Investing in Malaria in Pregnancy in Sub-Saharan Africa:

Saving Women's and Children's Lives

ROLL BACK MALARIA

What is the danger of malaria in pregnancy (MiP)?

Each year, **MiP** is responsible for:

Pregnancies → **20%** of stillbirths in sub-Saharan Africa[1]

Newborns → **100,000** newborn deaths globally[2]

11% of all newborn deaths in sub-Saharan Africa[3]

Mothers → **10,000** maternal deaths globally[3]

IPTp-SP works! It provides significant benefit by reducing the incidence of:[4,5]

- **29%** Low birthweight
- **38%** Severe maternal anaemia
- **31%** Neonatal mortality

Approximately **94,000** newborn lives saved through MiP interventions between **2009** and **2012**

The World Health Organization Recommends

- Routine administration of **IPTp-SP**
- Consistent use of **ITNs** before, during and after pregnancy
- Effective **diagnosis and treatment**
- Administration of low-dose **folic acid** during ANC

What can be done?

- **Aim for scale-up and full coverage** of WHO lifesaving interventions.
- **Promote early** and regular ANC attendance.
- **Preserve SP efficacy** by avoiding its use for treating clinical cases of malaria.
- **Reserve SP stocks** for IPTp at ANC clinics.

What about pregnant women living with HIV?

- Pregnant women living with HIV on cotrimoxazole **should not** receive SP because administration of both drugs together could cause harm.
- It is especially important that pregnant women living with HIV sleep under an ITN and access prompt and effective diagnosis and treatment if they have symptoms of malaria.

IPTp-SP = intermittent preventive treatment in pregnancy with sulphadoxine-pyrimethamine
ANC = antenatal care
ITN = insecticide-treated net
WHO = World Health Organization
MiP = malaria in pregnancy

USAID PRESIDENT'S MALARIA INITIATIVE · CDC · USAID FROM THE AMERICAN PEOPLE · Maternal and Child Survival Program · London School of Hygiene & Tropical Medicine · CDC · Bill & Melinda Gates foundation · mip malaria in pregnancy consortium · Maternal Health Task Force · USAID | DELIVER PROJECT · unicef · World Health Organization · ISGlobal Barcelona Institute for Global Health · The Global Fund · MMV Medicines for Malaria Venture · UNITAID

Investing in Malaria in Pregnancy in Sub-Saharan Africa:

Saving Women's and Children's Lives

ROLL BACK MALARIA

Key Message 1:

MiP is a serious global public health issue.

1. Malaria infection in pregnancy carries serious risks for pregnant women, foetuses and newborns, including anaemia, severe malaria, spontaneous abortion, stillbirth, prematurity, neonatal mortality and low birthweight.[6]
2. As malaria prevalence in a country declines, adverse consequences will likely increase in pregnant women because of delayed acquisition of immunity due to reduced exposure.[7]
3. Addressing MiP is key to malaria elimination efforts since the placenta can be a reservoir of infection.
4. Pregnant women co-infected with malaria and HIV are more vulnerable to the severe outcomes of both diseases.

Key Message 2:

Investing in MiP programs makes a difference in the lives of mothers and newborns.

1. IPTp-SP is cost-effective and prevents adverse consequences of malaria, i.e., placental infection, clinical malaria, maternal anaemia, foetal anaemia, low birthweight and mortality.[4,5,8]
   a. Severe maternal anaemia reduced by 38%.
   b. Low birthweight is reduced by 29%.
   c. Neonatal mortality is reduced by 31%.
2. MiP prevention can avert newborn deaths.
   a. About 300,000 deaths could have been averted if IPTp-SP and ITN coverage had increased to 80% from 2009 to 2012.
3. IPTp-SP continues to protect against low birthweight even in areas of low malaria transmission.[9]
4. IPTp will continue to be important until malaria has been eradicated.

Key Message 3:

Comprehensive MiP programming is needed and ensures full coverage of interventions.

1. WHO recommends these lifesaving interventions:
   a. In areas of moderate to high transmission of malaria, IPTp at every ANC visit, starting as early as possible in the 2nd trimester, with doses at least a month apart.
   b. ITN use before, during and after pregnancy.
   c. Parasitological testing and treatment according to national guidelines.
2. Scale-up of efforts is needed because coverage of effective tools is low:
   a. 40% of eligible pregnant women received two or more doses of IPTp-SP and 17% received three or more doses.[10]
   b. ITN use among pregnant women is 38%.[11]
   c. Effective case management in pregnancy is largely unknown.[12]
3. Investment in health systems strengthening, including effective monitoring and evaluation, is critical to scale up and sustain gains over time for MiP.
4. The Roll Back Malaria Global Call to Action focusing on IPTp-SP scale-up includes information on effective interventions and strategies for increasing coverage.[13]

[1] Lawn et al. 2016. Stillbirths: rates, risk factors, and acceleration towards 2030. doi: 10.1016/s0140-6736(15)00837-5.
[2] Desai, M. et al. 2007. Epidemiology and burden of malaria in pregnancy. The Lancet Infectious Diseases. 7(2): 93-104.
[3] Guyatt and Snow. 2001. The epidemiology and burden of Plasmodium falciparum-related anemia among pregnant women in sub-saharan Africa. AJTMH. 64(1,2)S: 36-44.
[4] Garner P, Gulmezoglu A. 2006. Drugs for preventing malaria in pregnant women. Cochrane Database Syst Rev: CD000169
[5] Bhutta et al. Can available interventions end preventable deaths in mothers, newborn babies, and stillbirths, and at what cost? The Lancet. Vol 384 July 26, 2014 347. doi: 10.1016/S0140-6736(14)60792-3.
[6] Menéndez et al. 2010. Malaria prevention with IPTp during pregnancy reduces neonatal mortality. doi: 10.1371/journal.pone.0009438.
[7] Mayor et al. 2015. Changing trends in P. falciparum burden, immunity, and disease in pregnancy. doi: 10.1056/NEJMoa1406459.
[8] Sicuri E et al. Cost-effectiveness of intermittent preventive treatment of malaria in pregnancy in southern Mozambique. doi: 10.1371/journal.pone.0013407
[9] Chico et al. 2015. Influence of malaria transmission intensity and the 581G mutation on the efficacy of intermittent preventive treatment in pregnancy: systematic review and meta-analysis. doi: 10.1111/tmi.12595.
[10] World Health Organization. *WHO Global Malaria Programme: World Malaria Report 2015*. Geneva: WHO Press, 2015. Accessed March 30, 2016. http://www.who.int/malaria/publications/world-malaria-report-2015/report/en/
[11] Agarwal et al. 2015. Global Call to Action to scale-up coverage of intermittent preventive treatment of malaria in pregnancy: seminar report. doi: 10.1186/s12936-015-0730-3.
[12] Riley et al. 2016. Knowledge and adherence to the national guidelines for malaria case management in pregnancy among healthcare providers and drug outlet dispensers in rural, western Kenya. doi:10.1371/journal.pone.0145616.
[13] Roll Back Malaria Partnership 2015. *Global Call to Action: To Increase National Coverage of Intermittent Preventive Treatment of Malaria in Pregnancy for Immediate Impact.* http://www.rollbackmalaria.org/files/files/resources/call_to_action_report_v5d_EN.pdf.

This brief is made possible by USAID and the Maternal and Child Survival Program and does not reflect the views of USAID, PMI or the United States Government.