

# Draft Measles Elimination Strategic Plan

Ministry of Health Lesotho

Maseru

**December 2013**

## FOREWORD

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picture of  
the Hon.  
Minister

Immunization is one of the cost effective health interventions ever documented. Through immunization, small pox was eradicated and the world is now in the era of eradicating polio and eliminating measles. Lesotho joins the rest of the world in this road map.

In Lesotho, provision of immunization services is used as an entry point to deliver other important health interventions including maternal health services, HIV/TB services as well as other child survival interventions including nutrition. Executed as planned, immunizations are a vehicle to help the country to achieve health's MDGs.

Measles elimination and control plans, which the Kingdom of Lesotho has committed herself to the eliminating have been in place since 1999 and are continuing. In order to reach this goal, the following basic strategies have to be adopted:

- Increased routine measles immunization coverage > 80% amongst infants < 1 year of age;
- Conducting follow up/catch up campaigns aimed at providing a second opportunity to children that have already received one dose, and reducing susceptible children that have been missed by routine EPI, or who were not born at the time of last measles campaign;
- Case-based surveillance of suspected measles cases with adequate clinical, epidemiological and serological investigations;
- Maximizing the quality of surveillance using specific performance indicators to monitor progress towards measles elimination.

This strategic plan provides a useful framework for both national and district level within which activities aimed at eliminating measles in Lesotho will be implemented.

Finally, we would like to thank all those who contributed to the development of the Lesotho Measles Elimination strategic plan 2013-2020, WHO, UNICEF (both country and regional offices), disease control unit and family health division

Endorsement by Hon Minister of Health

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## 1. Executive Summary

The African region has adopted the goal of measles elimination to be achieved by 2020 in all Member States (RC61/4). In response to this resolution and in line with the strategies outlined by WHO, the MoH Lesotho has developed this Strategic Plan. It outlines the key strategic activities to highlight and inform its commitment and to provide guidance and direction towards implementation of specific strategies and activities to eliminate measles by 2020. The country aims to intensify efforts for increasing access to safe immunization and to sustain high quality surveillance against all vaccine-preventable diseases.

Measles is extremely contagious and despite there being a safe and effective vaccine available for five decades, it is still among the leading causes of death contributing to almost 4% among children below age of 5 years (World Health Report 2008). The EPI in Lesotho joining the other Southern African countries in 1999 started to implement accelerated efforts to control measles. Through concerted efforts, to eliminate indigenous transmission of measles transmission, it followed the WHO/UNICEF strategy by implementing strategies to increase routine immunization, catch up and periodic measles SIAs, instituted case-based surveillance for measles, introduced 2<sup>nd</sup> dose of measles through the routine immunization program.

This resulted in remarkable reduction to near zero cases of measles and deaths, for almost a decade. However, an intense outbreak of measles that resurfaced among the Southern African countries was also documented in Lesotho in late 2009 that continued in 2010 as a set back to the progress. This intense outbreak of measles has recorded over 3000 cases and 37 reported deaths that necessitated nationwide measles vaccination outbreak response targeting children below 15 years of age.

As evidence of GOL's commitment to the Immunization program in reducing burden of vaccine preventable diseases, the country introduced 2<sup>nd</sup> dose of measles in 2002, Hepatitis B, Hib and HPV successfully in 2003, 2008 and 2010 respectively. Lesotho was among the few African countries that were not considered at high risk for MNT elimination in 1999, as it had fairly optimum coverage of TT vaccination. Further, in 2005 the African Regional Certification Commission accepted the national polio certification document for Lesotho reviewing performance of minimum 3 years achievement of certification standard AFP surveillance. The latest indigenous wild poliovirus in Lesotho was confirmed in the 1980s.

However, the immunization programme in Lesotho has not been able to reach the global goal of 90% coverage and 80% at national and district level respectively through the routine immunization program.

