



INFORM ASIA: USAID'S HEALTH RESEARCH PROGRAM

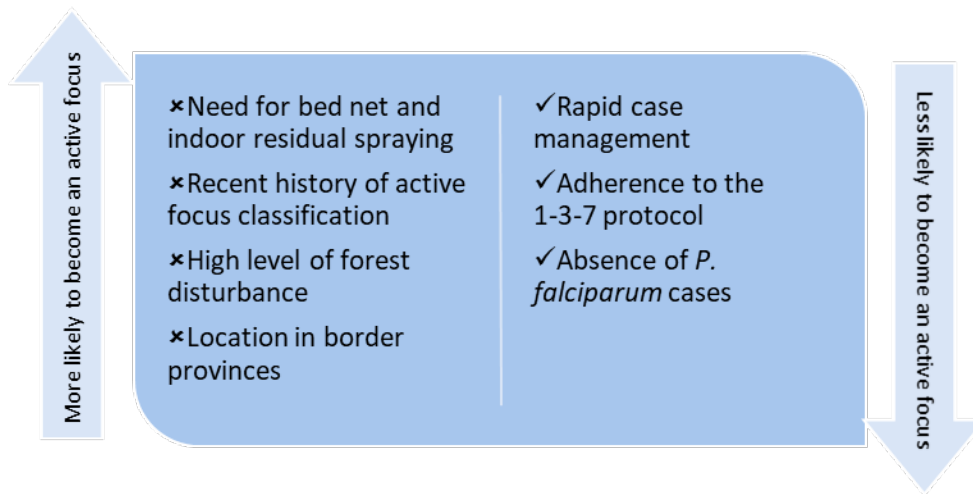
AN ANALYSIS TO MONITOR FOCI IN THAILAND

Thailand has implemented the 1-3-7 surveillance strategy to reach malaria elimination by 2024. The strategy requires that for each malaria case, notification occurs within 1 day of diagnosis, case investigation occurs within 3 days, and foci investigation occurs within 7 days to deploy targeted measures to prevent further transmission. All foci are classified into four levels based on existing transmission patterns and whether the environment is conducive to transmission. An active focus (A1) means that malaria transmission is ongoing in the community.

The Division of Vector Borne Diseases (DVBD), Ministry of Public Health, Thailand and Inform Asia: USAID's Health Research Program conducted a study to assess the effectiveness of the 1-3-7 strategy by following a group of 81,012 foci from 2013 to 2019 and to identify predictors of becoming an active focus.

The results show that the number of active foci decreased from 2,227 in 2013 to 700 in 2019 (68.5% reduction), while the number of local malaria cases declined from 17,553 to 3,787 (78.4% reduction). The mean number of local cases also dropped, from 7.3 to 5.4. These results indicate the effectiveness of the DVBD's surveillance and response measures.

Factors related to the likelihood of a focus being classified as active include:



To address the remaining challenges, the DVBD may consider alternative strategies in these vulnerable areas likely to revert back with active transmission. Movement between A1 and A2 foci is frequent, so malaria officers must maintain high coverage of nets and spraying moving forward. It also includes forest areas and border provinces, where workers often cross borders and work in forested areas that correspond to malaria hotspots. The DVBD's continued cross-border partnerships will support elimination in Thailand and the region as a whole.

Thailand's 1-3-7 surveillance and response approach in Thailand is contributing to fewer active foci. These results can help the DVBD and malaria officers to further improve the system by targeting specific populations and areas or by predicting foci that are at risk for reintroduced transmission. These encouraging results from Thailand's 1-3-7 strategy are a useful example for other countries in the Greater Mekong Subregion aiming to accelerate malaria elimination.