



MINISTER OF HEALTH OF THE REPUBLIC OF INDONESIA DECREE

NUMBER 293/MENKES/SK/IV/2009

28 APRIL 2009

CONCERNING MALARIA ELIMINATION IN INDONESIA



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Having Considered

- a. That malaria is a communicable parasitic disease continuous to be public health problem in Indonesia causing high morbidity and mortality, it debilitates communities and affects productivity and development
- b. That to overcome disease burden from malaria, all WHO member countries in the WHA.60.2007 committed themselves to eliminate malaria.
- c. That on the basis of the considerations as set forth in the letter a and letter b, it is necessary to pass Minister Of Health Decree concerning malaria elimination.

Having Observed

1. Law Number 4 of 1984 concerning Epidemic (State Gazette of the Republic of Indonesia of 1984 Number 20, Supplement to State Gazette of the Republic of Indonesia Number 3273);
2. Law Number 23 of 1992 concerning Health (State Gazette of the Republic of Indonesia of 1992 Number 100, Supplement to State Gazette of the Republic of Indonesia Number 3495);
3. Law Number 25 of 2004 concerning National Development Planning System (State Gazette of the Republic of Indonesia of 2004 Number 104, Supplement to State Gazette of the Republic of Indonesia Number 4421);
4. Law Number 32 of 2004 concerning Local Government (State Gazette of the Republic of Indonesia of 2004 Number 125, Supplement to State Gazette of the Republic of Indonesia Number 4437) as has been Revised With Law Number 8 of 2005 concerning decision on Government Regulation as a replacement of Law, Number 3 of 2005 on Revision of Law Number 32 of 2004 concerning Local Government (State Gazette of the Republic of Indonesia of 2005 Number 108, Supplement to State



- Gazette of the Republic of Indonesia Number 4548);
5. Government Regulation Number 40 of 1991 concerning Standard Guideline For Communicable Disease Epidemic Containment (State Gazette of the Republic of Indonesia of 1991 Number 49, Supplement to State Gazette of the Republic of Indonesia Number 3447);
 6. Government Regulation Number 38 of 2007 concerning Span of Authority among central Government, Provincial Government and District/Municipality (State Gazette of the Republic of Indonesia of 2007 Number 82, Supplement to State Gazette of the Republic of Indonesia Number 8737);
 7. Government Regulation Number 41 of 2007 concerning Organization Structure of Local Authority (State Gazette of the Republic of Indonesia of 2007 Number 89, Supplement to State Gazette of the Republic of Indonesia Number 4741);
 8. Government Regulation Number 7 of 2005 concerning Medium Run Development Plan of 2004-2009;
 9. Minister of Health of the Republic of Indonesia Regulation Number 004/Menkes/Sk/I/2003 concerning Policy and Strategy of Decentralization in Health Sector;
 10. Minister of Health of the Republic of Indonesia Decree Number 131/Menkes /SK/II/2004 Concerning National Health System.
 11. Minister of Health of the Republic of Indonesia Decree Number 331 / Menkes /SK/V/2006 concerning strategic plan of Ministry Of Health of 2005-2009.
 12. Minister of Health of the Republic Of Indonesia Regulation Number 1575/Menkes /Per/XI/2005 concerning Organizational Structure and Mechanism of Ministry of Health, which has been Revised with MOH Regulation Number 1295/Menkes/Per/XII/2007;
 13. Ministry of Health Decree Number 1468/Menkes/SK/XII/ 2006 concerning Health Development Plan of 2005-2009.

HAS DECIDED :

**To Issue :
Part one**

**MINISTER OF HEALTH OF THE REPUBLIC OF
INDONESIA DECREE CONCERNING MALARIA**



ELIMINATION IN INDONESIA

- Part two** Central Government, Provincial Government, District/Municipality, Health Structure at all levels shall have the task to undertaking proactive and responsive movement to build networking and partnership with stakeholders to conduct organized malaria control efforts to reach Malaria Elimination Status in Indonesia.
- Part three** Implementation of Malaria Elimination Program in Indonesia shall refer to Standard Guidelines of Malaria Elimination in Indonesia as stated in the Attachment of the Decree.
- Part four** Besides Referring to Standard Guideline of Malaria Elimination as mentioned in 2nd Dictum of the Decree, implementation of Malaria Elimination Program in Indonesia shall also refer to Standard Guidelines on Operational Aspect of Malaria Control in Indonesia which has been decided in separate Minister of Health Decree.
- Part five** In implementing malaria elimination in Indonesia it may create Working Group which is consisting of relevant expertise to provide analysis and professional/scientific judgment.
- Part six** Guidance on Monitoring and Supervision shall be conducted by Ministry of Health, Provincial Health Office, District/ Municipality Health Office which also include Professional Organization and relevant stakeholders.
- Part seven** This Decree come into effective since Enacted.

Enacted in : Jakarta
On : 28 April 2009

MINITER OF HEALTH OF THE REPUBLIC OF INDONESIA

Dr. Dr. SITI FADILAH SUPARI, Sp.JP (K)

TRANSLATOR'S STATEMENT

The translation is rendered accurately and consistently from Bahasa Indonesia into English.

Jakarta.....2009.

Dr. I Nyoman Kandun
Translator



I. INTRODUCTION

A. BACK GROUND

The success of Indonesian development is very much depend on the availability and the quality of human resources whereas health sector development is one of main factors in providing quality and productive human resources free from diseases including malaria.

Malaria remains one of the most serious public health problems in the world including Indonesia. The burden of malaria is the underlying factor for high mortality among infant, children under five and pregnant women. Malaria globally accounts for 500 million peoples infected annually, and of which 1.000.000 died. Most of malaria cases reported from Africa and from some countries in Asia, Latin America, Middle East, and Europe.