There is good experience of reaching intended target population through the periodic vaccination campaigns though. To improve coverage and sustain performance, scale up of operationalizing the Reaching Every District/community/child strategy is being implemented. In addition, recently effort is being made to improve data quality of routine immunization by institutionalizing self-assessment of data at district level. The performance of Vaccine preventable disease has been optimum. The recent cold chain assessment result has been used to develop improvement plan and expansion of capacity in anticipation of adding new antigens. There is emphasis on effective communication strategies to increase demand in Routine Immunization program by involving communities.

Through this strategic plan of measles elimination from 2013-2020, the GOL aims to achieve elimination of indigenous measles transmission. This is aimed to be achieved through, strategic activities of increasing and

sustaining high measles immunization coverage, create sustainable demand for immunization from communities, continue to conduct periodic follow up measles SIAs (in 2013, 2016 and 2019) targeting the susceptible population to measles, revamp the sensitivity of case-based measles/rubella surveillance, put measures to prevent measles outbreaks, promptly detect and investigate each measles outbreak with laboratory confirmation, mount and document effective response to contain the measles outbreaks.

In addition, disease burden of congenital rubella will be documented to make informed decision of MoH on rubella vaccine introduction tentatively in 2016. The MoH will identify a working group that will be tasked to advocate for measles elimination, monitor progress and report every year to inform the Minister of Health. The plan is estimated to cost a total of US\$3,000,000.

## **2. Background Information**

The Kingdom of Lesotho is landlocked by the Republic of South Africa and has 30,355 km<sup>2</sup> in surface area. The total population by 2012 was estimated at 1,886,833 of which 76% proportion live in rural areas. The annual population growth is reduced to 0.08 due to the high burden of HIV and AIDS. Administratively the country is divided into ten districts each headed by a District Administrator. The Lesotho is a developing country and stands 149/170 on Human Development Index.

The population's access to health care is about 80%, where it can reach a health facility within 2 hours. Treatment is free at Health Centers, while a nominal fee is paid in Hospitals. The major disease burden in the country is HIV/AIDS and Tuberculosis which have been a challenge to the socio economic development. HIV prevalence among ante-natal clinic attendants in 2005 was 38% while the national adult HIV prevalence was 23.2% and the country has the fourth highest incidence in the world with estimated 696/100,000 population. It has been recently witnessed coincidence of TB and HIV with increased detection of multi drug resistant TB.

As per the Demographic Health Survey (DHS) of 2009, the infant mortality rate is 91/1000 live births while under 5 mortality rate is 117/1000 live births and has increased as compared to the 2004 DHS which was.... The most frequent reason of child institutional deaths is attributed to diarrhea (22%) followed by pneumonia (21%), malnutrition (13%) and HIV and AIDS (11%). The country has updated policies and strategic plans amongst which is the child survival strategic plan where specific strategies, namely integrated management of childhood illnesses, is being scaled up to reduce child mortality. The country also has a comprehensive immunization multiyear plan (2012-2016) that is costed and is used to mobilize the required finances, an updated immunization policy in 2010 that guides the service providers and an updated health system strategic plan (2011).

Immunization is a strategy that continues to be given very high importance to reduce child and infant mortality targeting prominent vaccine preventable diseases. The MoH has a joint review of Health sector performance that is conducted once a year and allows accountability of performance in the Sector.

Government funding for health services is relatively good. As a component of the overall government budget, it has increased from 10.3% in 2008/9 to 14% in 2010/11. The high mortality rate among children is an indication of utilization and quality of services that are offered. In addition, the continuous attrition of the health workforce plays a major role in the output and impact of the health services.

The MoH spends about 15% of its recurrent expenditure on drugs but there are reports of stock-outs of some drugs and some sundries. Recent MoH reviews show a decrease in the frequency of the stock-outs of drugs and vaccines in MOH facilities. Procurement of drugs is done through the National Drug Service Organization (NDSO). The Government intends to remain as the main purchaser of the vaccines, further indicating continued commitment to the health of the nation.

