

## *An active approach to community-based malaria management in Senegal*

### Background

The region of Kedougou in the extreme southeast of Senegal has the highest rates of malaria in the country, and geographic, educational and financial barriers often prohibit rural populations from accessing care. A home-based care model called PECADOM was implemented by the Ministry of Health in Senegal starting in 2008 and addresses many of these barriers to care and care seeking. Volunteer community-based care providers are trained to perform rapid diagnostic tests and administer treatment for cases of uncomplicated malaria, referring all negative and severe cases. Despite these advances, some limitations are still evident in the existing model. As case detection is passive, malaria detection and treatment rely on the patient to seek out the community-based care provider. Peace Corps and the Saraya Health District have partnered in 2012 and 2013 to pilot an innovative new model to address these barriers.



### Goal

To decrease the burden of morbidity and mortality from malaria within the Saraya Health District through *active detection* of fever cases, testing, and treatment of confirmed malaria cases.

### Objectives

1. To reduce morbidity and mortality due to severe malaria
2. To reduce prevalence through provision of early diagnosis and treatment of malaria, thus diminishing the reservoir for transmission

## Methods

Pay a small wage (approximately US\$5 per week) to previously purely volunteer health workers to conduct sweeps of every household in their village once a week during the rainy season in order to actively seek out suspected cases of malaria. Rapid tests are administered to anyone with symptoms, and treatment is provided on the spot for positive cases. One woman from each compound is also trained to recognize the symptoms of malaria and make sure all ill family members are tested during the sweeps.

This model was implemented in 15 villages in the Saraya Health District from July 8 through November 25, 2013. 15 comparison villages were also chosen among villages benefiting from the original, passive PECADOM model, and village sweeps were conducted to estimate baseline, midline, and end line prevalence of symptomatic malaria in those villages.

## Results

At baseline, a similar prevalence of symptomatic malaria of just over 1% of the total population was found in both sets of villages. Sweeps continued on a weekly basis in the intervention villages. Midway through the program, sweeps of the comparison villages were again conducted, and the prevalence was found to be 2.5 times higher in the comparison villages than in the intervention villages using active case detection. The program concluded on November 25th, and this time, the prevalence in comparison villages was nearly 16 times higher than in the intervention villages, where only six cases of symptomatic malaria were found, showing great promise for this model.

**% of Population Testing Positive for Malaria: July–November 2013**

