

VIETNAM NATIONAL MALARIA CONTROL PROJECT

Malaria control program in Viet nam 2007 and plan for 2008

Dr. Nguyen Manh Hung
Vice Director of NIMPE

I. results of Malaria control 2007

No	Indicators	2007	2006	Reduce (%)
1	No of Malaria deaths	20	41	- 51.2
	Mortality/100,000 pop.	0.02	0.048	- 58.3
2	No of Malaria cases	70,910	91,635	- 22.6
	Morbidity/1000 pop.	0.83	1.08	- 23.1
3	No of Sever cases	158	285	- 44.6
4	No of Positive cases	16,389	22,637	- 27.6
	Parasite rate/1000 pop.	0.19	0.27	- 29.6
5	No of outbreaks	1	1	0

Implementation of the plan 2007

Activities	Plan 2007	Implementation 2007
1. No of doses of anti-malarial drug used	1.300.000	688.782
2. Total population protected by insecticides: . Residual spraying . Impregnated bednets	11.000.000 1.900.000 9.100.000	11.749.657 1.767.840 9.981.817

Malaria outbreak:



Level: Village
21 *P.vivax* cases, no death due to malaria in out break.

Sensibility of Anopheles to insecticide

- **Alpha-cypermethrin and Lambda-cyhalothrin: 4 species of *An.minimus*, *An.philippinensis*, *An.sinensis*, *An.aconitus*, knockout from 98% to 100%.**
- **Alpha-cypermethrin and Lambda-cyhalothrin: *An.epiroticus* (*An.sundicus*) Camau province knockout from 24% - 60%.**

Resistance of *p.falciparum* in vivo (28 day test)

Year 2004 - 2005: Artesunate 16 mg/kg for 7 days, 82 patients: Adequate clinical and parasitological response 76 (92.7%); 3 late parasitological failure (3.65%) and 3 late clinical failure (3.65%).

Year 2006: Dihydroartemisinin + piperaquine, oral for 3 days, 190 Patients in Quang Tri, Ninh Thuan and Dak Nong provinces: Adequate clinical and parasitological response are 190 (100%).

Resistance of *p.falciparum* in vitro

Year	Study Sites	Drug	No. of isolates	IC50 (nM)	Resistance rate (%)
2006	Ninh Thuan province	Mefloquine	25	69 nmol/L	0/25 (0.0%)
2004 2005	Binh Phuoc province	Mefloquine	25	60 nmol/L	2/25 (8%)
2006	Ninh Thuan province	Chloroquine	35	51 nmol/L	10/35 (28.6%)
2004 2005	Binh Phuoc province	Chloroquine	34	37 nmol/L	15/34 (44.1%)

Resistance of p.vivax (28-day test)

- Year 2004 - 2005:

Chloroquine 25 mg/kg, 45 patients in Binh Phuoc province: Adequate clinical and parasitological response 45 (100%).

- Year 2006 - 2007:

Chloroquine 25 mg/kg, 34 patients in Ninh Thuan province: Adequate clinical and parasitological response 34 (100%).

III. plan of malaria control 2008

3.1. General objectives.

To Roll back malaria in the malaria hyper-endemic areas and high risk groups (the remote border areas and host pot).

Development and strengthening of sustainable factor for malaria control.

3.2. Specifics objectives.

- **To reduce malarial mortality by 5% compared with 2007 (under 0.02/100 000 population.**
- **To reduce malarial morbidity by 5% compared with 2007 to under 0.8/1000 population).**
- **No big epidemic outbreak occur.**
- **To promote the development of sustainable factors for malaria control.**

3.3. Main indicator of implementation:

- **Total pop. protected by insecticid : 11 million pop.**
 - + **Residual spraying : 1.9 million pop.**
 - + **Impregnated bed nets : 9.1 million pop.**
- **No of doses of anti-malarial drug : 1 million dose.**
- **Blood Slid: 2.5 million slids.**

3.4. Main solutions:

- **Concentrating investment and technical guidance for malaria control in the “hot spots”, malaria hyper-endemic and remote areas.**
- **Sufficient and timely provision of budget, anti-malarial drugs, insecticides and other supplies for malaria control to the provinces.**
- **Improvement of the quality of malaria diagnosis and treatment at all levels: Arterakin* therapy (ACT) for all suspected cases and confirm malaria.**
- **Strengthening of case detection and case management**

(* Arterakin = 40 mg Dihydroartemisinin + 320mg piperazine)

- **Improvement of the coverage and quality of malaria control activities:**
 - + **Malaria surveillance.**
 - + **Vector control.**
 - + **The IEC and socialization.**



Thank you