Hopital Gabriel Toure (HGT), a Teaching Hospital in Bamako, Mali experiences an unacceptably high rate of pre-term infant mortality. The exact cause of most of these deaths is not known although infection is very frequently suspected. Malaria is highly prevalent in this setting but the extent to which malaria contributes to mortality or morbidity in preterm and neonates in Mali is not known. The objective of this study was to determine the rate of congenital and acquired malaria in inpatient neonates at HGT. We are performing a cross sectional study in infants aged 0-28 days that were admitted for inpatient care to the Unit of Reanimation and Neonatology of HGT. The study will recruit 300 mother-infant pairs. After informed parental consent was obtained venous blood was collected for malaria diagnosis by OptiMAL® IT, microscopy and PCR. If an infant was enrolled and the mother was available, she was approached for enrolment into the study and asked to provide a blood sample. To date 272 infants and 136 mothers were included between October 2006 and February 2008. The mean age of infants was 3.4 days but, 44.4% of infants were included on their first day of life. The mean weight was 2922g but 23.5% of the infant were low birth weight infants. In all infants both PCR and microscopy for malaria were negative. However, three infants were positive for *P. falciparum* malaria by the OptiMAL® IT test. The mean age of mothers was 25.2 years. No malaria prophylaxis was used by 5.3% of them during the pregnancy. Of the remaining women that used chemoprophylaxis, 58.7% used chloroquine while 36% used IPTp with sulfadoxine-pyrimethamine, the national policy for preventing malaria during pregnancy. All mothers were parasite negative by microscopy, the OptiMAL® IT was positive for *P. falciparum* in six cases while PCR was positive in 11 women. These preliminary data suggest that malaria is not a significant contributor to neonatal morbidity and mortality in this setting. Data from the completed study will be presented.