### 3. Situation Analysis by Strategy

#### 3. 1) Immunization Programme

The immunization program in the Ministry of Health was established at the inception of Primary Health Care in 1979. It is coordinated by an EPI Manager under the Director of Public Health. The immunization program provides 10 antigens and MoH continues to introduce cost effective vaccines to further reduce mortality and morbidity from vaccine preventable diseases.

Lesotho introduced 2<sup>nd</sup> dose of measles vaccine in 2001 and vaccines against Hepatitis B in 2003 and Haemophilus influenza type B in 2008 in the form of combination with DTP-HepB-Hib. The latest introduction is HPV vaccine that targets young adolescent girls scaled up to nationwide since 2012. In addition, the country is planning to introduce pneumococcal vaccine and Rota vaccines in 2014 and 2015 respectively, with support from GAVI that will be co-financed by GOL.

The programme has a current Immunization Policy (2010) that has set standard guides service providers. It informs that immunization services are run on daily basis in static health facilities and monthly outreach services to be organized by hospitals, Health Centers and Private Health Facilities. The program is using health facilities as fixed post and outreaches to reach the target population for vaccination.

**Table1:The Immunization schedule in Lesotho**

Antigen	Time
BCG	Birth
DTP-HepB- hib DT	6,10,14 weeks 18 months
OPV	6,10,14 weeks
Measles	9 and 18 months
T <sup>T</sup> (pregnant women)	1st contact, 4 wks,6months 1yr and 1 year
HPV	9-13 years in 2 doses

#### 3.1.1 Trend of Immunization Performance

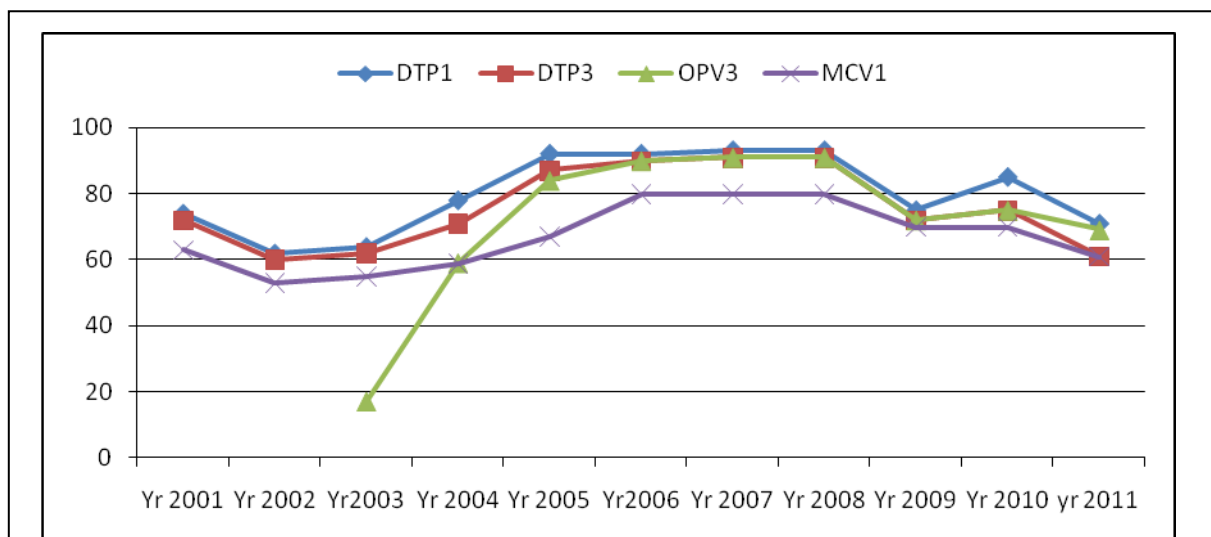
Lesotho's Immunization program performance has been increasing steadily between 1980 and 1990s but started to decline in 2002 and 2003. Between 2004 and 2005 performance increase was observed but it stagnated between 2006 and 2008. In 2009, the performance declined sharply but again started to increase in 2010 (Fig 1). The performance target coverage of measles, has not been attained both at national and district levels. A reduction in the outreach activities that was ascribed to staff shortages and lack of vehicles contributed to drop in the national immunization coverage.

