



Summary of Indoor Residual Spraying in Madagascar

AFM summarized indoor residual spraying (IRS) activities occurring in African countries based primarily on reports from the World Health Organization (WHO), Global Fund and the President's Malaria Initiative (PMI). Little information was available from other sources. AFM hopes IRS activities will be sustained and expanded as appropriate, and that all donor agencies supporting IRS with public funds will make available detailed and accurate reports in the future. Below is the summary of IRS activities in Madagascar.

Year of Initiation^a	1950
Operational Coverage 2006-2007^a	98% targeted structures sprayed
Population Covered 2006-2007^a	1.25 million people (7% of population at risk)
Insecticide(s) Used^a	Alphacypermethrin
PMI FY08 Population Targeted^b	1.25 million people (7% of population at risk)
PMI FY08 IRS Budget^b	\$4,263,000 (25% of FY08 PMI budget)
PMI FY08 IRS Operational Research^b	N/A
Global Fund Support^c	Round 7

a. Implementation of Indoor Residual Spraying of Insecticides for Malaria Control in the WHO African Region Report:

http://www.afro.who.int/vbc/reports/report_on_the_implementation_of_irs_in_the_african_region_2007.pdf

b. President's Malaria Initiative, Malaria Operational Plans: <http://fightingmalaria.gov/countries/mops.html>

c. The Global Fund to Fight AIDS, Tuberculosis and Malaria: <http://www.theglobalfund.org/en/>

Madagascar was awarded three Global Fund malaria grants: a Round 1 grant in 2003, a Round 3 grant in 2004 and a Round 4 grant in 2005. None of the Original Proposals requested funding for IRS. A Round 7 grant has also been awarded. According to the Original Proposal, support was requested for a generalized IRS campaign during the first three years covering 33 health districts followed by a focused IRS campaign in the final two years. IRS activities would be focused only on the Central Highlands and margin regions.

IRS activities in Madagascar have been ongoing in the Central Highlands since 1993 using DDT. In 2004, pyrethroids became the insecticide of choice as a result of international pressure and in an effort to slow insecticide resistance. Focal spraying campaigns in the Central Highlands have reached 95-98% of targets over the past several years. In 2005, the WHO recommended a shift from focal spraying to blanket spraying using a combination of insecticides (DDT, carbamate and pyrethroid); however, the National Malaria Control Program and the Ministry of Health have yet to come to a decision on how to proceed. The National Malaria Control Program has also suggested increasing the annual IRS budget in order to conduct spraying campaigns on the West Coast but this has also not been finalized.

In the past, IRS campaigns were fully funded through the CRESAN Project (World Bank); however, the project ended in May 2007 and no further funding is available. The PMI along with USAID/Madagascar will support the continuation of IRS in the Central Highlands by targeting 250,000 households per year for spraying. This is expected to benefit approximately 1.25 million people or 7% of the estimated 18 million people at risk for malaria. Additional proposed Year 1 activities include supporting the evaluation of Year 1 activities to determine future vector control strategies; strengthening entomologic capabilities of the National Malaria Control Program; and implementing support for a long-term vector control strategy in the Central Highlands. The proposed PMI funding for Year 1 is \$17 million, of which 25% or

\$4,263,000 will go toward IRS.

According to the WHO's 2006-2007 summary of IRS activities in Madagascar, funding for IRS has been provided by the CRESAN Project as well as the Ministry of Health. The IRS program was stopped in 1970 due to failure in the anticipated eradication of the disease in the perennial transmission areas. In 1988, devastating epidemics occurred in the Central Highlands. IRS was re-introduced in the 1989/1990 malaria season. During the malaria seasons of 1998/1999, 2000/2001 and 2001/2002 spraying was inconsistent due to limited funding. Since 2003, IRS has been applied selectively, targeting areas at greatest risk of epidemics. Reportedly, the Central Highlands have achieved a significant reduction in malaria burden. The National Malaria Control Program has a good IRS management system and capacity.