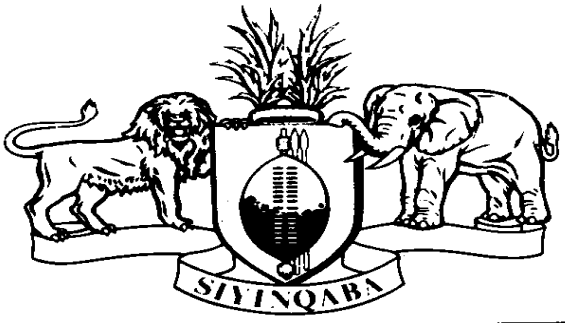

KINGDOM OF SWAZILAND

Ministry of Health

FINAL

MALARIA EPIDEMIC PREPAREDNESS AND RESPONSE NATIONAL GUIDELINES

SEPTEMBER 2009

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FOREWORD

Swaziland especially the lowveld of the country is at a high risk of malaria outbreaks. At the moment the lowveld which is also known as the Lubombo region is regarded a high malaria endemic area. This is because of the conducive environment for the breeding of the vector (the anopheles mosquito) and also due to the fact the region is neighboring Mozambique and South African's Mpumalanga Province both of which are high malaria endemic areas. The Ministry of Health (MOH) through the Emergency Preparedness and Response (EPR) and National Malaria Control Programme (NMCP) together with World Health Organization (WHO) have collaborated efforts towards initiating the development of the Malaria Epidemic Preparedness and Response (MEPR) Elimination Guidelines.

The purpose is for an effective elimination of the malaria outbreak in the country by ensuring zero internal malaria transmission within the country. The NMCP will network with the two neighboring countries in the malaria elimination phase. The existence of a formal NMCP and EPR programmes has resulted in the systematic, holistic and sectoral approach to the planning and implementation of the MEPR National Guidelines.

To facilitate effective implementation of MEPR National Guidelines, all sectors (private and public) and other Partners are encouraged to support the full operational implementation of these guidelines within the Ministry of Health for malaria assessment and diagnosis, drug inventory, disease surveillance and IDSR reporting, capacity building for operational and sound supervision at regional and national level.

Conducive Malaria Vector breeding environments that experience high temperatures, extreme changes in weather patterns and construction of dams which allows stagnant water in the country will be priority areas for intervention in the malaria elimination phase.

WHO Swaziland Office pledges support to the MOH in Coordination and Technical Assistance for the sustenance of the MEPR National Guidelines.

We count on your usual support, collaboration and partnership as we take on this brilliant initiative and request all Stakeholders concerned to double their efforts to ensure an effective implementation of the MEPR National Guidelines for improved health status for the benefit of the Kingdom of Swaziland and the entire SADC region.

Hon. MP Benedict Xaba
Ministry of Health
KINGDOM OF SWAZILAND

ACKNOWLEDGEMENT

The **Ministry of Health** (MOH) is grateful to all **Partners** and **Stakeholders** both local and international whose contribution and collaboration effort was instrumental in producing these comprehensive Malaria Epidemic Preparedness and Response (MEPR) Guidelines

The MOH recognises the **Guidelines Development Group** (GDG), **National Malaria Control Programme** (NMCP), **World Health Organization** (WHO) and the **Ministry of Health authorities**, who provided the overall guidance and support in the finalization of this document.

We wish to acknowledge the immense contribution and financial assistance of the **Development Partners** (Global Fund through NERCHA and WHO).

We are grateful to **Dr O. Muyabala Munachitombwe (Muna)** of MUNA Healthlife Consultancy who as a Consultant provided the GDG with professional support and technical advice that facilitated the development of the MEPR National Guidelines.

We also appreciate the active participation of the GDG, composed mainly of the local National Epidemic Task Force Team and the NMCP Team who were both headed by their Program Managers **Mr Masitsela Mhlanga** and **Mr Simon Kunene** respectively.

