# Maternal and Newborn Health Disparities
# Ghana



© UNICEF/UNI192193/Asselin

unicef ⬡ | for every child

# Maternal and Newborn Health Disparities in Ghana
# Key Facts

**Ghana reference table**

| Demographic indicators | | |
|---|---|---|
| Total population (thousands)[1] | 2015 | 27,410 |
| Total live births (thousands)[1] | 2015 | 884 |
| Total Fertility Rate (number of children per woman)[1] | 2014 | 4.1 |
| Adolescent birth rate (per 1,000 women 15-19)[10] | 2013 | 65.0 |
| **Impact indicators** | | |
| Maternal mortality ratio (per 100,000 live births)[4] | 2015 | 319.0 |
| Average annual rate of MMR reduction between 1990 and 2015 (%)[5] | 2015 | 2.7 |
| Lifetime risk of maternal death: 1 in x[4] | 2015 | 74 |
| Stillbirth rate (per 1,000 total births)[6] | 2015 | 22.7 |
| Preterm birth rate (per 100 live births)[7] | 2010 | 14.5 |
| Under-five mortality rate (per 1,000 live births)[3] | 2015 | 61.6 |
| Under-five deaths that are newborn (%)[3] | 2015 | 47.0 |
| Neonatal mortality rate (per 1,000 live births)[3] | 2015 | 28.3 |
| Neonatal deaths (thousands)[3] | 2015 | 25 |
| **Service Delivery** | | |
| Availability of EmONC Services (% of minimum acceptable level)[8] | 2011 | 37.0 |
| Physician density (per 1,000 population)[9] | 2010 | 0.1 |
| Nurse and midwife density (per 1,000 population)[9] | 2010 | 0.9 |

# Maternal and Newborn Health Disparities
# Ghana

**In 2015, 884,000 babies were born in Ghana, or around 2,400 every day.[1]**

Among young women (aged 20-24), 17 percent gave birth by age 18.[2]

Approximately 69 babies will die each day before reaching their first month[3]; 55 stillbirths occur every day.[6]
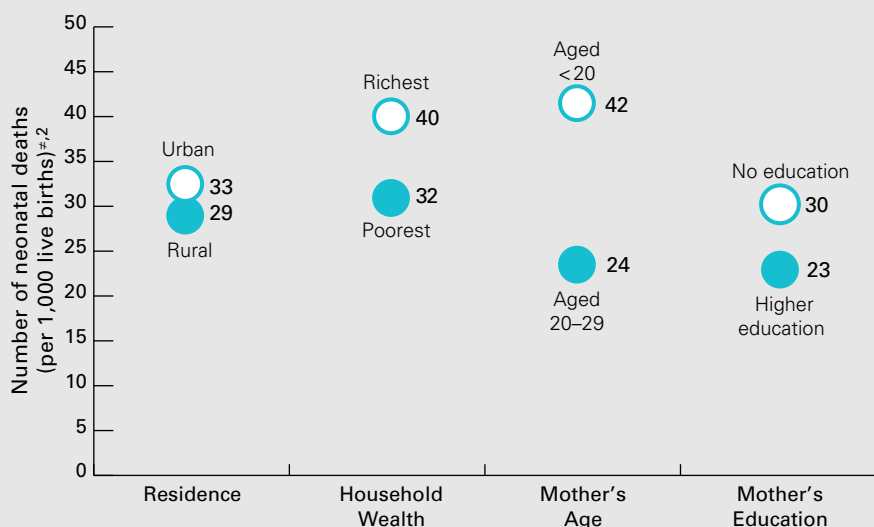
## Neonatal mortality rate:

Ghana's neonatal mortality rate (NMR)^ is 28 deaths per 1,000 live births.[3]

NMR≠ in rural areas is 29 deaths per 1,000 live births and 33 deaths per 1,000 live births in urban areas for an urban-to-rural NMR ratio of 1.1.[2]

While the NMR≠ among the poorest households is 32 neonatal deaths per 1,000 live births, it is 1.3 times higher among the richest households at 40 neonatal deaths per 1,000 live births.[2]

## Neonatal mortality rates, by background characteristics, 2014



Number of neonatal deaths (per 1,000 live births)*,[2]

- Urban 33
- Rural 29
- Richest 40
- Poorest 32
- Aged <20 42
- Aged 20–29 24
- No education 30
- Higher education 23

Residence · Household Wealth · Mother's Age · Mother's Education

## Neonatal mortality rate

for newborns with mothers:[2]

