

MamaYe Factsheet on Sepsis

What is sepsis?

Sepsis is caused by a severe infection which leads to blood poisoning and organ damage. In severe cases it can lead to organ failure and death. It is difficult to predict, diagnose and treat but importantly low-tech interventions are available^{1,2}.

How does it affect mothers and newborns?

Sepsis is the third leading cause of maternal and newborn deaths^{2,3}. In sub-Saharan Africa, sepsis causes 10% of maternal deaths³ and was responsible for 15% of neonatal deaths globally².

According to the Global Sepsis Alliance, these figures underestimate the true scale of deaths caused by sepsis: common global estimates of deaths from sepsis do not include infections such as malaria, diarrhoea and lower respiratory infections, even though sepsis is the final common pathway to death⁴. The true global scale of newborn deaths from sepsis could be as high as 30%* and 38%** in sub-Saharan Africa⁵.

What can be done to prevent sepsis?

Many of these infection-related deaths in mothers and babies are caused by a lack of hygiene and infection control during and around delivery^{6,7}. They can be significantly reduced through increased investment in the quality of care around the time of birth⁸.

Key life saving interventions are:

- @ Improve the use and quality of maternal and newborn health facilities⁹
- @ Follow clean birth practices as recommended in the World Health Organization's six cleans¹⁰
- @ Avoiding infection is one of the best ways to prevent sepsis. In addition to the clean birth practices the following are also key¹¹:
 1. Provide access to clean water and improved sanitation¹²
 2. Encourage good nutrition for mothers and early and exclusive breastfeeding for newborns to support a healthy immune system¹³
 3. Vaccination to prevent infectious diseases that can lead to sepsis

What would be the result?

During delivery, there is evidence that the "six cleans", recommended by the World Health Organization, are associated with a lower incidence of puerperal sepsis^{14,15}. Puerperal sepsis refers to any bacterial infection of the mother's genital tract after a baby is born¹⁶.

One study also found that clean birth practices could reduce newborn deaths from sepsis by 15% at home, by 27% in a facility, and by 40% with clean postnatal care. The researcher's defined clean birth and postnatal practices as including: clean hands of the birth attendant before delivering baby, clean birth surface, clean perineum, cutting of the umbilical cord using a clean implement, clean cord tie, and a clean cloth for drying¹⁷.



The World Health Organization's Six Cleans¹⁰

1. Clean hands of the attendant
2. Clean surface
3. Clean blade
4. Clean cord tie
5. Clean towels to dry the baby and then wrap the baby
6. Clean cloth to wrap the mother

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Notes:

*Calculated by adding the total number of deaths for infants 0-27 days old globally by two causes categorised by the Global Burden of Disease study: 1) “sepsis and other infectious disorders”, and 2) diarrhoea, lower respiratory infections, meningitis, and other common infectious diseases”. This figure was then divided by the total number of deaths for infants 0-27 days old globally and multiplying by 100.

**Calculated by adding the total number of deaths for infants 0-27 days old in sub-Saharan Africa by two causes categorised by the Global Burden of Disease study: 1) “sepsis and other infectious disorders”, and 2) “diarrhoea, lower respiratory infections, meningitis, and other common infectious diseases”. This figure was then divided by the total number of deaths for infants 0-27 days old in sub-Saharan Africa and multiplying by 100.