Other GDG members who worked hard with much commitment and passion for the successful achievement of these guidelines are:

Xol'siwe Dlamini,
Bongani Tsabedze,
Nok'thula Mahlalela,
Sipho Shongwe,
Ignitous Shongwe,
Sindie Shongwe,
Bheki Mamba,
Nozipho Mthande

Lastly we acknowledge the secretarial work of both **Princess Dlamini** who assisted in the preparation of the Draft MEPR National Guidelines during the workshop and the **MUNA Healthlife Consultancy staff** in the preparation of the Final MEPR National Guideline after the validation meeting with the Stakeholders.

Dr Steven Shongwe
Principal Secretary
Ministry Of Health
KINGDOM OF SWAZILAND

ACRONYMS

ACT - Artemethinin Combined Therapy

EPR - Emergency Preparedness and Response

HMIS -Health Management Information System

IDSR -Integrated Disease Surveillance Response

IRS -Indoor Residual Spraying

GDC -Guideline Development Consultant

GDG -Guideline Development Group

LLIN -Long Lasting Insecticides Treated Nets

MEPRT -Malaria Epidemic Preparedness and Response Team

MOH -Ministry of Health

NETF -National Epidemic Task Force

NMCP - National Malaria Control Program

RDT -Rapid Diagnostic Test

RETF -Regional Epidemic Task Force

WHO -World Health Organization

1.0 INTRODUCTION

1.1 Background

The emergence and re-emergence of infectious diseases of epidemic potential, such as malaria calls for improved preparedness, strong coordination and rapid response. Unprepared communities will always be subjected to worse disasters due to lack of systemic approach in dealing with problems. Epidemics, as other emergencies, can reach disastrous proportions where there is poor preparation, weak and uncoordinated response. Being well prepared increases the likelihood of rapid and effective response. Experience has shown that where epidemic preparedness plans have been formulated and implemented, not only outbreaks have been detected timely, but also the response has been rapid and well targeted, resulting in effective and rapid control.

The benefits of a rapid and effective response are numerous. Rapid response helps shorten the duration of the outbreak. It helps reduce the number of cases and fatalities. The above benefits help save resources that would be necessary to tackle a large epidemic. The ultimate result is the reduction of human suffering usually linked with high morbidity and mortality.

It is therefore important for the MOH to strengthen epidemic preparedness and response [EPR], particularly at region and community level. Attention needs to be focused on preparedness, response actions, ways to monitor these activities and, finally, on the evaluation of the effectiveness of control measures.

Epidemic Preparedness and Response Plans should be underscored by a detailed strategy. These plans should clearly outline the interventions and specific activities to be implemented, resources needed e.g. human, finance, clear time frames, and monitoring and evaluation indicators e.g. input, process, output and outcome.

Despite Swaziland being in the Malaria Pre-Elimination phase Malaria Epidemic preparedness remains critical and should be included as part of the civil protection/disaster preparedness activities (9.1)

1.2 Legislative Framework

1.2.1. Disaster Management Act No. 1 of 2006

- Call for disaster preparedness and risk reduction through the enactment of an Act, which stipulates the establishment of National Disaster Management Council, Agency, Committee and Structures at national and regional levels.
- The Act mandates the sectoral Ministries including Ministry of Health and Social Welfare (MOHSW) to "prepare Disaster Management and Emergency Management Plans [1] Disaster Management Act, 2006

1.2.2 International Heath Regulations

The International Health Regulations 2005 on Strengthening National Capacity on Section 3, Sub-Section 2 states that:

"*Strengthen national disease prevention, surveillance, control and response systems. This is the cornerstone for enhanced national and international public health security. By strengthening national public health systems, specifically in the area of disease surveillance and response, countries can detect, assess, and respond to public health threats in a timely manner and prevent international spread*".

1.3. MEPR National Guideline Development Process

The Guideline Development process followed a series of steps ranging from guideline initiation process, consultations, dialogue and consensus building. A team of experts from different sections of the health sector was constituted to undertake the task of developing the guidelines. They formed the Guideline Development Group (GDG).

The process was led by a Consultant **Dr O. Muyabala Munachitombwe (Muna)** in partnership with the National Malaria Control Program Manager **Mr. S. Kunene** to facilitate the consultations and activities. The Malaria EPR GDG had a week long workshop.