**<20 years**   **>20 years**



The NMR for younger mothers (42 per 1,000 live births) is 1.8 times higher than for mothers aged 20-29 (24 per 1,000 live births).[2]
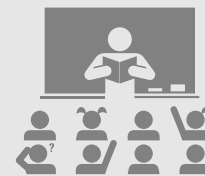
**1 in 6** young women (aged 20-24) have given birth by age 18.[2]
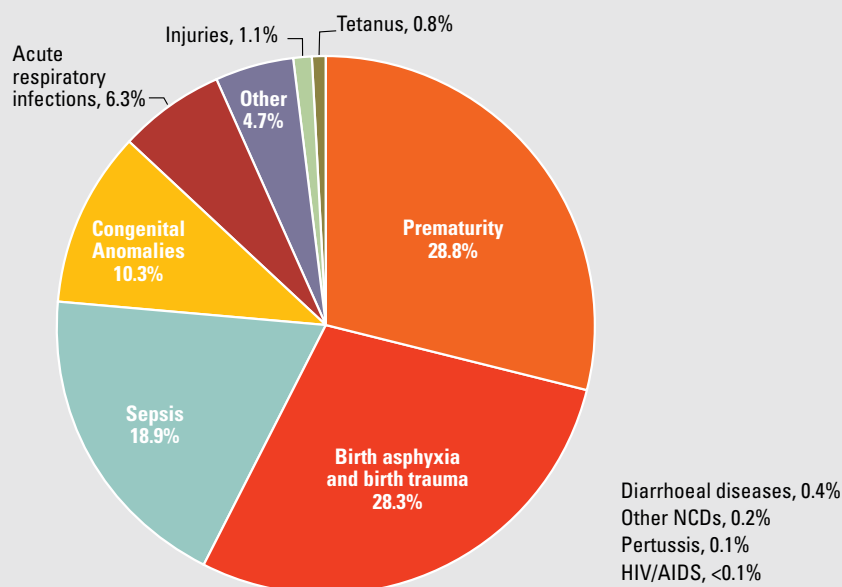
**Newborns** with less educated mothers are:

**1.3x** more likely to die during the first month compared to those born to mothers with higher education.[2]

# Ghana — Causes of Neonatal Mortality, 2015

In Ghana, the main causes of neonatal deaths in 2015 were prematurity (28.8 percent), birth asphyxia (28.3 percent) and sepsis (18.9 percent).[11]



Injuries, 1.1%
Tetanus, 0.8%
Acute respiratory infections, 6.3%
Other 4.7%
Prematurity 28.8%
Congenital Anomalies 10.3%
Sepsis 18.9%
Birth asphyxia and birth trauma 28.3%
Diarrhoeal diseases, 0.4%
Other NCDs, 0.2%
Pertussis, 0.1%
HIV/AIDS, <0.1%

## Disparities in key maternal and newborn health interventions, Ghana, 2014[2]

| | | 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 | 36.3 | 92.3 | 90.1 | 90.2 | 18.8 | 90.2 |
| | Rural | 41.9 | 82.9 | 60.2 | 59 | 7.9 | 73.9 |
| Residence ratio (urban to rural) | | 0.9 | 1.1 | 1.5 | 1.5 | 2.4 | 1.2 |
| **Household Wealth** | Richest | 36.6 | 98.1 | 96.7 | 96.4 | 27.9 | 95 |
| | Poorest | 39.8 | 76.4 | 46.9 | 46 | 4 | 64.6 |
| Household wealth ratio (richest to poorest) | | 0.9 | 1.3 | 2.1 | 2.1 | 7.0 | 1.5 |
| **Mother's age** | Less than 20 | 24.1 | 80.8 | 72.1 | 71.3 | 4.9 | 79.4 |
| | 20-34 | | 88.5 | 74.6 | 74 | 12.7 | 82.3 |
| | 35-49 | 37.1 | 86.0 | 71.2 | 70.4 | 17.3 | 77.8 |
| **Mother's education** | No education | 36.4 | 79.2 | 52.3 | 51.7 | 5.7 | 68.4 |
| | Primary | 44.2 | 82.3 | 68.8 | 68.2 | 10.9 | 76.2 |
| | Secondary | 37.7 | 82.1 | 85.6 | 85.0 | 15.5 | 88.9 |
| | Higher | 48.5 | 92.9 | 98.2 | 97.7 | 36.1 | 92.8 |
| Mother's education ratio (highest to lowest) | | 1.3 | 1.2 | 1.9 | 1.9 | 6.3 | 1.4 |

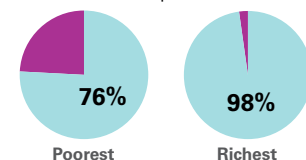## Maternal and newborn health coverage indicators

### By residence:[2]

- In rural areas, 83 percent of women made at least 4 antenatal care (ANC) visits, compared to 92 percent in urban areas.
- Coverage of skilled attendance at birth is 60 percent in rural areas, compared to 90 percent in urban areas.
- 22 percent of newborns in rural areas receive postnatal care (PNC) within 2 days after birth, compared to 23 percent in urban areas.