To cope with the malaria problems, in the 60 th WHA (World Health Assembly) meeting which was conducted in 18 May 2007 in Geneva, member countries committed to eliminate malaria in their country as part of global commitment on malaria elimination. Guidelines on Malaria elimination has been formulated by WHO in the *Global Malaria Programme*.

Indonesia is one of malaria high risk endemic countries. In 2007, 396 districts out of the total 495 districts in Indonesia are malaria endemic. And it is estimated that 45% of the population lives in areas that are highly risk for the disease transmission. About 2.000.000 malaria cases reported to occur in 2006, and decreased to 1.774.845 in 2007.

It is estimated by health economist that illness from malaria filed a toll on Indonesian economy, the total loss amounting to more than 3 trillion rupiah annually. This does not take into consideration revenue lost in malaria endemic area.

Malaria has been in the agenda of Indonesian leaders for a long time in line with malaria elimination plan, the President of Republic of Indonesia in the occasion of 1st malaria day inauguration called for accelerated action to increase awareness and preparedness of the community toward malaria.



This recorded that rapid and intense malaria transmission caused by many factors :

1. Environmental degradation may create breeding places for malaria mosquitoes.
2. There are 17 species of *Anopheles sp* has been confirmed as malaria vector from different habitat.
3. Rapid population movement from and to malaria endemic areas.
4. High risk behavior that contribute to malaria transmissions.
5. More spread of drug resistance to malaria parasites.
6. Poor access to health facilities to cover villages with high burden of malaria, due to geographical constraints, economic burden and lack of resources.

In conclusions, the burden of malaria in Indonesia is very complex in nature, so that the direction to move from malaria control to elimination should be implemented through integrated approach and become integral part of national development.

B. GOALS AND OBJECTIVES

1. Goals

On step wise basis, the creation of healthy community free from malaria infections in 2030. The goal of the malaria elimination campaign in Indonesia is to eliminate malaria by reducing the burden of malaria with the ultimate aim of creation of a healthy community free from malaria infections in 2030.

2. Objectives

The main objective of the malaria elimination campaign is the general direction to move from malaria control to elimination through incremental programming. The following malaria endemic areas will be targeted for elimination:

- a. Province of DKI Jakarta, Bali island and Batam island in 2010.
- b. Island of Java, Province of NAD and Province of Kepulauan Riau in 2015.
- c. Island of Sumatera (except Province of NAD and Kepulauan Riau), Province of NTB, island of Kalimantan and island of Sulawesi in 2020; and
- d. Province of Papua, Province of West Papua, Province of East Papua, Province of East Nusa Tenggara, Province of Maluku and Province of North Maluku in 2030.



B. DEFINITIONS AND GENERAL PROVISIONS

1. **Advocacy** means a series of persuasive, systematic and organized efforts which covers awareness improvement, rationalization, argumentation, and recommendation with the ultimate aim of action through targeting stake holders and decision makers for betterment of policy making.
2. **Annual Malaria Incidence (AMI)** is number of malaria (confirmed) cases seen by health workers (in facilities or facilities + outreach) per year.
3. **Annual Parasite Incidence (API)** is number of confirmed malaria cases per 1000 population per year.
4. **Malaria elimination** is a reduction of malaria transmission to predetermined very low level in a certain geographical areas as a result of deliberate efforts. Provided that malaria cases may still occur imported from other areas that are still endemic and malaria vector is still exist, permanent intervention is required to maintain elimination status.
5. **Evaluation** is the episodic assessment of the change in targeted results that can be attributed to interventions.
6. **Gebrak Malaria (GM)** is a national Roll Back malaria involving all community components movement to eliminate malaria intensively through building partnership with all partners (e.g. government agencies, civil societies, private sectors, NGOs, international and donor agencies).
7. **Integration** is the act or process of integrating the whole or entire systems with common goals and Resources into a collaborative activities to maximize the benefits of cooperation in a defined time and place.
8. **Intensification** is the act or process of intensifying, or of making more intense activities to increase output through maximizing the use of available resources.
9. **Imported malaria case** is a malaria case on which the infection was acquired outside the area in which it is found implying that its origin could be traced to a known malarious areas.
10. **Indigenous malaria case** is a malaria case that is natural to an area i.e not imported.
11. **Induced malaria case** is a malaria case attributed to the effect of a blood transfusion or other form of *parenteral* inoculation, *transplacental* but not to normal transmission by the mosquito.
12. **Introduced malaria case** is a malaria case in which it can be proved that the infection is the first step (direct secondary) of local transmission subsequent to a proved imported case.
13. **Unusual event /outbreak** may be defined as a condition in which the disease occurrence rises it clearly in excess of the normal expectation in a given period of time in a defined area, and it rises may lead to epidemic.
14. *)**Partnership** may be defined as a mutual cooperation among two or more partners with shared vision and responsibilities to reach a common goal in health development with the principle of a trust building, and mutual benefit.



****Partnership** is a collaborative relationship between activities to work toward shared objective through mutually agreed division of labour.

15. **Partners** may be defined as those who involved in the interaction, interrelation in the process of creating partnership.
16. **Monitoring** is a continuous process to monitor and to evaluate malaria elimination effort for effectiveness and progress.
17. **Village malaria post** is a vehicle for community empowerment, by, from and for the community. The bottom up approach will consolidate the community's role in the malaria elimination efforts in order to achieve sustainable impact and self reliance.
18. **Receptivity** is a condition in which the vector density is high linked to environmental and climate factors that lead to facilitating the spread of malaria.
19. **Early warning system** is a continuous surveillance activities to prevent malaria outbreak from occurring.
20. **Surveillance** may be defined as the on going systematic collection, organization, analysis, interpretation and dissemination of health data essential to the planning, implementation, monitoring and evaluation of public health event / practice for effective and efficient control.
21. **Surveillance for migrant:** blood specimens collection from migrant persons coming from endemic areas those express clinical sign and symptom of malaria. This activities aim for to prevent imported malaria cases.
22. **Vulnerability** : this term is applied to a condition of a certain area where this area is located bordering to malaria endemic areas. Or this area is considered vulnerable, when infective vector and imported malaria cases from nearby introduced to the area from outside.