The Workshop Methodology used strategies of didactic presentations, discussions, question and answer sessions. Literature reviews from different sources with presentations of different scenarios were also applied. Group work on template development and consensus building was undertaken together with group discussions on guideline statement development.

2.0 AIM AND OBJECTIVES OF THE MEPR

2.1 General Objective

The overall objective is to mount a timely, consistent and coordinated response to anticipated malaria epidemic to minimize potential consequences.

2.2. Specific Objectives

The specific objectives of these guidelines are to assist Malaria Epidemic Preparedness and Response Team (MEPRT) to: -

2.2.1. Strengthen MEPRT with clear roles and responsibilities including terms of reference of each member/unit at all levels of the health system
2.2.2. Strengthen capacity at all levels, including communities on malaria epidemic preparedness and response.
2.2.3. Strengthen early detection, rapid response, outbreak investigation and malaria epidemic management and control at all levels
2.2.4. Strengthen monitoring and evaluation of MEPR strategies,
2.2.5. Document all malaria epidemics and share information with all relevant stakeholders and educate the general public.
2.2.6. Integrate malaria epidemic Action Plans with those of other committees e.g. Infection Control Committees at health facilities.

3.0 EPIDEMIOLOGICAL THRESHOLDS AND CASE DEFINAITIONS

3.1. Epidemiological Thresholds

A sensitive surveillance system is critical to enhance prediction and early detection of malaria epidemics as well as monitoring and evaluation of intervention programs. It is important to note that malaria cases are to be reported on a weekly basis as directed by the IDSR Tool but during malaria peak seasons and in epidemic situations daily reports may be required. There are two types of thresholds that should trigger specific responses. These are **Alert** and **Epidemic Thresholds.**

3.2 Malaria Alert Threshold

Malarial alert threshold is reached when there are two or more (but < 5) locally acquired confirmed cases or when there is an unexplained increase of the same seen over a period of time in weekly summary reports in a geographically localized area taking into consideration malaria seasonal changes.

Health staff should respond to an alert threshold by: -

- Reporting the confirmed cases to the next level
- Reviewing data from the past
- Requesting laboratory confirmation
- Being more alert to new data and the resulting trends in malaria.
- Investigating the case
- Alert Regional Epidemic Task Force Team and Malaria Program Manager of the potential epidemic

An alert threshold suggests to health staff that further investigations is needed and that contingency plans i.e. drug stocks and supplies and preventive measures such as health promotion should be in place.

3.3 Malaria Epidemic Threshold

Malaria Epidemic threshold is reached when there are five or more locally acquired confirmed cases per week or less than a week in a geographically localized area taking into consideration malaria seasonal changes.

An Epidemic threshold triggers a definite response. It signals an action beyond

confirming or clarifying the problem. Possible actions include: -

- Communicating laboratory confirmation to affected health facilities,
- Implementing an emergency response,
- Community awareness campaigns,
- Improving malaria control practices

3.4 Malaria Case Definitions

Case definitions should be used to identify malaria cases at both the health facility and the community. The Malaria Case Definitions for the health facility and the community is shown in Table 1 and 2 respectively. At the health facility the definition should assist the health worker to suspect malaria and institute diagnostic measurers while the community definition should assist in seeking early medical attention or referrals.

Table 1: Case Definitions for Health Facility Level

Case	**Definitions**
Malaria	Any person with fever (equal and/or above 38.°C), with or without headache, confusion, back pain, chills, sweats, mylagia, nausea and vomiting, convulsions and with RDT and laboratory confirmation of malaria

Table 2: Case Definitions for Community Level

Case	**Definitions**
Malaria	Any person who has an illness with high fever (hot on touch) a danger sign like floppiness, weakness, fits, aching bones and joints, vomits, and in children less than 5years unable to drink and breastfeed.

4.0 MALARIA EPIDEMIC PREPAREDNESS

(What to put in place & do in readiness for a response)

4.1. Establishment of MEPRT

The Emergency Preparedness and Response Unit and the National Malaria Control Program should establish and sustain well-constituted and well-functioning MEPRT at regional and community levels.

