By Honelgn Nahusenay

**IRS:** Indoor Residual Spraying is one of the vector control strategies being used in the fight against malaria. Eight out of the ten sentinel sites have undergone IRS operation in August. In the operation Bendiocarb, a carbamate insecticide has been used. ACIPH provided logistic support for Bulbula Health Center during the operation.

**Laboratory quality control:** ACIPH and EHNRI are working together to increase the quality of malaria diagnosis. EHNRI started reading of blood slides collected for quality control purpose. The institute provides professional comments on the quality of staining and other issues. The results are communicated to the lab technicians at the health centers; slides with discordant results are taken back to the health centers and onsite support is given. The continuous support for lab quality provided through this approach serves to strengthen and maintain lab diagnostic quality over time.

**SMS reporting:** Since July 7, 2011, sentinel sites have submitted weekly malaria reports via SMS. This has enabled early detection of epidemics in the sentinel sites. Onsite trainings on SMS reporting was given for HEW at their health posts or in sentinel site health centers. Currently, the number of health facilities reporting using SMS has increased to 31. In order to make reports available, a user account enabling access to weekly malaria data was developed and shared with different stakeholders such as ORHB and PMI. Using the account, interested health professionals can see the numbers of cases, charts and maps of malaria cases. These are generated automatically and weekly by the system and serve to provide rapid information for decision making.
Selected Results from the Sentinel Sites (Health Centers)

Figure 1. Trends in number of patients laboratory tested for malaria at the primary sites, since April, 2010.

An increase in the number of lab tested patients for malaria has been observed starting from June 2011 in Asendabo and Bulbula; while slight increase beginning in July was observed at Metehara.

Figure 2: Trends in number of patients laboratory tested for malaria at the secondary sites, since April, 2010. The trend for Guangua continued to increase starting from March 2011 has reached peak in May 2011, while numbers have fallen slightly the overall level remains very high. An increased trend has also been observed for Dera and Wolenchiti in July & August 2011.

Figure 3: Trends of confirmed malaria cases at the primary sites as of April 2010.

The trend in confirmed malaria at the primary sites is somewhat similar with the trend for the lab tested cases. An increased trend has been observed for Bulbula starting in July 2011. Compared with the 2010 trend for the same months, the increase in Asendabo appears to be later in the year. A case buildup is also being seen at Asendabo HC.
Figure 4: Trends in confirmed malaria cases at the secondary sites, since April, 2010. The trend in confirmed malaria cases shows that the malaria situation in Guanqua is still in epidemic state although a reduction has been reported around June 2011. A slight increase in the confirmed malaria cases has also been seen for Dera and Wolenchiti since July 2011.

Figure 5. Trends in overall test positivity rate at the primary sites since April, 2010. The test positivity rate at Bulbula HC has shown a sharp increase in July 2011 and continued to increase in August as well. This is similar to the trend of confirmed cases in the same site. Increasing TPRs are also seen at Asendabo and Metehara HCs.

Figure 6. Trends in overall test positivity rate at the secondary sites since April, 2010.

The TPR also followed similar trend with the number of confirmed cases in the secondary sites. Dera and Welenchiti are showing general increases in TPR while Guanqua’s TPR remains high and stable indicative on the ongoing epidemic there.
Selected Results from the Sentinel Sites (Health Posts)

Figure 7. Trend in confirmed cases of malaria at the health posts of three sentinel sites as of Nov 2010. The reporting period varied across sites. The trend in Bulbula and Asendabo sites starting from June 2011. This is similar to the trends in their respective Health centers.

Figure 8. Trends in TPR at the health posts of three sentinel sites Nov 2010-Aug 2011.

For Further Information, please contact either ACIPH or Tulane University

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