II. POLICY AND STRATEGY

A. POLICY

1. Malaria elimination campaign is implemented as an overall integrated efforts involving central government, local government, stakeholders (e.g. NGOs, private sectors, donor agencies, professional organizations, Community and community organizations).
2. Malaria elimination campaign is implemented step by step in the districts/municipalities, provinces, islands untill the whole country covered by the campaign considering the malaria burden and resources situation of the areas.

B. STRATEGY

1. Conducting early diagnosis and prompt treatment.
2. Community empowerment and societal movement intended to support actively malaria elimination efforts.



3. To ensure access to quality health services for high risk and vulnerable community.
4. To conduct communication, advocacy, motivation and socialization to communicate to central and local government with a view of raising resources and gaining commitment of political and social leadership to actively support malaria elimination.
5. Broadening partnership and mobilizing local, national, international resources through integrated and consolidated stakeholders role (e.g. inter government sectors, private sectors, professional organizations, community organizations) in the overall partnership of the Roll Back Malaria forum.
6. Conducting and strengthening surveillance system, monitoring and evaluation.
7. Implementing malaria elimination program through partnership forum of Roll Back Malaria and other existing partnership forum.
8. Improving human resources, developing quality technology aiming at supporting malaria elimination efforts.

III. TARGETS AND INDICATORS

A. TARGETS

To achieve the national malaria elimination status in 2030, the following targets has been set:

1. In 2010 all health facilities in Indonesia should be able to examine malaria parasites (all clinical malaria cases should be laboratory confirmed from blood smear examination)
2. In 2020 all areas in Indonesia should have achieved pre elimination stage.
3. In 2030 all areas in Indonesia should have achieved malaria elimination status.

B. INDICATORS

District/municipality. Province, island is declared as malaria eliminated area if no indigenous transmission in 3 consecutive years and it should be proven with good surveillance system.

IV. PHASING OF MALARIA ELIMINATION ACTIVITIES

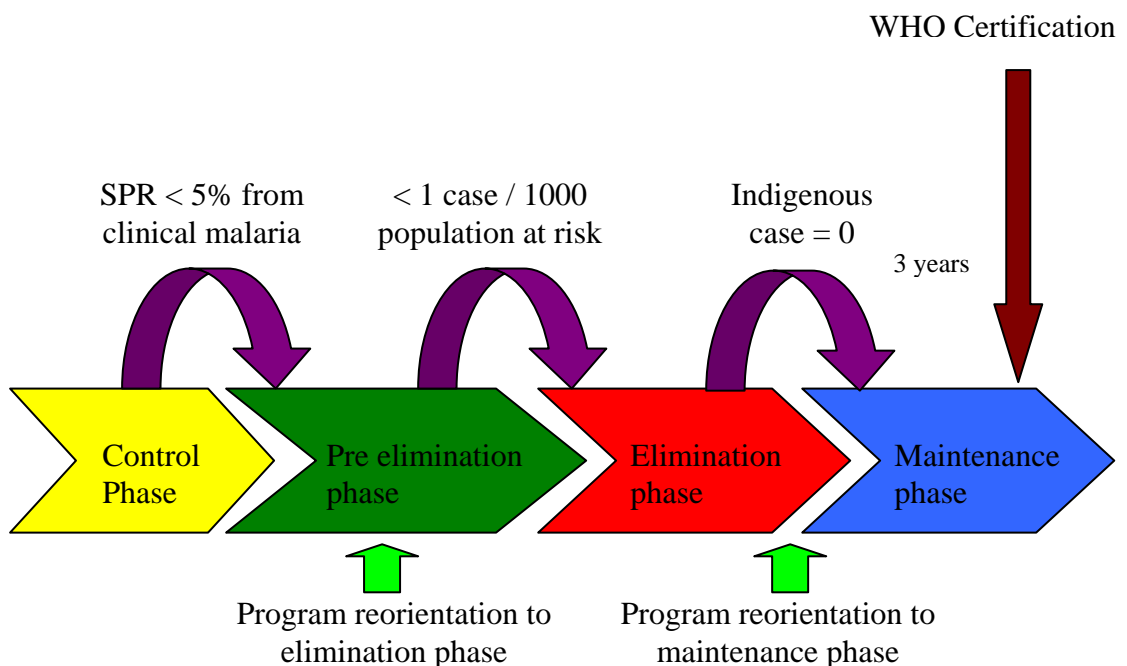
A. PHASING OF MALARIA ELIMINATION

With reference to global malaria programme, there are 4 stages should be passed to achieve malaria elimination status, are those:



- Control phase
- Pre elimination phase
- Elimination phase
- Maintenance phase (To prevent re infection)

Stages / phases of malaria elimination:



Situations in each of the malaria elimination phase are the following:

1. Control Phase

- Not all of health facilities are capable of examining blood smear
- Limited low service coverage and lack of resources
- When all blood smear from febrile cases has been examined but the SPR is still > 5%.
- Intensive efforts being conducted to reach SPR < 5 %.
- Involvement of central government, provincial government and districts/ municipalities, private sectors, NGOs, professional organizations, international agencies, donor agencies in the Roll Back Malaria (RBM). RBM team and other partnership forum has been established.



2. Pre Elimination Phase

- a. All health facilities are capable to examine blood smear from the clinical cases.
- b. All malaria clinical cases has been laboratory confirmed and SPR < 5%.
- c. Improvement of the quality and the coverage of malaria control efforts (surveillance, cases detection and treatment, vector control), to achieve API < 1/1000 population at risk.
- d. Improvement of the involvement of central governments, private sectors, NGOs, professional organizations, international agencies, donor agencies, and others (e.g. RBM team and other forum in the provinces and districts/municipalities) availability of the legal frame work at all levels as an umbrella of malaria elimination campaign, to facilitate support for policy formulation and resources raising.