4.1.1 The Aim of the MEPRT

The overall aim of MEPRT is to: -

- Identify malaria epidemic by ensuring the existence of a functional surveillance system
- Prepare for and investigate Malaria epidemics wherever they occur
- Prepare adequately and in time for epidemics and ensure rapid response and systematic management of the epidemic in order to reduce morbidity, and mortality

4.1.2 Composition of MEPRT

MEPRT must be a multi-disciplinary Team constituted by representatives from the following units at the national level:

- Malaria Control Program Team
- Epidemic Task Force Teams (Regional and National)

For the actual composition of who is who in the national MEPRT and their roles see **Annex 8.1.** The MEPRT at regional level will parallel the national composition.

4.1.3 General Responsibilities of MEPRT

The activities of the MEPRT should be underscored by the common understanding of reducing morbidity and mortality due to Malaria. However, this objective can be realized by the following general responsibilities of the team:

- To contribute to the preparation of the plan of action for malaria epidemic preparedness and response that has been costed to allow for appropriate resource allocations
- To mobilize human, material and financial resources for Malaria epidemic prevention and Control

- To provide information and education to the general public before, during and after Malaria epidemic
- To monitor the implementation of Malaria epidemic control actions
- To coordinate assistance for Malaria epidemic prevention and control from various partners

- To monitor resource utilisation (drugs, supplies, disinfectants, logistics, human and financial resources)
- To verify and confirm any rumours of malaria epidemics at all levels
- To carry out malaria epidemic investigation
- To recommend appropriate strategies and measures for the rapid containment of malaria epidemics
- To coordinate the implementation of the plan of action and participate actively in the implementation of malaria epidemic prevention and control strategies
- To provide technical support to the health facilities during malaria epidemics
- To monitor and evaluate overall preparedness, investigation and response to ensure documentation of all malaria epidemics.

4.1.4. MEPRT Meetings

The Malaria Control Program Manager should co-chair with EPR Coordinator the MEPRT meetings. The frequency of meetings will depend on the nature of the epidemic and its epidemiological situation.

(a) During Non-Epidemic Periods

The Core Team should meet quarterly. Regions at risk of malaria epidemic should systematically convene meetings of the team at the beginning of each epidemic season in order to assess the trends of malaria in their area and review the implementation of epidemic preparedness and response plans.

(b) During Malaria Epidemic Periods

During malaria epidemic it is recommended that the team meets on a daily basis. The frequency may be reduced depending on the extent of the outbreak. When the control measures are launched and when epidemiological surveillance data show no more extension of the epidemic, a weekly meeting may suffice. The responsibilities described above should be reviewed regularly in order to ensure the success of epidemic control actions. The EPR Unit should ensure proper secretarial support and minuting of the proceedings of the meetings.

4.1.5. Roles and Responsibilities of Epidemic Task Force and the Malaria Control Program Teams (Refer to Annex 8.1)

4.2. Malaria Epidemic Surveillance

Malaria epidemic is defined as the occurrence in excess of the expected numbers of malaria cases in a given area in a defined time period. In Swaziland the malaria epidemic threshold is reached when five or more cases are confirmed in an area within a week. Such case increases may be notified through various sources e.g. clinical and laboratory surveillance, community members and leaders and media. Early detection of malaria depends on the: -

- Indicators selected
- Functional HMIS
- Surveillance system with sensitive and specific indicators.

For detailed information on the above refer to *Malaria Elimination Monitoring and Evaluation Plan 2009-2013 Draft*

4.3 Preparing for Malaria Epidemic Investigation

Proper planning before a malaria epidemic investigation takes place is very essential. It is important to decide whether there is a need to investigate or not. Prior to the investigation, the team should prepare a method for tracking the reporting and response to epidemics or rumors. In verifying rumours or malaria epidemic, the following factors should be considered:

- Source of information (For example, is the source of the rumor reliable?)
- Number of reported cases and deaths
- Transmission mode, risk and severity
- Geographic considerations
- Available resources

The malaria epidemic investigation always needs to be treated with urgency. Regardless of the various factors, suspected malaria epidemic needs to be reported within 48 hours.

