FIGHTING AFRICA’S KILLER

Kenya

The studies of MSU researchers Ned Walker and James Miller in western Kenya focus on methods to reduce malaria transmission in sustainable and practical ways. Their target is the adult, female Anopheles mosquito — the most dangerous insect in Africa. The main focus is on insecticide treated bed nets (ITNs).

- Which is the best kind of net to deploy in communities?
- Will community uptake be sufficient to reduce malaria transmission?
- How sustainable is an intervention like this?
- Will mosquitoes develop resistance to the insecticides in the bed net fabric?

In addition to this work, studies are conducted on the population responses of the mosquito and malaria populations to wide scale deployment of ITNs, using molecular genetic methods. The results show that both of these populations respond in dramatic ways when transmission is greatly reduced, as it has been. More about this on the next page.

The female anopheline mosquito transmits malaria, that kills almost two million people each year, 90 percent of them in Sub-Saharan Africa.

HIV/AIDS, MALARIA, AND OTHER DISEASES

For many years, MSU health professionals have been collaborating with their African counterparts to fight not only malaria, but other diseases such as HIV/AIDS, tuberculosis, epilepsy and more.