3. Elimination Phase

- a. At least in an area equivalent to one district / municipality the API < 1/1000 population at risk.
- b. Malaria surveillance is well functioning including active case detection (ACD).
- c. Re-orienting all stake holders and those who involve in malaria elimination campaign toward elimination phase.
- d. All sectors have been fully involved in synergy with all players which include government, local authorities, NGOs, professional organizations, international organizations, donor agencies in malaria elimination campaign. Their roles and responsibility is clearly defined in the local authority regulations.
- e. Intensive malaria elimination campaign has been conducted, so that the indigenous malaria case is not found in the last one year period.

4. Maintenance Phase (to prevent reinfection)

- a. To maintain indigenous malaria case remains zero.
- b. To maintain quality surveillance.
- c. Re orienting all stake holders and those who involve in the malaria elimination campaign, health providers, government and private sectors that elimination phase has been achieved.
- d. The local governments are consistent with their responsibility and committed themselves to the maintenance phase of elimination to ensure sustainable financing and resource allocations for the implementation of malaria interventions. The commitment must be clearly stated in the local authority regulations.



B. ACTIVITIES IN MALARIA ELIMINATION CAMPAIGN

1. Control Phase

The main objective of the campaign during control phase is to accelerate implementation at least in the districts / municipalities areas in order to reduce malaria transmission to reach $SPR < 5\%$ by the end of control phase.

In order to achieve the objective of control phase, the following main activities should be done:

a. Case findings and management

- To increase coverage of case detections and laboratory confirmation of malaria cases both microscopically and RDT.
- All malaria positive cases will have with universal access to free effective and safe malaria treatment The standard treatment decided by the Ministry of Health which is now using artemisinin combination therapy.
- Re examination of blood smear, monitoring of RDT quality, improvement of microscopist skill.
- Monitoring of malaria drug efficacy

b. Risk factors prevention and control

- To conduct vector survey and survey on malaria mode of transmission to ensure appropriate control measures.
- Distribution of Long Lasting Insecticide Net (LLIN) to the community as part of mass campaign or integrated with other sectors activities in the malaria endemic areas.
- Implementation of indoor residual spraying (IRS) and other vector control measures suitable to local situation and during outbreaks.
- Monitoring of insecticide efficacy (including LLIN) and vector resistance.

c. Epidemiological surveillance and outbreaks containment

- Improving and strengthening health care facilities capacity both government and private (health centers, hospitals, clinics) in the malaria outbreak early warning systems.
- Malaria outbreak containment.
- Improving the coverage and on the quality of the recording and reporting systems on the morbidity and on the program activities.
- To map malaria endemic areas derived from routine and survey data.



d. Increasing the communication, information, and education

- Increasing the active participation of the community through establishing village malaria post in remote areas.
- Increasing health promotion activities.
- The success of the malaria elimination campaign will depend on effective and well coordinated partnership among stake holders and active community participation at all levels. The following are essentials to be included for the success of the partnership: government sectors, NGOs, religious and faith based organizations, community organizations, professional organizations, international institutions, donor agencies, private sectors, community.
- Integrated malaria elimination campaign with other programs for example integration of malaria treatment and distribution of LLIN into other programs.
- To develop legal framework basis for malaria elimination supports.

e. Improvement of HRD

- To conduct training to malaria microscopist in health centers, hospitals, private health to facilities and to ensure the quality of blood smear examination.
- To conduct training and socialization of case management.
- To conduct training on technical and management aspects of malaria control programmes.

2. Pre-Elimination phase

The main objectives of the campaign during pre-elimination phase is to reduce the number of active focus and to reduce the indigenous transmission at least in the area of one district / municipality so that at the end of pre-elimination phase, API <1 /1000 population at risk has been achieved. Target of intervention during the era of elimination phase is the active focus where the transmission is still exist in the elimination target areas.

The main activities include :

a. Case detection and case management.

- To detect all laboratory confirmed cases in all health facilities.
- Treating all confirmed cases with effective malaria drug , *Artemisinin Combination Therapy* (ACT).
- Re examination of blood smear and routine proficiency test of the microscopist.



- To monitor malaria drug efficacy
- To increase coverage of passive case detection and treatment of the cases in the sub health centers, to encourage and scaling up community based involvement in case detection and case management (village health posts, integrated health posts, village malaria posts) and in hospitals and private clinics.
- To regulate and to monitor malaria drug selling other than ACT (chloroquin, fansidar) in the shops.

b. Risk factors prevention and control

- Distribution of insecticide treated nets (ITNs).The distribution of ITNs through integrated routine mechanism or through mass campaign is expected to cover 80% of the population in the malaria focus with API < 1/1000 population at risk.
- Indoor spraying covering > 90% of the houses in the outbreak potential areas and during outbreaks and in the focus areas with API > 1/1000 population at risk.
- Integrated vector management suitable to local situation to reduce receptivity.
- Monitoring of insecticide efficacy (including ITNs) and vector resistance.

c. Epidemiological surveillance and epidemic containment

- All health facilities both government and private sectors (helth centers , policlinics, hospitals) should be able to conduct EWS for malaria. Data collected must be analyzed and reported routinely to District / Municipality Health Office.
- Outbreaks containment.
- To strengthen health information systems in order all malaria cases and deaths and all activities are reported.
- To report immediately the detected cases.
- To inventarize and mapping of malaria focus.
- To develop data base of elimination campaign , among others using GIS technology, this GIS will be based on available information of focuses, cases, vectors, genotype isolate of the parasite and intervention measures.
- To establish elimination monitoring team at central as well as at provincial and district/municipality levels. The main tasks of the team are the following :
 - a) To develop base line data of elimination campaign.
 - b) ?.....by evaluate the states as phasing of certain areas in their efforts already whether they have achieved prae elimination or



elimination phase. The evaluation will be based on the following indicators :