- If malaria epidemic is verified, coordinate the investigation objectives with the person responsible for coordinating MEPRT.
- Make travel arrangements for getting to and from the site of the investigation.
- Inform health staff about the tasks they will be expected to do and the functions they will support.
- Prepare a diagram showing who will report to whom and how information will move both within the investigation team and between the region and other levels, including the most local level. Methods may include daily updates by radiophone, facsimile, electronic mail or conference calls.

- MEPRT defines the role of non-health staff and how they should be supervised before conducting a field visit.
- Review information already known about malaria including its transmission method and risk factors. Use this information to define the geographic boundaries and target population for conducting the investigation.
- Involve the community and local health facility staff in planning and conducting the investigation.
- Consider information about local customs, culture, and routines as it could affect the success of the epidemic investigation.

Observe the appropriate authorisations, clearances, ethical norms, and permissions that are required to do the investigation.

4.3.1. Methods of Investigation

MEPRT should review how to collect and record the required information using the Malaria Investigation Form.

4.3.2. Review the Clinical History

Examine the patients to confirm that their symptoms and signs meet the case definition. (Refer to Table 2)

4.3.3. Confirm the Diagnosis of Malaria

The confirmation of malaria is done by immunologic RDT followed by malaria slide microscope.

Review laboratory results with the investigation team, clinicians, and laboratory persons at the health facility.

Find out if the laboratory results are consistent with the clinical findings, seek additional assistance from higher levels or technical experts if there are any questions about the laboratory results.

4.3.4. Case Management

Strengthen case management at the health facility by providing the health facility with advice, support and supplies as indicated by the case management guidelines. Support the health facility in enhancement of infection control as needed when obtaining blood samples.

4.3.5. Search for Additional Cases in the Reporting Health Facilities

Once the initial cases have been confirmed and treatment has begun, actively search for additional cases. In the health facilities where cases have been reported, search for additional cases in the registers. Look for other patient's who may have presented with the same or similar signs and symptoms.

Request health workers, to search for similar cases in the registers from neighboring health facilities.

4.3.6. Search for Cases in the Community

Identify risk areas where the patients have lived, worked, or traveled. Also talk to other informants in the community such as priests or schoolteachers. The epidemic and its mode of transmission may influence the areas for the search and factors of risk related to time place and person analysis. Visit those places and talk to people who had or were likely to have had contact with the patient. Ask if they or anyone they know has had an illness or condition likely to be Malaria. Collect information that will help to describe the magnitude and geographic extent of the outbreak. Refer newly identified cases to the health facility for treatment.

4.3.7. Surveillance Data from Health Facilities

It is recommended that the national office receives reports from local areas of RDT confirmed cases within 48 hours of the case being seen at the health facility. Both weekly and monthly reports of summary data should be received on time. When an epidemic is suspected, cases and deaths should be reported and graphed weekly. When written reports are received, review case-based reporting forms to see if any essential information is missing. If reports are not being received at all, or if they are consistently late, contact or visit the health facility to find out what has caused the problem. Work with the staff at the reporting health facility to help find a solution that could be implemented for improving reporting. Data should be recorded in an IDSR Tool [***See Annexure 8.2***).

4.3.8. Record Information about the Additional Cases

- For each new case either in the health facility register or in searches of the community that fits the surveillance case definition, record the collected information on either a case-based reporting form, IDSR Tool or any other recommended form.

4.4. Malaria Epidemic Declaration

Declaration of an epidemic/emergency can be done at community, regional and/or national level in line with the country's legislation. The National Epidemic Task Force in liaison with the MEPRT, after analyzing, interpreting the data and drawing conclusions shall advise the Minister of Health who shall in turn advise His Excellency The Right Honorable Prime Minister to make the Declaration.

5.0 RESPONSE TO A CONFIRMED MALARIA EPIDEMIC

[Activities During a Confirmed Malaria Epidemic]

5.1 Preparation to Respond

The MEPRT should routinely: -

- Review surveillance data for trends that cause a concern for public health.
- Make sure that the health worker in all the health facilities know and use protocols for recommended malaria case management.