### By household wealth:[2]

- Nearly all mothers among richest households (98 percent) made at least four ANC visits, compared to 76 percent of mothers from the poorest households.
- Only 47 percent of deliveries in the poorest households had a skilled attendant at birth, compared to 97 percent of deliveries in the richest households.
- 29 percent of newborns in the richest households receive PNC within 2 days after birth, compared to 25 percent among the poorest households.

Only **3/4** of mothers in the poorest households have **4 Antenatal Care visits** compared to...



**76%** Poorest    **98%** Richest

**...98%** of mothers 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, newborn (%) | Pentavalent 1 vaccination received (%)** | Tetanus protection for newborns (%) | Birth registration (%) | Births by age 18 (%)a,# | | |
| 23.4 | 76.5 | 54.5 | | 97.2 | 95.9 | 80.1 | 79 | 12.9 | Urban | **Residence** |
| 22.3 | 47 | 56.5 | | 96.4 | 97.2 | 76.2 | 63.2 | 21.5 | Rural | |
| 1.0 | 1.6 | 1.0 | | 1.0 | 1.0 | 1.1 | 1.3 | 0.6 | Residence ratio (urban to rural) | |
| 29.3 | 87.9 | 53.7 | | 98.9 | 98.5 | 87.3 | 88 | 8.4 | Richest | **Household Wealth** |
| 25.4 | 37.9 | 58.6 | | 95.7 | 95.8 | 68.2 | 58.1 | 23.1 | Poorest | |
| 1.2 | 2.3 | 0.9 | | 1.0 | 1.0 | 1.3 | 1.5 | 0.4 | Household wealth ratio (richest to poorest) | |
| 19.7 | 53.2 | | | | | 66 | | | Less than 20 | **Mother's age** |
| 23.7 | 62.2 | | | | | 78.7 | | | 20-34 | |
| 20.8 | 56.8 | | | | | 80.9 | | | 35-49 | |
| 24.8 | 41.3 | 58.8 | | 93 | 95.1 | 72.4 | | 35.0 | No education | **Mother's education** |
| 26.9 | 50.6 | 52.8 | | 98 | 93.9 | 73.3 | | 27.6 | Primary | |
| 19.2 | 71.9 | 55.2 | | 98.3 | 98.5 | 81.9 | | | Secondary | |
| 31.9 | 95.7 | 52.6 | | (96.8) | (96.8) | 87.5 | | | Higher | |
| 1.3 | 2.3 | 0.9 | | 1.0 | 1.0 | 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



Skilled attendant at birth · Postnatal care of newborns within 2 days · Antenatal care coverage at least 4 times
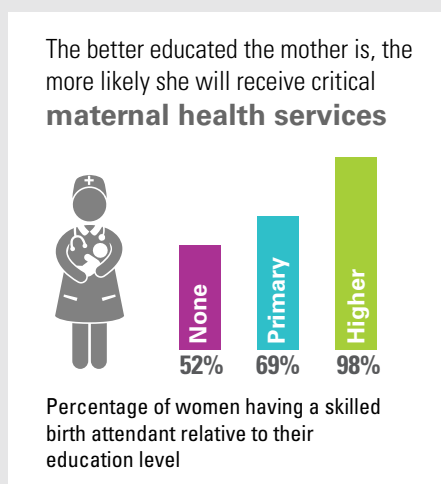
### By mother's age:[2]

- 89 percent of mothers aged 20-34 made at least four ANC visits, compared to 81 percent among younger mothers (aged less than 20).

- Mothers aged 20-34 and younger mothers have similar levels of skilled attendance at birth (75 percent and 72 percent, respectively).

- Their newborns receive low levels of postnatal care: 24 percent and 20 percent, respectively.