- 1) Transmission status of the areas
- 2) The capacity and readiness of the health care delivery systems in the area.

d. Increasing communication, information and education

- Increasing health promotion and malaria elimination campaign
- Building partnership with stake holders: inter programs, inter sectors, NGO, faith based organizations, community organizations, donor agencies, international agencies, private sectors and the whole community.
- Integration of malaria elimination campaign into the existing public services, for example the distribution of ITNs and cases detection and treatment.
- To observe and to implement the local regulations and other legal framework to support malaria elimination campaign.
- Developing advocacy and socialization strategy and plan: the purpose of advocacy is to build political support and sustainable financing support for malaria elimination campaign to eliminate the active focuses.
- Resource mobilization from central, provincial, districts/ municipalities government, donor agencies.
- To conduct inter provinces and inter districts/municipalities meeting to ensure effective and coordinated intervention.

e. Increasing human resources

- Reorientation of the programs activities for health personnels and staffs: both government and private need to be reoriented on the elimination phase guidelines to acquire understanding of their roles and responsibilities in the elimination activities.
- Training/refreshing course: microscopist in the health centers and hospitals need to be trained to ensure the quality assurance of the blood smear examination.
- Training to malaria program staffs on technical and management aspects.
- Training and socialization of case management.



3. Elimination phase

The main objective of the elimination phase is to eliminate malaria focuses at least in a district / municipality in order at the end of the elimination phase, no indigenous transmission reported.

The target of interventions in elimination phase is to eliminate remaining active focuses and individual indigenous positive cases.

Main activities in the elimination phase.

a. Case detection and management

- To detect all positive (laboratory confirmed) malaria cases both from PCD and from ACD in the government and private health care facilities.
- All malaria positive cases will have universal access to effective and safe treatment. The standard treatment is decided by Ministry Of Health (Up till now *Artemisinin Combination Therapy* is used).
- Conducting follow-up to all malaria cases under treatment: for falciparum malaria, follow-up is conducted at day 7 and day 28 after medication while for vivax malaria, at day 7,28 days ,and 3 months after medication.
- Re examination of blood smear and routine proficiency test of the microscopist.
- To monitor malaria drug efficacy.
- Full involvement of health care facilities capacity, both government and private (health centers, hospitals, clinics) in the case detection and malaria treatment.

b. Risk factors prevention and control

- To implement appropriate vector control suitable to local situations among others, distribution of ITNs (to cover > 80% of the population) or indoor spraying (to cover > 90% of the houses) to decrease transmission in the new focus area or in the remaining old active focuses.
- In special case if needed larviciding or environmental management could be done in the focus with high receptivity (area with high vector density and area with favorable environment and climate for mosquito to breed).
- Insecticide efficacy and vector resistance monitoring.
- To protect with ITNs those peoples originating from eliminated areas who will travel to endemic area (inside the country or outside the country).



c. Epidemiological surveillance and outbreak containment

- All health facilities both government and private health facilities (health centers , polyclinics, hospitals) are expected to conduct malaria EWS. Data collected, analyzed and reported to the District /Municipality Health Office.
- When outbreaks occur, immediate control measure should be undertaken.
- To conduct intensive and high individual cases surveillance. Case count is essential when the number of indigenous cases become rare.
- To conduct surveillance for migrant peoples to prevent imported cases.
- To conduct epidemiological investigation to all positive malaria cases to define the possible sources of infection.
- To report immediately the positive cases found in all health facilities (government, private) to all health authorities.
- To conduct epidemiological investigation in the malaria focuses to define source of infection, the spread and classification of the focus.
- To strengthen malaria information system in order all detected cases could be recorded and reported.
- To record all positive cases in registry book nation wide.
- To develop data base of elimination campaign , among others using GIS technology, this GIS will be based on available information of focuses, cases, vectors, genotype isolate of the parasite and intervention measures.
- To optimize the function of malaria elimination team at central, provincial, district / municipality levels.

d. Increasing the communication, information, and education

- Increasing the active participation of the community through establishing village malaria post in remote areas.
- Increasing health promotion activities.
- The success of the malaria elimination campaign will depend on effective and well coordinated partnership among stake holders and active community participation at all levels. The following are essentials to be included for the success of the partnership: government sectors, NGOs, religious and faith based organizations, community organizations, professional organizations, international institutions, donor agencies, private sectors, community.
- Integrated malaria elimination campaign with other programs for example integration of malaria treatment and distribution of LLIN into other programs.



- To implement legal framework basis for malaria elimination support, among others to ensure that, all services provided for laboratory diagnosis, treatment in the government health care facilities are free of charge. To ban malaria drug selling by street vendors
- To implement advocacy and socialization strategy to gain political support and sustainable financing support for malaria elimination campaign to eliminate active focuses and to stop local transmission
- Resources mobilization from central, provincial, districts/municipalities government and donor agencies.
- to conduct inter provinces and inter districts/municipalities meeting to ensure effective and coordinated malaria elimination activities.

e. Improvement of Human Resources

- Reorienting all stakeholders and health personnels both government and private sectors that we have achieved elimination phase and our concern now is directed to maintenance phase to prevent reinfection. Program reorientation is started when the following criteria is met :
 - a. Quality disease surveillance is in place to cut the local transmission completely (no indigenous cases detected).
 - b. No indigenous cases with local infections detected.
 - c. Almost all confirmed cases detected were imported cases, relaps cases, or induced and introduced.
- To conduct refreshing training to malaria microscopists in health centers, hospitals (both government and private), especially in receptive areas to ensure the quality of blood smear examination.
- To conduct training to village malaria volunteers (JMD) on Active Case Detection (ACD) in the areas in need.