- Review and update supplies and resources for epidemic response including: presence of trained staff, treatment equipment and supplies, resources for transportation and communication, supplies for collecting and transporting specimens for confirmation, availability of funds, checking emergency stock of supplies periodically, making sure they are dry, clean and ready for use and make sure steps for obtaining laboratory confirmation are known by the appropriate staff.

- Identify areas or populations at high risk for malaria. Review the analysis data to refine the description of the epidemic characteristics. Review at least the incidence rate and extent of risk factors for the epidemic.

- Alert nearby catchment areas about the epidemic. If they are having a similar epidemic, coordinate response efforts.

- Review the lists of supplies and resources made by the epidemic response team. Obtain the emergency supplies and set them aside at the regional and community levels for emergency use. If supplies are not available locally, contact the National Malaria Control Program

- Assign clear responsibilities to individuals or units for specific response activities.

- Provide training so that health staff will be able to keep detailed records on the response activities

- Throughout the response activity, review data on cases, laboratory confirmation, and treatment.

- Identify problems in implementing the activities and modify activities, as necessary.

5.2 Implementation of Epidemic Control Actions

In case of malaria epidemic the MEPRT should assist the community in the implementation of measures aimed at containing the epidemic. The response activities include the following: -

- Strengthening case management,
- Malaria chemoprophylaxis to those at risk
- Updating health staff skills,
- Resource mobilisation
- Social mobilisation and malaria awareness campaigns,
- Active community surveillance,
- Reduced exposure to mosquitoes,
- Vector Control
- Dissemination of technical recommendations appropriate for the epidemic.
- Epidemic monitoring and evaluation of interventions

5.2.1 Strengthen Case Management

Suspected cases detected at community level should be referred to health facilities for confirmation and appropriate treatment using treatment standard protocols. Patients should benefit from education on the disease and its mode of transmission so as to protect their families and encourage others and thereby contribute to the containment of the epidemic. Ensure that each health facility staff knows and uses recommended protocols for case management. Make sure that clinicians get laboratory confirmation.

5.2.2 *Malaria Chemoprophylaxis*

Malaria Chemoprophylaxis to people at risk such as children, pregnant women and travelers to the malaria epidemic area is recommended. Swazi Nationals and returning residents travelling outside the country to malaria endemic areas are advised to routinely obtain WHO recommended chemoprophylaxis for Malaria.

5.2.3 Update Health Staff Skills

Give clear and concise directions to health staff taking part in the response. Select training topics. Emphasize case management. In an epidemic there is often no time for formal training. Provide on-the-job or one-on-one training as needed.

5.2.4 Resource Mobilisation

Regions at risk of epidemics should set-up a contingency stock of drugs and supplies allowing them to manage the first cases without delay before receiving support from higher levels. The contingency stock should be regularly and carefully monitored in order to avoid shortages and expiry of drugs and supplies. Additional resources should be mobilized to replenish contingency stock.

5.2.5 Social Mobilization and Malaria Awareness Campaign

Keep the public informed to calm fear and to encourage cooperation with the epidemics response. Develop community education messages to provide the community with information about recognizing the illness, how to prevent transmission and when to seek treatment. Begin communication activities with the community as soon as an epidemic is identified.

5.2.6 Active Community Surveillance

Contacts and family members living with the confirmed case/s should be informed about the epidemic and its mode of transmission. They should be asked to refer other family members to health facility in case they observe symptoms/signs of Malaria.

5.2.7 Reduce exposures to mosquitoes

Encourage prevention of malaria by helping people in your community reduce their exposure to mosquitoes during the day and at night. Work with the malaria control program to distribute Long Lasting Insecticide treated Nets (LLINs) and to conduct community education on the proper use of the LLIN and how to avoid dawn-to-dusk mosquito bites.

5.2.8 Vector Control

- Indoor Residual Spraying (IRS) of all households if the area had not been sprayed.
- Larviciding in all potential breeding stagnant water once evidence of breeding is confirmed.

