MINISTRY OF HEALTH
NATIONAL MALARIA CONTROL AND ELIMINATION PROGRAMME

NATIONAL INSTITUTE OF MALARIOLOGY, PARASITOLOGY AND ENTOMOLOGY

NATIONAL STRATEGY FOR MALARIA CONTROL AND ELIMINATION FOR THE PERIOD OF 2012-2015

(Implementation of the Decision No.1920/QĐ-TTg dated of 27/10/2011 of the Prime-Minister on the approval of the National Strategy for malaria control and elimination for the period of 2011 – 2020 and orientation to 2030)

HÀ NỘI, DECEMBER – 2011
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I. SUMMARY OF MALARIA CONTROL ACHIEVEMENTS FROM 2006-2011.

1.1. Result of implementation of key indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>% reduction 2010/06</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of malaria deaths</td>
<td>41</td>
<td>20</td>
<td>25</td>
<td>27</td>
<td>21</td>
<td>- 48.78</td>
<td>14</td>
</tr>
<tr>
<td>Mortality rate/100,000 pop.</td>
<td>0.05</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
<td>- 60.00</td>
<td>0.02</td>
</tr>
<tr>
<td>No. of malaria cases</td>
<td>91,635</td>
<td>70,910</td>
<td>60,426</td>
<td>60,867</td>
<td>54,297</td>
<td>- 40.75</td>
<td>45,588</td>
</tr>
<tr>
<td>Morbidity/1,000 population</td>
<td>1.08</td>
<td>0.83</td>
<td>0.70</td>
<td>0.69</td>
<td>0.62</td>
<td>- 42.6</td>
<td>0.52</td>
</tr>
<tr>
<td>No. of confirmed cases</td>
<td>22,637</td>
<td>16,389</td>
<td>11,355</td>
<td>16,130</td>
<td>17,515</td>
<td>- 22.63</td>
<td>16,612</td>
</tr>
<tr>
<td>Malaria parasite rate/1,000pop. in endemic areas</td>
<td>0.83*</td>
<td>0.63*</td>
<td>0.45*</td>
<td>1.06**</td>
<td>1.15**</td>
<td>-</td>
<td>1.07</td>
</tr>
<tr>
<td>No. of outbreak</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Note:
* Population in the malaria endemic areas according to the Malaria Stratification 2004.
** Population in the malaria endemic areas according to the Malaria Stratification 2009

Each year, about 10 to 12 millions of population in the malaria endemic areas are protected by vector control measures (free of charge) and about 800,000 to 2 million doses of antimalarial drugs are freely distributed for the population.
II. CURRENT CHALLENGES AND DIFFICULTIES

1) High number of population in the malaria endemic areas: more than 15 millions (Malaria Stratification 2009). Most of them are poor and ethnic people living in the mountainous, coastal, remote and border areas.

2) Seasonal movement of population from free malaria to the highly malaria endemic areas for economic purposes which make the malaria situation unstable and causing outbreaks. People crossing the border with Lao and Cambodia is high.

3) People have the habit of sleeping overnight in the forest for cultivation which are at high risk of malaria infection.

4) Drug resistant malaria parasites are present in many provinces with high level especially in the South-East and Central Highland regions. In 2009, artesunate (the current used high effective antimalarial drug) resistance was found in Binh Phuoc province with the rate of 14.6%.

5) In the North, the number of malaria cases and malaria deaths has been reduced, but it is facing with the relapse and persistent P.vivax malaria with long treatment course (14 days) as the patients normally did not take full dose of treatment.

6) *An.minimus* and *An.dirus* - exophilic vectors are present in almost of the surveyed sites. *An.epiroticus* - the malaria vector in the coastal southern area is resistant to insecticides.

7) The budget resource from the Government is limited, currently, there is only support from the Global Fund, and technical assistance from WHO.


1. Objectives

1.1. Overall goal

To reduce malaria morbidity to below 0.20/1,000 population, and malaria mortality to below 0.02/100,000 population. To sustain prevention of malaria re-introduction in 16 provinces; to implement malaria elimination in 34 provinces, pre-elimination in 10 provinces and active malaria control in 3 provinces.

1.2. Specific objectives and targets by 2015

a) *Objective 1*: Ensure that all people have better access to early diagnosis, prompt and effective treatment of malaria at the public and private health facilities.
− 90% of malaria clinical cases in the malaria endemic area have blood slides taken for malaria examination.
− 95% of *P. falciparum* cases received treatment with high effective antimalarial combined therapy.
− 95% of malaria cases received correct and proper treatment according to the treatment guideline of the MOH.

**b) Objective 2:** Ensure the coverage of all people at risk of malaria by appropriate malaria control measure.

− Households in the moderate and high malaria endemic areas have sufficient ITNs for malaria control (02 persons/1 double net).
− More than 90% of the existing bednets of the population in the malaria endemic area are retreated.
− Percentage of households received IRS is > 90%.
− No. of high malaria endemic communes is reduced 30% as compared with that in 2009 stratification.
− No. of moderate and low malaria endemic communes is reduced 30% as compared with that in 2009 stratification.
− 95% of poor families in the low malaria endemic areas having sufficient bednets for malaria control (02 persons/1 double net).
− 85% of people at high risk of malaria apply malaria control measures.

c) **Objective 3:** Eliminate malaria in the provinces with low malaria endemicity. Reduce malaria incidence in the high and moderate malaria endemic provinces;

− Maintain and sustain prevention of malaria re-introduction in 16 provinces: no indigenous cases, only imported cases.
− Implement malaria elimination in 34 provinces: those with malaria parasite rate < 1/1,000 population at risk of malaria.
− Carry out pre-elimination in 10 provinces: those with malaria parasite rate from 1 to below 5/1,000 population at risk of malaria.
− Carry out active malaria control in 3 provinces: those with malaria parasite rate >5/1,000 population at risk of malaria.