Elimination phase is considered has been achieved when the following criteria is met :

- No more cases derived from local transmission in the last one year.
- Good surveillance system in the health care delivery systems (both government and private).The surveillance system is capable to detect and to cut transmission.

4. Maintenance Phase (re infection prevention)

The main objective of the maintenance phase is to prevent malaria cases from reinfection of local transmission. The target of interventions in the maintenance phase is the individual positive cases, especially imported cases.



Main activities in the maintenance phase.

a. Case detection and management

- To detect all malaria cases in low receptivity and low vulnerability areas with PCD. In areas with high receptivity and vulnerability, early case detection is done through PCD as well as ACD by village malaria volunteers (JMD) in the government and private health facilities.
- Re examination of blood smear in the referral laboratories (districts /municipalities, province, central laboratories respectively).
- All malaria positive cases will have universal access to effective and safe treatment. The standard treatment is decided by Ministry of Health (up till now *Artimisinin Combination Therapy* is used).
- Conducting follow-up to all malaria cases under treatment: for falciparum malaria, follow-up is conducted at day 7 and day 28 after medication while for vivax malaria, at day 7,28 days ,and 3 months after medication.

b. Risk factors prevention and control

- In special case if needed, suitable vector control such as larviciding or environmental management could be done in the focus with high receptivity and high vulnerability (area with high vector density and area with favorable environment and climate for mosquito to breed).
- To implement appropriate vector control suitable to local situation among others distribution of ITNs or indoor spraying to decrease transmission when cases of local transmission or introduced cases is found.

c. Epidemiological surveillance and outbreak containment

To prevent re-emergence of cases with local transmission, the following activities are conducted :

- In the lower receptivity and vulnerability level areas :
 - a. Passive case detection (PCD) in the health facilities both government and private health facilities.
 - b. To conduct epidemiological investigation to all positive malaria cases to define the possible sources of infection.
 - c. Follow up treatment of malaria.
 - d. To conduct surveillance for migrant peoples to prevent imported cases.



- In the high receptivity and vulnerability level areas, in addition to above mentioned activities ACD by village malaria volunteers, and appropriate vector control to lower down receptivity is done .

Beside the above mentioned activities the following surveillance activities is also done:

- To report immediately the positive cases found in all health facilities (government, private) to health authorities.
- To maintain quality malaria information system in order all detected cases could be recorded and reported.
- To examine isolate for parasite genotype.
- To record all positive cases in registry book, nation wide.
- To conduct epidemiological investigation in the malaria focuses to define sources of infection, the spread and classification of the focuses.
- To develop data base of elimination campaign , among others using GIS technology, this GIS will be based on available information of focus, cases, vectors, genotype isolate of the parasite and intervention measures.

d. Increasing the communication, information, and education

- Increasing health promotion and malaria elimination campaign to prevent re infection from late detected imported cases.
- Building partnership with stake holders: inter programs, inter sectors, NGOs, faith based organizations, community organizations, donor agencies, international agencies, private sectors and the whole community.
- Integration of malaria elimination campaign with other programmes in lowering down receptivity.
- To conduct advocacy and socialization in order to ensure political support and sustainable financing support for maintaining malaria elimination status.

f. Improvement of HRD

- To conduct refresher training courses for malaria microscopists in health centers, hospitals, private health facilities and to ensure the quality of blood smear examination.

V. ASSESSMENT OF ELIMINATION STATUS

A. CERTIFICATION OF MALARIA ELIMINATION STATUS BY GOVERNMENT



For those districts / municipalities or provinces who provide after the last identified case no evidence of local transmission (indigenous case, for 3 consecutive years) and supported with good and proactive surveillance system may propose to the central government to be evaluated for elimination status certification, for if the criteria is met they are eligible for elimination status certificate provided by Ministry of Health.

National and provincial evaluation teams will evaluate requirements need to be fulfilled for obtaining malaria elimination certificate. The requirements are the followings:

1. Good surveillance system been implemented covering the whole elimination target areas. The surveillance system includes target surveillance for migrants population.
2. Good and complete malaria registry which cover the whole elimination target areas.
3. All health facilities both government and private are capable to conduct early diagnosis and prompt treatment.
4. Health centers and District Health Offices are capable to follow up all imported malaria cases.
5. Sufficient number of malaria microscopists with good quality of blood smear examination, especially in the receptive areas.
6. Epidemiological investigations have been conducted to all positive cases to determine the sources of transmissions.
7. Local authority regulations and other regulations have been passed to ensure sustainable funding for malaria elimination status (prevention of reintroduction of malaria cases after the last identified case).
8. Continuous information, education, communication on malaria prevention to visitors and immigrants to prevent infection, the messages content will include the use of LLIN, repellent and prophylactic treatment.
9. In high receptive areas, vector surveillance should be conducted including insecticide efficacy, vector resistance.
10. Outbreak EWS is functioning very well which is able to detect and to control outbreak immediately.
11. Good inter provinces and inter districts / municipalities coordination.

National malaria elimination evaluation team members consist of internal components i.e, malaria elimination monitoring team and from Ministry of Health. While external components come from universities, WHO representatives, UNICEF, professional organizations, malaria experts and others if needed.

Provincial malaria elimination evaluation team members consist of internal and external components.



Internal components at provincial level consisting of provincial malaria elimination monitoring team and provincial health offices. While external components come from universities, professional organizations and other components if needed.

Evaluation results of the malaria elimination evaluation team are sent to the Ministry of Health for consideration to issue malaria elimination certificate.

B. MALARIA ELIMINATION CERTIFICATE FROM WHO

Certificate from WHO will be awarded to the government of Indonesia if all areas without exception in the Republic of Indonesia have fulfilled all the requirements mentioned in point a (number 1 – 11).

Evaluation will be jointly conducted between, National Malaria Elimination Evaluation Team and WHO. Based on the evaluation results, if the requirements been met, Director General of WHO will award malaria elimination status certificate to the government of Indonesia.