5.2.9 Monitoring and Evaluation of Interventions

Continuous monitoring and evaluation should constitute an integral part of managing and controlling an epidemic (***See Chapter 6***).

6.0 MONITORING AND EVALUATION

6.1 Monitoring

Monitoring is a process that assists in improving performance. It aims to sustain good quality services rather than finding faults. This section describes how MEPRT visit regions and local communities to monitor progress of implementation of EPR plans and to discuss the following issues:

- Preparedness, detection, reporting of malaria
- Epidemic investigation and response activities.
- Timeliness and completeness of data on a routine basis
- Surveillance data are being used for action at all levels
- Prevention and control activities
- Epidemic detection and regional response with appropriate action.
- The improved surveillance has had an impact

Furthermore, various EPR elements that need to be monitored before, during and after an epidemic include:

- Identify and record suspected/confirmed cases
- Confirm suspected cases
- Collect, review and analyze data
- Availability of well functioning MEPRT and EPR Plans
- Report data
- Investigation and response to the epidemic
- Maintain readiness for epidemic response
- Supervision and training

6.2 Support Visits

Begin regularly scheduled monitoring visits to ensure that:

- Health workers know how to identify and use standard case definitions to record RDT confirmed cases of malaria.
- Data is analyzed in the health facility to identify thresholds to take action for malaria.
- Reported cases of malaria are investigated promptly.
- Response takes place when epidemic is confirmed, or when problems are identified in routine reporting.
- Response actions are monitored and action is taken by the health facility to improve surveillance actions and readiness for epidemic response.

6.2.1. Provision of feedback to health staff visits

Let the health workers know what is working well. Also give feedback on how the data reported previously was used to detect epidemic and take action to reduce morbidity and mortality. If improvements are needed, discuss solutions with the team. Provide on-the-job training as needed if a problem is identified. If a solution to a preexisting problem was identified in a previous visit, check to see how well the solution has been implemented. Find out if problems are still occurring and modify the solution if necessary.

6.2.2. Use of a Support Visit Checklist:

Each health facility has unique problems and priorities that require specific problem solving and corrections. To maintain the positive motivation of the health facility staff for making the improvements, consider developing a graduated checklist to guide the support visit and review timeliness and completeness of reporting

6.2.3. Identify Targets and Indicators:

Measuring indicators are used to measure the extent of achievement for a particular program or activity. The achievement is compared to overall recommended or expected standards. An indicator can also be developed to measure the proportion or percentage of facilities that are reporting. This proportion is then compared with the desired goal or target, and can be used to evaluate progress and, therefore, the quality of the service or activity. Select the indicators that are most relevant to the plan for improving EPR, and that w ill provide information that can be used.

6.2.4. Select Data for Measuring the Indicators:

After selection of relevant indicators, specify the numerator and the denominator.

6. 3 Evaluation

Evaluation involves reviewing interventions and determining whether planned goals have been reached, and if not, identifying gaps. Evaluation is a systematic way of learning from experience by using lessons learnt to improve the existing activities and those planned.

Evaluation should not stop at a list of problems and their possible causes, but should include recommendations. The following areas should be considered when conducting an evaluation:

- Were the reports complete, on time and accurate?
- What were significant changes in malaria trends during the year?
- If an increase occurred, was the problem identified?
- If additional cases are still occurring, why are they occurring? Where are they occurring?
- Were appropriate and timely actions taken in response to the surveillance data?
- Were supervisory visits conducted as planned and follow up tasks carried out as planned?
- Did the community feel that response activities were successful?
- Were any actions taken to address health staff requests or suggestions about services or surveillance?

6.3.1. Provide Feedback on Evaluation

Provide a report and give feedback to health facilities and authorities about the results of the evaluation activity. Mention in the feedback report:

- What the objectives were for the year
- What was actually achieved
- What were likely reasons for any differences between what was planned and what was achieved

Recommend solutions and prioritize activities for improving surveillance and response in the region/area.

