

**USAID/PAHO Project for the Prevention and Control of Antimalarial Resistance in the Amazon.  
Proposed Work Plan for the period October 2002 through September 2003  
Country Work Plan - ECUADOR**

**Intermediate Result 1** - Reliable and standardized malaria drug efficacy information available . **Process Indicators:** a) Percent of sentinel sites where data collection has been initiated, b) Percent of functioning sentinel sites that comply with quality control procedures, as defined by country protocol. **Milestones:** a) Studies sites have been identified; b) Study protocol has been prepared and approved by Ethical Committee; c) Surveillance site staff have been trained in use of the study protocol; d) National level reference laboratory has been identified.

Activities	Tasks	Staff , Other Human Resources, and oOther Inputs	Product	Month/ Year	Remarks
A1.1 Establish a regional network for surveillance of drug resistance and monitoring of activities under the coordination of PAHO	Participate in regional meetings of RAVREDA-AMI	Focal Point, National Coordinator, one member of Technical Advisory Committee (TAC)		March 2003.	Cost included in 3.1.1
A.1.2 Establish national sentinel surveillance networks with quality control in each target country to assess the efficacy of antimalarial drugs.	1. Execution of the efficacy studies at 5 sentinel sites	Provincial personnel as part of a support team and Technical Advisory Committee (TAC)	Data collection in identified sentinel sites	October 2002 / September 2003	At each sentinel site it is planned to make evaluation of two therapeutic lines each for 6 months.
	2. Technical coordination meetings amongst participating institutions.	TAC, Directorates Provincials. Universities, Hospitals, NMES, Health Services	Coordinated participation activities	October 2002/ September 2003	
	3. Operation of the Technical Advisory Committee (TAC) through periodic meetings to evaluate activity progress.	Members of the Technical Advisory Committee and managerial equipment to be determined	Available information on operation of sentinel sites , management indicator and suggested recommendations.	October 2002 - September 2003	
	4. Monitoring the progress of the process in sentinel sites. (TAC technical supervision visits)	National personnel, PAHO, study- participant representatives	Progress reports on studies execution.	October 2002 - September 2003	
	5. Integrate health services with malaria quality control system	Personnel of Provincial Health Bureaus, NMES, NGOs.	Strengthening the diagnostic capacity of the health system, and operating quality control system	January-September 2003	
	6. Structure operational technical teams at provincial and local level for epidemiological analysis	Provincial health members, personnel of provincial and national epidemiological surveillance	Reactivation of analysis groups at local and provincial level.	January-September 2003	

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	7. Defining needs for sentinel sites, and making them operative.	Committee Technical Advisory, provincial Health workers.	Inputs and materials delivered and operating sentinel sites, transport operational, computer equipment available.	October/ December 2002	Include provision for maintenance and repair of laboratory equipment for malaria diagnosis in the national laboratory network.
	8. Execution of microscopy quality control for sentinel sites.	Reference laboratory.	The sentinel sites carry out PAHO/WHO protocol with laboratory diagnosis quality control.	March-September 2003.	
	9. Differentiation of reinfection or recurrence through genotyping by PCR.	Personnel trained in Peru, University of Guayaquil (180 processed samples)	Report on frequency of reinfection/recurrence available	June 2003	
	10. Study of factors related with therapeutic failures (accessibility, drug availability, prescription errors, self-medication ) in two pilot areas of the country.	Advisory technical committee, provincial health Bureaus, NGOs.	Report that identifies factors related to therapeutic failures.	January-September 2003	

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A.1.3 Provide training to improve national capability to conduct the surveillance network of antimalarial drug resistance in all target countries.	1. Retraining local personnel who intervene in studies, feedback, standardization in management of protocols and techniques of diagnosis, replication of seminar-workshop management on EPI-info.	National Personnel and selected local resources.	Selected personnel trained in 100% of the provinces where the sentinel sites were selected.	March - September 2003.	
	2. Holding seminar-workshop with personnel of general health services and NMES to improve passive surveillance of therapeutic failures.	Personal health Bureaus, NMES, private health workers.	Information available in the health system on therapeutic failures.	January - September 2003	
A.1.4. Study findings reviewed, alternative treatments evaluated, and consensus on appropriate treatment protocols reached.	1. Meetings for national policy adjustments on uses of therapeutic regimens, based on the first and second year study results.	Technical Adviser Committee. PAHO, NGOs, national Authorities.	New Standards of treatment arrived at by consensus, health workers handling new regimens.	June 2003	Ministry of Health will guarantee scheme availability.
	2. Training healthcare workers in management of new therapeutic schemes, publication of documents on new policy and new therapeutic schemes.	Advisory technical committee, provincial health Bureaus, NGOs.	Personnel trained at the country level, and widespread standards.	June-September 2003	