C. FOLLOW UP OF MALARIA ELIMINATION STATUS

Certificate of malaria elimination status is awarded based on the current situation and the elimination status should be maintained forever.

Annual report to WHO containing continuous assessment of preventive measures to maintain elimination status. The annual report should include:

1. Confirmed malaria cases detected annually in detail :
 - By parasite species and source of infection.
 - Imported cases by species of parasite and the sources of infection.
2. Briefs description of reported fatal malaria cases and the number of outbreaks occurred.
3. Brief description of preventive measures on how :
 - a. To decrease imported cases.
 - b. To decrease receptivity in the focuses where transmission is still occurring.

Outbreak of malaria due to *P. Falciparum* and reintroduction of malaria infection in declared malaria free areas should be reported immediately to WHO.

Indication that reinfection of malaria in a focus do occur if ≥ 3 introduction cases and / or indigenous cases found in two consecutive years in that focus for *P.Falcifarum* and three consecutive years for *P.Vivax*.



THE ROLE OF CENTRAL GOVERNMENT, PROVINCIAL GOVERNMENT, DISTRICTS / MUNICIPALITIES, PRIVATE SECTORS, CIVIL SOCIETES AND DONOR AGENCIES.

One of the key strategies in malaria elimination campaign is to gain strong commitment from the central government and from the local authorities by mobilizing partnership with relevant sectors which include private sectors, NGOs, professional organizations, community organizations, through Roll Back Malaria forum or other forum as vehicles for partnership.

The role of central government, provincial government, districts/municipalities, NGOs, private sectors, and donors in the partnership are the following:

A. THE ROLE OF CENTRAL GOVERNMENT

1. To develop and to legally decide the national policy and malaria elimination.
2. To develop guidelines on malaria elimination.
3. To mobilize collaboration and potential resources to support implementation of malaria elimination in synergy with other programmes and sectors.
4. To socialize, to advocate, to coordinate with other sectors horizontally at national level, the national policy of malaria elimination.
5. To socialize, to advocate the national policy of malaria elimination and to provide technical assistance to the provincial governments, intersectors and to the districts / municipalities.
6. To develop technical and operational standard.
7. Training of trainers on management and technical aspect of malaria elimination.
8. To facilitate the provision and distribution of essential supplies and logistics to the provinces, districts / municipalities.
9. Outbreak responses, emergency responses in the disaster situations and displaced persons.
10. To provide and to distribute equipments, supplies and logistics for outbreaks containment.
11. To develop epidemiological surveillance network and malaria feed back forms and system.
12. To develop indicators for area stratifications toward elimination. To certify eliminated areas.
13. To provide technical assistance on monitoring and evaluation of drug efficacy and vector resistance.
14. To develop guidelines on monitoring and evaluation.
15. To develop routine progress reports on the implementations and the achievement of national elimination campaign to the president through Ministry of Health.



B. THE ROLE OF PROVINCIAL GOVERNMENT

1. To develop malaria control strategy through commitment building. This commitment should be stated clearly in the local authority regulations reflecting the national policy.
2. To provide assistance and advocacy to districts / municipalities, inter sectors on the policy and strategy of malaria elimination.
3. To coordinate activities of malaria program with relevant sectors to achieve malaria elimination.
4. To socialize, to mobilize the role of private sectors, NGOs, professional organizations and other relevant organizations.
5. Resource mobilization to support malaria elimination campaign. To synergize resources derived both from internal and foreign sources.
6. To coordinate, to guide, to monitor malaria elimination campaign in the districts/municipalities.
7. To conduct management and technical training in malaria elimination including training on IMCI to all health personnels in the primary health care setting and in the referral system (doctors, nurses, midwives).
8. To provide equipments, supplies, logistics needed for malaria elimination including for outbreaks EWS.
9. To monitor the implementation of EWS.
10. To facilitate outbreak responses, disaster and displaced persons management in the provinces, districts/municipalities.
11. To develop epidemiological surveillance network and malaria information systems.
12. To conduct monitoring activities on drug efficacy and vector resistance.
13. To conduct monitoring, evaluation, and reporting on malaria elimination evaluation toward elimination status achievement in districts/municipalities.
14. To develop annual report on malaria elimination program activities in the provinces to Minister of Health through Directorate General of Disease Control and Environmental Health.
15. To coordinate collaborations with other districts / municipalities to support malaria elimination campaign.

C. THE ROLE OF DISTRICTS/MUNICIPALITIES

1. To develop Standard Operating Procedures (SOP) on malaria elimination in the districts/municipalities. This SOP should be clearly stated in the local authority regulations.
2. To conduct and implement malaria elimination activities.
3. To mobilize resources from potential sources to support malaria elimination campaign. The resources should include human resources, funding, supplies and logistics.
4. To coordinate malaria elimination campaign with inter programs and inter sectors.



5. To conduct and implement EWS.
6. To provide equipments, supplies, logistics needed for malaria elimination including for outbreak EWS.
7. To conduct outbreak responses, disaster and displaced person management.
8. To conduct epidemiological surveillance network and malaria information systems.
9. To facilitate universal access for early diagnosis and prompt treatment
10. To conduct management and technical training on malaria elimination including training on IMCI to all health personnels in the primary health care setting and in the referral system (doctors, nurses, in midwives).
11. To conduct mapping of endemic, outbreak potential areas, drug resistant.
12. To conduct surveys on transmission dynamic, insecticide resistant, entomology, etc.
13. Procurement and distribution of equipments, supplies and logistics including anti malaria drug and insecticide.
14. To recruit village malaria personnels and volunteers for village malaria posts in the unreached endemic remote villages.
15. To socialize, to advocate and to provide technical assistance to private sectors, NGOs, professional organizations, civil societies and other organizations involved in the malaria elimination campaign.
16. To conduct monitoring, evaluation and to develop progress report on elimination activities and its achievement in the areas.
17. To develop annual progress report on elimination activities and its achievement in the districts/municipalities to the government of the province.