7.0 REPORT WRITING

7.1 The Epidemic Report

All Epidemics must be documented in a scientific and systematic manner. The following is a recommended format for report writing:

Title of the Report

Introduction/Background Information
Aim and Objectives of Investigation
Methodology of Investigation

Results: Summary of Major Findings/Description of Epidemics:

- Period/Index Case/Time, Place, Person
- Laboratory Confirmation (Date)/Causal Agent
- Mode of Transmission
- Cases/Attack Rate
- Deaths/Case Fatality Ratio
- Distribution: Time, Place Person, Epidemic Curve, Mapping

Description of Response

- Coordination
- Monitoring/Surveillance
- Laboratory Surveillance
- Case Management
- Health Education
- Environmental Issues
- Community Involvement, etc

Results of response and evidence of impact
Lessons Learnt/Self Evaluation
Conclusions and Recommendations

7.2 The Feedback

Feedback can take various forms e.g. submissions, meetings [briefings], bulletins, media and other forms of presentations.

8.0 ANNEXES

ANNEXURE 8.1

MEPRT Composition

THE NATIONAL MALARIA EPIDEMIC PREPAREDNESS AND RESPONSE TEAM (MEPRT)

The following key experts and/or sectors constitutes the National MEPRT

1. Chair – NMCP Manager
2. Co-Chair – EPR National Co ordinator
3. Secretariat – EPR
4. Members:
    - WHO/DDHS n (PH)
    - NDMA Director/delegated Official
    - DDHS(Clinical)
    - Partners –UNICEF, MSF, Italian Cooperation, WVI, UNDP, etc
    - Key Ministries/Dept such MOA, Immigration, Police and Fire and Emergency
    - Health Promotion
    - Environmental Health
    - Regional Epidemic Task Force Chairpersons;
    - Epidemiologist
    - RHMs Program Manager
    - Laboratory
    - Principal Planning Officer
    - Transport Officer
    - Chief Pharmacist

5. NOTE: Add members as necessary

ANNEXURE 8.2

Integrated Disease Surveillance and Response (IDSR) Tool

Ministry of Health
Weekly Summary Report of Integrated Notifiable Diseases

Region _____ Dates of reporting week _____

Facility name _____ Date of Report _____

Facility code _____ Prepared by _____

Clinician in charge _____ Validated by _____

Disease	Number of Suspected Cases[1]	Number of Confirmed Cases[2]	Number of Cases Treated[3]	Number of Deaths[4]	Number of Referrals[5]	Demographic Breakdown of Confirmed Cases[6]		
						Children < 5 years	> 5 years	Pregnant women
Watery Diarrhoea								
Dysentery								
Cholera								
Measles								
Poliomyelitis								
NNT (< 12 months of age)						# of < 12 months		
Malaria								
MDR-TB								
XDR-TB								
Rabies								
Acute Malnutrition (MUAC < 12 cm and/or oedema)								# of MUAC < 21cm
Maternal Deaths[7]								
Rift Valley Fever								
Other								

Notes [1] Suspected cases: number of cases meeting the clinical definition of the disease [2] Confirmed cases: number of cases positively confirmed by parasitological or laboratory diagnosis [3] Treated cases: number of cases given the appropriate treatment for the identified disease [4] Deaths: number of deaths attributed to a disease [5] Referrals: number of cases referred to a higher facility [6] Demographic breakdown of confirmed cases: breakdown of confirmed cases for children under 5 (or 12 months), children and adults over 5, and pregnant women [7] Maternal deaths: deaths primarily caused by pregnancy-related conditions

9.0 REFERENCES

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9.2 Other Reference Sources

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9.2.2. KINGDOM OF SWAZILAND, Ministry of Health, National Malaria Control Programme: *Malaria Elimination Monitoring and Evaluation Plan 2009 – 2013*

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9.2.4. **KINGDOM OF SWAZILAND,** *Advocacy and Communication Strategy for Malaria Elimination*

9.2.5. **KINGDOM OF SWAZILAND,** *Malaria Diagnosis and Treatment 2009*

9.2.6. **KINGDOM *OF SWAZILAND***, *Laboratory Standard Operation Procedure*

9.2.7. **KINGDOM *OF SWAZILAND,*** *Malaria Quality Assurance and Control Procedures*