	7.2	81.4
	Rural	57.3	55.2	51.6	56.3	3.0	54.3
Residence ratio (urban to rural)		1.3	1.0	1.7	1.6	2.4	1.5
Household Wealth	Richest	78.4	65.5	94.3	95.1	10.9	83.6
	Poorest	49.1	51.5	45.2	49.4	2.8	47.4
Household wealth ratio (richest to poorest)		1.6	1.3	2.1	1.9	3.9	1.8
Mother's age	Less than 20		52.0	70.1	73.5	5.0	63.9
	20-34		55.4	64.6	67.7	4.3	65.0
	35-49		59.3	54.8	58.5	4.3	56.1
Mother's education	No education	53.1	49.0	46.2	50.7	1.6	48.1
	Primary	60.0	55.2	56.8	60.3	3.2	59.2
	Secondary	71.5		81.7	84.1	6.5	73.0
	Higher	79.1		95.6	96.5	15.0	88.6
Mother's education ratio (highest to lowest)		1.5		2.1	1.9	9.4	1.8

Maternal and newborn health coverage indicators

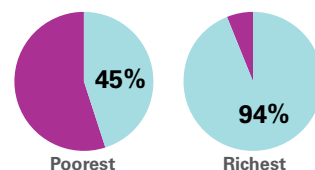
By residence:²

- In rural areas, 55 percent of women made at least 4 antenatal care (ANC) visits compared to 56 percent in urban areas.
- Coverage of skilled attendance at birth is 52 percent in rural areas, compared to 89 percent in urban areas.
- 14 percent of newborns in rural areas receive postnatal care (PNC) within 2 days after birth, compared to 20 percent in urban areas.

By household wealth:²

- Only 45 percent of deliveries in the poorest households had a skilled attendant at birth, compared to 94 percent of deliveries among the richest households.
- 20 percent of newborns in the richest households receive PNC within 2 days after birth, compared to 12 percent among the poorest households.
- 95 of newborns among the richest households are weighed at birth, compared to 45 percent of newborns in the poorest households.

Only **45%** of deliveries in the poorest households had a **skilled attendant at birth**, compared to...



...**94%** 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 breastfeeding (%)	Exclusive breast-feeding (<6 months) (%)	BCG vaccine for newborn (%)	DPT 1 vaccination received (%)**	Tetanus protection for newborns (%)	Birth registration (%)	Births by age 18 (%) ^{a, #}	
20.0	89.6	67.3		97.2	98.1	86.1	20.4	22.0	Urban
13.5	53.9	65.0		93.7	94.9	79.3	6.7	39.4	Rural
1.5	1.7	1.0		1.0	1.0	1.1	3.0	0.6	Residence ratio (urban to rural)
19.9	95.3	63.0		97.7	98.2	87.2	29.2	14.8	Richest
12.4	45.3	61.8		92.6	93.3	77.6	4.9	42.6	Poorest
1.6	2.1	1.0		1.1	1.1	1.1	6.0	0.3	Household wealth ratio (richest to poorest)
16.3	69.3					70.8			Less than 20
16.3	67.0					84.2			20-34
12.4	57.7					84.2			35-49
16.3	46.4	59.7		88.1	88.9	77.0		51.7	No education
14.0	58.7	66.0		94.6	96.2	80.2		46.3	Primary
17.8	84.1	67.6		97.3	97.7	85.1			Secondary
20.6	98.1	65.0		98.1	98.1	92.1			Higher
1.3	2.1	1.1		1.1	1.1	1.2			Mother's education ratio (highest to lowest)

Key for tables:

0-24 %

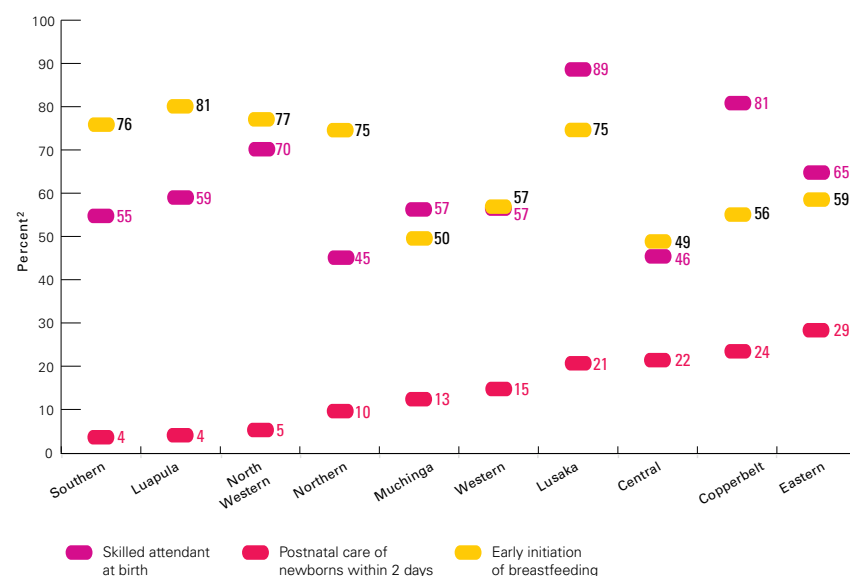
25-49 %

50-74 %

75-100%

Data not available

Selected maternal and newborn health indicators, by region, 2013-2014²



By mother's age:²



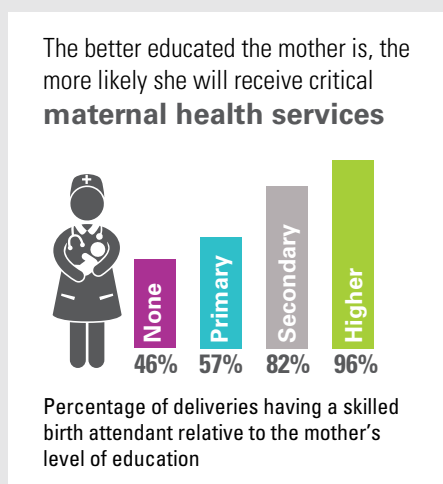
- Deliveries among mothers aged 20-34 and younger mothers (aged less than 20) have similar levels of skilled attendance at birth (65 percent and 70 percent, respectively).
- 16 percent of newborns born to younger mothers (aged less than 20) and newborns born to mothers aged 20-34 received postnatal care within 2 days of birth.
- 84 percent of newborns born to mothers aged 20-34 received tetanus protection at birth, compared to 71 percent of newborns born to younger mothers (aged less than 20).

Disparities in key maternal and newborn health interventions, Zambia, 2013-2014²

Coverage – care for mothers						
	Demand for family planning satisfied by modern methods (%)	Antenatal care coverage at least 4 times (%) ^a	Skilled attendant at birth (%)	Institutional delivery (%)	Delivered by caesarean section (%)	Postnatal care of mothers within 2 days (%)
National estimate	63.8	55.5	64.2	67.4	4.4	63.4
Central	60.3	54.7	45.7	47.9	3.1	44.4
Copperbelt	69.0	62.9	81.0	82.5	6.9	81.6
Eastern	70.7	52.6	65.0	70.7	3.7	71.2
Luapula	52.5	51.3	59.4	68.4	3.0	54.2
Lusaka	74.0	54.7	88.9	89.9	7.4	83.0
Muchinga	49.9	53.8	56.7	60.8	3.8	52.0
Northern	44.8	52.3	45.3	48.0	2.7	49.2
North Western	58.0	54.6	70.3	74.7	5.8	75.3
Southern	66.6	59.9	55.0	55.9	2.9	58.4
Western	55.3	50.4	57.2	61.7	3.1	43.1
Regional performance						
Highest value	Lusaka	Copperbelt	Lusaka	Lusaka	Lusaka	Lusaka
	74.0	62.9	88.9	89.9	7.4	83
Lowest value	Northern	Western	Northern	Central	Northern	Western
	44.8	50.4	45.3	47.9	2.7	43
Ratio (highest to lowest)	1.7	1.2	2.0	1.9	2.7	2

By mother's education:²

- Only 46 percent of deliveries among mothers with no education had a skilled attendant at birth, compared to 57 percent of deliveries among mothers with primary education and 96 percent of deliveries among mothers with a higher education.
- 16 percent of newborns are checked within two days after birth if their mothers have no education, compared to 14 percent of mothers with a primary education and 21 percent of mothers who received higher education.
- Nealy all newborns born to mothers with higher education were weighed at birth (98 percent), compared to 46 percent of newborns born to mothers with no education.



By geographic regions:²

- The region with the highest coverage of skilled birth attendance is Lusaka with 89 percent; the lowest coverage is Northern with 45 percent – a difference of 2 times.
- Eastern has the highest coverage of PNC for newborns (within 2 days after birth) with 29 percent while Southern has the lowest coverage at 4 percent – a difference of 7.5 times.

Coverage – care for newborns								Other	
Postnatal care of newborns within 2 days (%)	Newborn weighed at birth (%)	Early initiation of breast-feeding (<6 months) (%)	Exclusive breast-feeding (<6 months) (%)	BCG vaccine for newborn (%)	DPT 1 vaccination received (%)**	Tetanus protection for newborns (%)	Birth registration (%)	Births by age 18 (%) ^{a,#}	
15.7	66.1	65.8	72.5	94.9	95.9	81.9	11.3	30.7	National estimate
21.7	47.1	48.8		89.2	90.8	84.3	4.6	36.2	Central
23.5	84.8	55.5		97.8	98.7	89.2	23.6	19.5	Copperbelt
28.6	69.4	58.9		97.6	96.5	82.2	13.4	38.2	Eastern
4.1	59.2	80.5		92.9	95.5	66.5	5.7	29.6	Luapula
20.6	93.3	75.0		97.3	97.8	83.2	20.8	22.3	Lusaka
12.7	50.4	49.8		95.5	95.0	84.4	3.7	36.7	Muchinga
9.7	42.0	74.7		94.6	97.2	81.5	2.3	38.3	Northern
5.4	77.0	77.3		97.1	96.1	85.8	5.4	37.2	North Western
3.8	57.5	76.1		92.2	95.8	76.9	12.0	38.3	Southern
15.0	59.1	56.7		93.5	93.0	84.4	2.6	38.8	Western
Eastern	Lusaka	Luapula		Copperbelt	Copperbelt	Copperbelt	Copperbelt	Western	Highest value
28.6	93.3	80.5		97.8	98.7	89.2	23.6	38.8	
Southern	Northern	Central		Central	Central	Luapula	Northern	Copperbelt	Lowest value
3.8	42.0	48.8		89.2	90.8	66.5	2.3	19.5	
7.5	2.2	1.6		1.1	1.1	1.3	10.3	2.0	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 Zambia Demographic and Health Survey 2013-2014 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/).

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.
- ^ Reference period: five years preceding the survey.
- ≠ Reference period: ten years preceding the survey.
- a Data from UNICEF reanalysis of Zambia Demographic and Health Survey 2013-2014.
- # 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.