D. THE ROLE OF PRIVATE SECTORS, CIVIL SOCIETIES, AND DONOR AGENCIES.

Partnership is a collaborative relationship between entities toward shared objectives through a mutually agreed division of labour. Private sectors, NGOs, Community Based Organization (CBOs), Faith Based Organizations (FBOs), donor agencies, professional organizations and other CBOs could play an active role in malaria elimination campaign in the spirit of partnership with government through RBM forum or through other existing forum.

The role of partners is based on the principle of partnership which requires equality, communications accountability, transparent, as it is stated in the partnership guidelines of the malaria elimination campaign.

The implementation process of partnership must consider partners with diverse vision, mission, values, function and capacities, they minimize the ground for disputes and maximize the benefits of cooperation toward malaria elimination efforts.



MONITORING – EVALUATION AND REPORT

A. MONITORING AND EVALUATION

It is important to measure the progress and evaluate the impact of the malaria elimination campaign. Monitoring and evaluation is the routine tracking process of the performance of malaria elimination campaign components in order to know the progress of the campaign. The monitoring and evaluation process include:

1. To evaluate progress and quality of the implementation components of malaria elimination campaign. The components to be evaluated both operational aspects, process indicators and the impact of the campaign
2. To evaluate epidemiological changes indicators of the campaign.
3. To monitor the potential, problems, and constraints, deviations in the malaria elimination campaign. With good interpretation of well organized monitoring data will contribute to better information for policy and strategy revision.
4. To document the progress and achievement of malaria elimination campaign.

The monitoring and evaluation activities is documented in the monitoring and evaluation plan document, supported with captured data in an organized and effective way from different sources:

1. Quarterly/semester/annual plan and its report.
2. Routine program activities report of malaria elimination campaign (which include management aspect, risk factors prevention, case management, logistics, financial)
3. Routine field visits.

Since monitoring is the routine tracking of the performance of various program components and evaluation is the episodic assessment of the change in targeted results that can be attributed to interventions, the framework and main indicators of monitoring and evaluation of prae elimination and elimination phase presented in the following table:

COMPONENTS	ACTIVITIES	INDICATORS
Legislation and political commitment	Political commitment	<ul style="list-style-type: none">- Malaria elimination strategic plan launched by government.- Regulations/local authority regulations been passed.- Local budget for malaria elimination available.



	Regional/trans boundaries cooperation	<ul style="list-style-type: none"> - Trans boundaries cooperation agreement been signed. - Inter districts /provinces /countries cooperation agreement signed.
	Health policy	<ul style="list-style-type: none"> - Malaria treatment policy. - Policy on diagnosis and free treatment for malaria cases. - Regulation on anti malaria drug distribution been passed.
Epidemiology	Stratification	<ul style="list-style-type: none"> - Malaria stratification mapping by village/ sub districts available.
	Focus investigation	<ul style="list-style-type: none"> - Total number of active focuses reported. - Proportion of complete investigation of the reported focuses. - Proportion of reported focuses with correct classification. - The number of cases in the focus. - The total number of high risk population in the focus.
Surveillance	Surveillance system	<ul style="list-style-type: none"> - Timeliness between diagnosis, reporting and investigation. - Completeness : proportion of cases reported to the surveillance data base system.
	Private sectors involvement	<ul style="list-style-type: none"> - Protocol of involvement of private health facilities is available. - Proportion of private health facilities reported to the surveillance database.
COMPONENTS	ACTIVITIES	INDICATORS
	Recording and reporting of malaria burden	<ul style="list-style-type: none"> - Total number of cases reported per year - Proportion of reported cases followed by complete investigation. - Number of cases classified.
Cases management	Diagnosis	<ul style="list-style-type: none"> - Proportion of malaria cases confirmed by laboratory



		examination (microscopic or RDT). <ul style="list-style-type: none"> - Proportion of malaria cases confirmed by microscopic examination. - Quality control/ quality assurance supervision system on microscopic examination is functioning.
	Treatment	<ul style="list-style-type: none"> - Proportion of malaria cases are given standard radical treatment.
Vector control	IRS	<ul style="list-style-type: none"> - Total number and proportion of high risk houses treated with IRS. - Total number and proportion of reported active focuses treated with IRS.
	Larvae control	<ul style="list-style-type: none"> - Proportion of potential mosquito breeding places followed by larvae control.
Entomological surveillance	Larvaciding	<ul style="list-style-type: none"> - Proportion of potential breeding places with larvae positive.

B. REPORTING

Reporting system will include disease situation, result of activities, program performance accountability of the implementing units. The report flows from districts/municipalities to provinces and to central government using standard form.

Details of the monitoring and evaluation system and recording – reporting system is clearly described in the surveillance and monitoring and evaluation of malaria elimination manual.

VIII. FINANCING

To support the achievement of malaria elimination efforts, it is expected that all institutions and sectors should allocate the estimated cost required to implement the annual planned activities according to their roles and responsibilities in the malaria elimination campaign. Provincial and District/Municipality Health Offices play important roles in facilitating,



coordinating and identifying the role of each sector through the Roll Back Malaria forum. The source of funding for malaria elimination campaign may be coming from a mix of national and local government budget, bilateral donations, international donation, private sectors and other legal sources.

IX. CONCLUSION

This national malaria elimination process is designated for reference to those involve in the malaria elimination campaign, government, local authority, civil society, donor agencies, community and other partners.

In developing planning and implementation strategy, the national malaria elimination campaign, it is important to do it in integrated and coordinative way through Roll Back Malaria forum or other existing partnership forum to ensure optimum and sustainable results.

MINISTER OF HEALTH OF THE REPUBLIC OF INDONESIA

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