

Factsheet on Ghana's blood services: 2015

Every year, an estimated 289,000 women die worldwide from complications related to pregnancy and childbirth¹. Nearly two-thirds of these maternal deaths (62%) occur in sub-Saharan Africa¹, with severe bleeding as the leading direct cause accounting for 24.5% of maternal deaths in this region². Out of all these maternal deaths from severe bleeding in sub-Saharan Africa, an estimated 26% are directly related to a lack of an emergency supply of blood³.

Key interventions to reduce maternal deaths from severe bleeding are skilled birth attendance, which includes the enabling environment to provide skilled care (e.g. availability of all essential drugs, supplies and equipment) and ensuring the availability of quality emergency obstetric care^{3,4}. Blood is needed for caesarean sections and blood transfusions, which are two essential components of comprehensive emergency obstetric care⁵.

Women who haemorrhage while pregnant or around the time of delivery are at high risk of dying because once bleeding has started death can occur in around two hours⁶. Therefore, among other strategies to prevent maternal deaths from haemorrhage, it is crucial for women to have rapid access to adequate, safe, and affordable blood for transfusion³. Despite considerable progress made in recent years, a survey by the World Health Organization (WHO) shows that the African region has yet to meet the required need for blood and blood products⁷.

The World Health Organization's integrated strategy for safe and effective use of blood includes⁸:

- @ Establishment of a centralised, nationally-coordinated blood transfusion service
- @ Collection of blood only from voluntary unpaid blood donors from low-risk populations
- @ Testing of all donated blood, including for transfusion transmissible infections
- @ Reduction in needless transfusions through the effective clinical use of blood

Go to www.who.int/bloodsafety for more on WHO's recommendations on blood safety, developing a national blood system, and the clinical use of blood



- @ Ghana's National Blood Services are collecting just over 50% of the blood needed in Ghana^{9,10,11, a}.
- @ Help make that 100% and save the lives of mothers and babies **Give blood today**
- @ To find out more about the blood services in Ghana and where you can donate blood, please visit <http://nbsghana.org/>
- @ For more information on why you should be a voluntary donor, please visit www.mamaye.org.gh



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Organisation of the Blood Transfusion Services in Ghana

Established national policy	Yes ¹²
Blood system: centralised ^b or decentralised ^c	Centralised and decentralised ^{13,14}

Blood Safety and Screening by National Blood Service Ghana

Blood tested for HIV	Yes ¹² (according to the national blood policy)
Blood tested for Hepatitis B Virus	Yes ¹² (according to the national blood policy)
Blood tested for Hepatitis C Virus	Yes ¹² (according to the national blood policy)
Blood tested for malaria	No ¹⁴
Blood tested for syphilis	Yes ¹² (according to the national blood policy)

Donor population

Percentage of donations collected by NBSG from voluntary unpaid donors (WHO recommendation: 100%)	30% (2014) ¹¹
Percentage of donations collected by NBSG from family replacement donors	70% (2014) ¹¹
Paid donors	Not practised in Ghana ¹⁴

Blood supply by National Blood Services Ghana

Total population in the country	27,000,000 (mid 2014) ¹⁰
Estimated blood needed	270,000 units (2014) ^{9,10,a}
Blood units collected by NBSG	150,322 units (2014) ¹¹
Estimated blood needed per 1,000 population	10 units per 1,000 population ⁹
Blood units collected per 1,000 population	5.6 units per 1,000 population ^{10,11,a}

Blood use towards maternal, newborn, and child health

Blood transfused to children under five and women of childbearing age	Data is difficult to collect as only available on a facility by facility basis ^{11,15} . Therefore no up-to-date available figures. 2006 data suggests: urban areas: 50%; rural areas: >75% ¹²
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Notes:

^a The World Health Organization recommends that the minimum level of blood needed is 1% or 10 units per 1,000 population⁹. For 2014, the estimated population in Ghana is 27.0 million¹⁰ and an estimated 150,322 units of blood were collected¹¹. The units collected per 1,000 population is equal to: 150,322 units / (27,000,000 / 1,000 population) = 5.6 units per 1,000 population. This is equivalent to just over half of blood needed being collected:

5.6 units per 1,000 collected / 10.0 units per 1,000 population needed⁹ = 0.56 (equivalent to 56%)

^b Blood collection, testing, and distribution are co-ordinated centrally e.g. via NBTS.

^c Blood collection, testing, and distribution are co-ordinated at the hospital level.