## Disparities in key maternal and newborn health interventions, Ghana, 2014[2]

| | 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** | **39.2** | **87.3** | **73.7** | **73.1** | **12.8** | **81.1** |
| Western | 42.8 | 92.1 | 75.3 | 74.0 | 14.6 | 83.9 |
| Central | 45.4 | 91.1 | 72.0 | 70.3 | 15.7 | 81.2 |
| Greater Accra | 34.1 | 91.4 | 92.1 | 92.5 | 22.9 | 95.6 |
| Volta | 43.0 | 77.3 | 66.3 | 65.3 | 8.8 | 69.0 |
| Eastern | 39.7 | 77.4 | 67.2 | 67.7 | 9.5 | 73.4 |
| Ashanti | 35.8 | 93.5 | 86.3 | 85.6 | 15.6 | 91.0 |
| Brong-Ahafo | 46.3 | 90.3 | 79.0 | 78.3 | 9.6 | 82.7 |
| Northern | 27.8 | 73.0 | 36.4 | 35.4 | 2.7 | 59.3 |
| Upper East | 46.5 | 93.0 | 84.6 | 84.1 | 7.6 | 91.4 |
| Upper West | 47.0 | 91.3 | 63.7 | 63.4 | 4.7 | 76.6 |
| **Highest value** | Upper West | Ashanti | Greater Accra | Greater Accra | Greater Accra | Greater Accra |
| | 47.0 | 93.5 | 92.1 | 92.5 | 22.9 | 95.6 |
| **Lowest value** | Northern | Northern | Northern | Northern | Northern | Northern |
| | 27.8 | 73.0 | 36.4 | 35.4 | 2.7 | 59.3 |
| **Ratio (highest to lowest)** | 1.7 | 1.3 | 2.5 | 2.6 | 8.5 | 1.6 |

Region · Regional performance

## By mother's education:[2]

- 93 percent of mothers with higher education made at least four ANC visits, compared to only 79 percent of mothers with no education.

- Only 52 percent of mothers with no education had a skilled attendant at birth, compared to 69 percent with primary education and 98 percent for mothers with higher education.

- 25 percent of newborns are checked within two days after birth if their mothers have no education, compared to 27 percent of mothers with a primary education and 32 percent of mothers who received higher education.

The better educated the mother is, the more likely she will receive critical **maternal health services**

| None | Primary | Higher |
|------|---------|--------|
| 52% | 69% | 98% |

Percentage of women having a skilled birth attendant relative to their education level

## By geographic regions:[2]

- Ashanti saw the highest rate of antenatal care coverage (at least four visits) of 94 percent, compared to the lowest coverage of 73 percent in Northern.

- The region with the highest coverage of skilled birth attendance is Greater Accra with 92 percent; the lowest coverage is Northern with 36 percent – a difference of 2.5 times.

- Upper East has the highest coverage of PNC for newborns (within 2 days after birth) with 60 percent and Western has the lowest coverage at 7 percent.

| 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, newborn (%) | Pentavalent 1 vaccination received (%)** | Tetanus protection for newborns (%) | Birth registration (%) | | Births by age 18 (%)a,# | | |
| 22.8 | 60.3 | 55.6 | 52.3 | 96.8 | 96.6 | 78.0 | 70.5 | | 16.9 | National estimate | |
| 6.5 | 56.9 | 62.0 | | 96.8 | 95.4 | 82.0 | 61.9 | | 22.8 | Western | |
| 24.3 | 52.0 | 60.9 | | 95.9 | 98.4 | 84.0 | 81.3 | | 15.9 | Central | |
| 42.1 | 80.0 | 52.8 | | 98.4 | 97.2 | 78.2 | 79.3 | | 13.8 | Greater Accra | |
| 19.3 | 63.1 | 44.1 | | 96.4 | 90.9 | 80.8 | 49.5 | | 14.7 | Volta | Region |
| 10.6 | 49.1 | 50.7 | | 94.5 | 94.7 | 68.8 | 64.3 | | 23.3 | Eastern | |
| 16.2 | 73.7 | 50.0 | | 98.1 | 99.1 | 81.8 | 81.5 | | 9.5 | Ashanti | |
| 11.2 | 63.7 | 59.2 | | 100.0 | 99.5 | 83.7 | 56.7 | | 21.3 | Brong-Ahafo | |
| 21.8 | 28.4 | 64.7 | | 92.1 | 93.6 | 69.0 | 68.3 | | 19.6 | Northern | |
| 59.9 | 67.9 | 65.2 | | 97.9 | 98.7 | 68.0 | 71.3 | | 18.6 | Upper East | |
| 49.2 | 57.3 | 40.6 | | 98.6 | 97.5 | 70.9 | 75.3 | | 21.5 | Upper West | |
| Upper East | Greater Accra | Upper East | | Brong Ahafo | Brong Ahafo | Central | Ashanti | Eastern | | Highest value | |
| 59.9 | 80 | 65.2 | | 100 | 99.5 | 84 | 81.5 | 23.3 | | | |
| Western | Northern | Upper West | | Northern | Volta | Upper East | Volta | Ashanti | | Lowest value | Regional performance |
| 6.5 | 28.4 | 40.6 | | 92.1 | 90.9 | 68.0 | 49.5 | 9.5 | | | |
| 9.2 | 2.8 | 1.6 | | 1.1 | 1.1 | 1.2 | 1.6 | 2.5 | | 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 Ghana 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.

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.

** Pentavalent schedule includes the hepatitis B vaccine.

a Data from UNICEF reanalysis of Ghana 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.

unicef | for every child