(Please see the list attached).

d) **Objective 4:** Improve the malaria epidemiological surveillance system and ensure sufficient capacity to malaria epidemic response;
– more than 95% of villages having villages health workers for malaria control and elimination.

– Malaria outbreaks are detected within 2 weeks of its onset and intervention measures are carried out within 1 week after being informed/reported.

– No big malaria outbreak occurs.

e) **Objective 5:** Improve scientific researches activities and to apply the results of researches in malaria control and elimination activities;

– Research on anti-resistant malaria treatment schedules and application of artemisinin resistant containment measures; Research on appropriate and high effective vector control measures for seasonal workers and migrant people involving in swidden fields for agriculture and other forest based activities; border malaria and malaria elimination.

– Technical transfer and exchange of experiences and expert training with the local and international institutions on malaria control and elimination.

f) **Objective 6:** Improve the knowledge and behavior change of the people in malaria control so as to actively protect themselves from malaria

– More than 95% of population in the malaria endemic areas can recall at least 4 key messages on malaria control.

– More than 85% of population in the malaria endemic areas using the bednets.

3. **Main solutions**

3.1. **Solutions on policy and social issues:**

- To include the malaria control and elimination in the social-economic development targets of the health sector and provinces.

- To further research and improve the system of institutions/regulations and policies in malaria control and elimination;

- To promote the IEC activities to improve the knowledge and behavior change of the people, especially those are in the areas at high risk of malaria, on malaria control and elimination

3.2. **Solutions on technical issues:**

- Early diagnosis, prompt and proper treatment in accordance with the national guidelines. Develop and sustain the communal microscopic points for early diagnosis and treatment of malaria especially in the areas with artemisinin resistance;
- Update the national guidelines on diagnosis and treatment of malaria every 2 years according to WHO guidelines or practical treatment of malaria in Vietnam;

- Ensure sufficient provision of high effective antimalarial drugs for all levels;

- Provide free of charge LLINs and hammocks LLINs to the people living in the moderate and high malaria endemic areas. To mobilize the people to buy the bednets themselves and use the bednets regularly;

- Carry out the malaria epidemiological stratification. Conduct vector surveillance on their density and distribution. Monitor the insecticide resistant vectors and the restore of vector density;

- Build up and strengthen the M&E system from central to grass-root levels Develop the procedures and guidelines on M&E for different levels.

3.3. **Scientific researches and application of the research results on malaria control and elimination:**

- Research on new antimalarial drugs for malaria treatment and malaria treatment schedules. Research on appropriate and high effective vector control measures.

3.4. **Solutions for human resources and international cooperation**

- Strengthen the health care network and improve capacity for staff in charge of malaria control and elimination;

- Ensure sufficient budget for malaria control and elimination including the Government budget and other international supports. Allocate and use of the budget effectively;

- Extend the international cooperation on malaria control and elimination, and explore the possibility for new bilateral and multilateral cooperation.

3.5. **Estimated budget**

Budget from Government: ~ 542,88 billions VND.

Budget from other sources: ~ 757,95 billions VND.

Budget from the Government is for procurement of insecticides, antimalarial drugs, transportation, microscopes, spray equipment, chemicals and supplies for laboratory examination, training and retraining, IEC activities for malaria control and elimination, scientific researches and surveillance and monitoring at all levels in the low, moderate, high endemic and areas at high risk of malaria re-introduction.
Proposed budgets for malaria control and elimination for period of 2012-2015

*unit: million VND*

<table>
<thead>
<tr>
<th>Year</th>
<th>Requirement</th>
<th>From Government</th>
<th>From provinces</th>
<th>other resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>347,000</td>
<td>122,349</td>
<td>2,591</td>
<td>222,060</td>
</tr>
<tr>
<td>2013</td>
<td>264,000</td>
<td>127,050</td>
<td>2,720</td>
<td>134,230</td>
</tr>
<tr>
<td>2014</td>
<td>349,000</td>
<td>139,755</td>
<td>2,856</td>
<td>206,389</td>
</tr>
<tr>
<td>2015</td>
<td>352,000</td>
<td>153,730</td>
<td>2,999</td>
<td>195,271</td>
</tr>
<tr>
<td>Total</td>
<td>1,312,000</td>
<td>542,884</td>
<td>11,166</td>
<td>757,950</td>
</tr>
</tbody>
</table>

With the investment and high consideration of the Government and the Ministry of Health, the National Malaria Control Program (NMCP) has gained great achievements in reducing malaria morbidity and mortality. However, in 2012, Vietnam will carry out the National Strategy on Malaria control and Elimination (NMCEP) for the period of 2011-2020 and orientation to 2030 which was already approved by the Prime-Minister in the Decision No. 1920/QD-TTg dated of 27/10/2011, this is very important strategy showing high and strong commitment of the Vietnam Government on malaria elimination, contributing to the health care of the population.

**Director**
Chairman of the NMCEP

Nguyen Manh Hung