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<b>Intermediate Result 2.</b> Tools and approaches developed, adapted, tested and disseminated. Indicator: Number of sites identified in Ecuador with trials of rapid tests for malaria diagnosis initiated.					
A2.1.Rapid tests for malaria diagnosis evaluated in selected sites and appraisal of their cost- effectiveness evaluated	Select the sentinel sites where rapid tests will be evaluated, according to guidelines established through consensus within PAHO/WHO.	Technical Committee, Provincial Personnel Health Advisor. Local NGOs.	Selected Sentinel sites, functioning in accordance with PAHO norms and protocols.	January - September 2003.	
	2. Training of personnel who will participate in trial of rapid test.	TAC, Provincial Health Personnel, Local NGOs.	Trained test personnel under way	January /February 2003	
	3. Adaptation of pilot sites	Provincial Bureaus of Health, NMES	Adequate pilot sites and functioning under way of tests	January / February 2003	
	4. Purchase of inputs, and diagnostic kits .(10.000 kits)	TAC, Provincial Health Personnel, Local NGOs.	% of pilot sites with acquired inputs	January/ February 2003	
	5. Quality control, supervision of protocol execution.	Reference laboratory	Report protocol progress under way.	January/ September 2003	
	6. Analysis of collected data.	Personnel trained to this end.	Available information on cost effectiveness of tests in remote areas.	August- September 2003.	

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<b>Intermediate Result.3:</b> Partnerships to improve malaria control in the sub-region enhanced. Indicator: Number of surveillance network of anti-malarial drug resistance activities carried out with technical assistance or exchanges between target countries					
A3.1 Subregional dialogue and planning for prevention and containment anti-malaria drug resistance facilitated.	Participation at meetings of regional techniques, evaluation and coordination. a) Annual Technical Meeting b) Technical Meeting on modified WHO Protocols	National Coordination, provincial technical Coordination , PAHO/WHO	The strengthening of national networks of surveillance and the technical articulation with the regional network	Mar-03	
A3.2 Centers of excellence for regional training identified and supported.	Establish contacts with RAVREDA/AMI network (public and private institutions) to establish fields in advisory services. Participate in regional workshops: a) cost-effectiveness and EPI-info, b) data analysis c) trainers in entomology d) others	National Reference Laboratory, National Coordination, provincial technical Coordination , Sentinel Sites, PAHO/WHO	Application of methodologies of technical expertise in each one of the phases of the study	January/ June 2003	
A3.3 South-to-south technical assistance and training activities executed.	1. Training workshop in maintenance and repair of national laboratory network equipment in malaria diagnosis with participation of international experts (Ing. J.E. Villamil)	National Coordination, National Reference Laboratory, National laboratory Network, Provincial Directorates and Health Area PAHO/WHO	Personnel with supply capacity and provision for maintenance and repair of laboratory equipment for the diagnosis of malaria in the national laboratory network	January/ September 2003	Related to A1.2.7.
	2. Workshops to define scenarios for the establishment of pharmaceutical policies with participation of malariologists and Amazon experts.	National Authorities, Advisory Technical Committee, PAHO, Society of Infectious Diseases, international Advisory Services, international expert guests	Definition of the therapeutic malaria scenarios in the medium term and long period	Jun/July 2003	
	3. Workshops for definition of scheme management in border areas.	National Authorities, Pharmacy Commission, National Health Council, TAC, PAHO, provincial, and local authorities.	Establishment of national regimens for the malaria treatment	Jun/August 2003	
	4. Quality control with an International reference laboratory		External control: 100% of slides of the study, revision of thick blood smears for analyses of concordance and reference laboratory staff trained.	February-September 2003	