It is documented that in addition to the administrative coverage that is low, the DHS in 2009 has estimated the coverage to be 74.7%. The WHO UNICEF estimate is indicating 85% for measles coverage while the reported coverage in 2011 was 61% as reported on the Joint reporting form (2011). This calls for concern as there is high dropout rate from DTP-HepB- hib1 to measles that is on average above 15%. The country is intensifying



the reaching every district/child strategy to ensure that each community is reached with Immunization services.

Fig 1: Trend of Reported Immunization coverage performance in Lesotho by antigens 2001-2010



### 3.1.2 Measles Control in Lesotho

Seven Southern Africa countries, including Lesotho, adapted the accelerated control of measles in late 1990. The collective efforts of Member States in Africa in operationalizing the strategies has allowed for the African region reduction of related death targets being met by 2009.

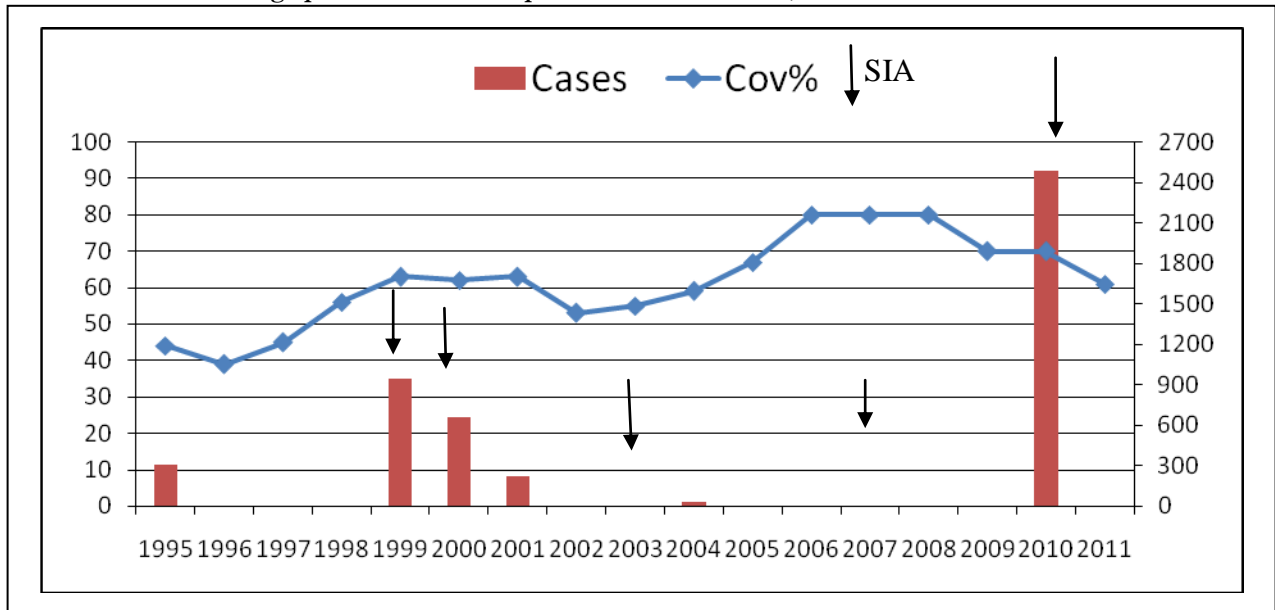
The strategies that were followed in Lesotho in order to accelerate measles control are:

- Continued provision of 1<sup>st</sup> & 2<sup>nd</sup> dose of measles vaccination at 9 & 18 months to all eligible children, offered in health facilities throughout the country;
- Providing additional opportunity to all children below five years of age since 1999 followed by 2003, 2007 and the latest in 2010 by conducting periodic supplemental vaccination campaigns;
- Instituted case-based surveillance to monitor the impact of the measles control and also use the information to guide further measures to be taken since 2003;

- Provision of case management for children with suspected measles to prevent deaths by using Integrated Management of Child hood Illness (IMCI) strategy.

As per figure 2 below, the burden of reported cases of measles has reduced from range of 600-900 reported cases to near zero measles cases between the years 2002 to 2009 since the implementation of the periodic SIAs and increasing coverage of measles.

**Fig2: Trend of measles coverage performance and reported cases of measles, Lesotho**



As a setback, in 2010 due the documented measles outbreak a total of 2845 confirmed cases were notified including 37 reported deaths. The outbreak followed performance decline in 2008 and 2009 in addition to gaps in the periodic SIAs of 2007.

### 3.1.3 Routine Immunization Performance of Measles

As indicated in figure 2, there is decline in performance coverage in measles and the country is not in the right direction to achieve the minimum 90% national target that is required to achieve herd immunity. This allows accumulation of unprotected children. In addition, there is high dropout rate between first doses of DTP containing vaccine to measles as indicated in Figure 3. This indicates that the immunization service is not reaching the intended target population and among those who are reached through first dose, they don't return for the second measles vaccine. The 2<sup>nd</sup> dose though registered on the child vaccination card is not monitored. The comparison of MCV1 and MCV2 indicates that both coverage performances are below the expected target and Lesotho would have benefited from the routine second dose of measles (fig5).

Fig 3: Dropout rate of DTP1 to Measles 1<sup>st</sup> dose

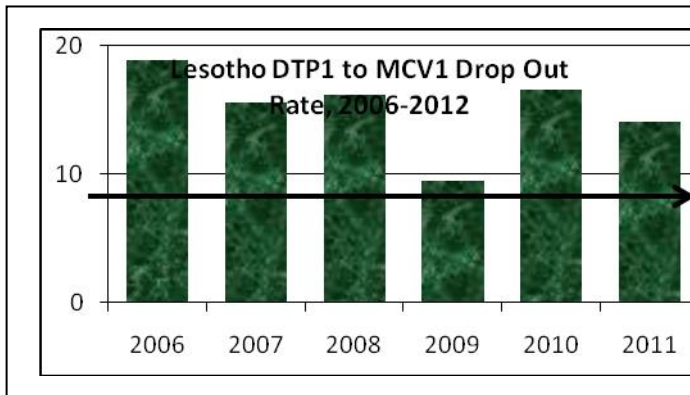


Fig 4: Proportion of districts by category of measles performance

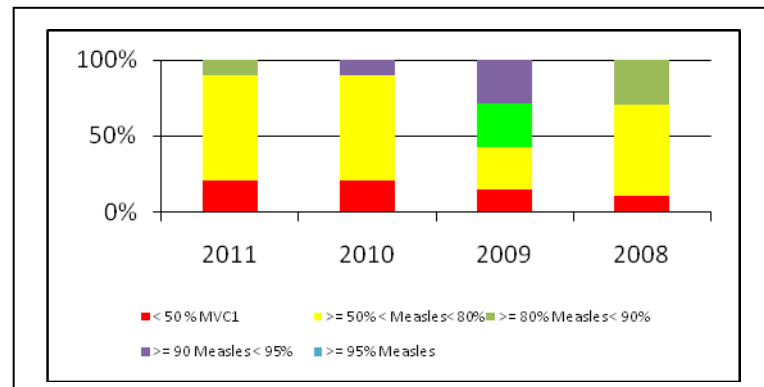
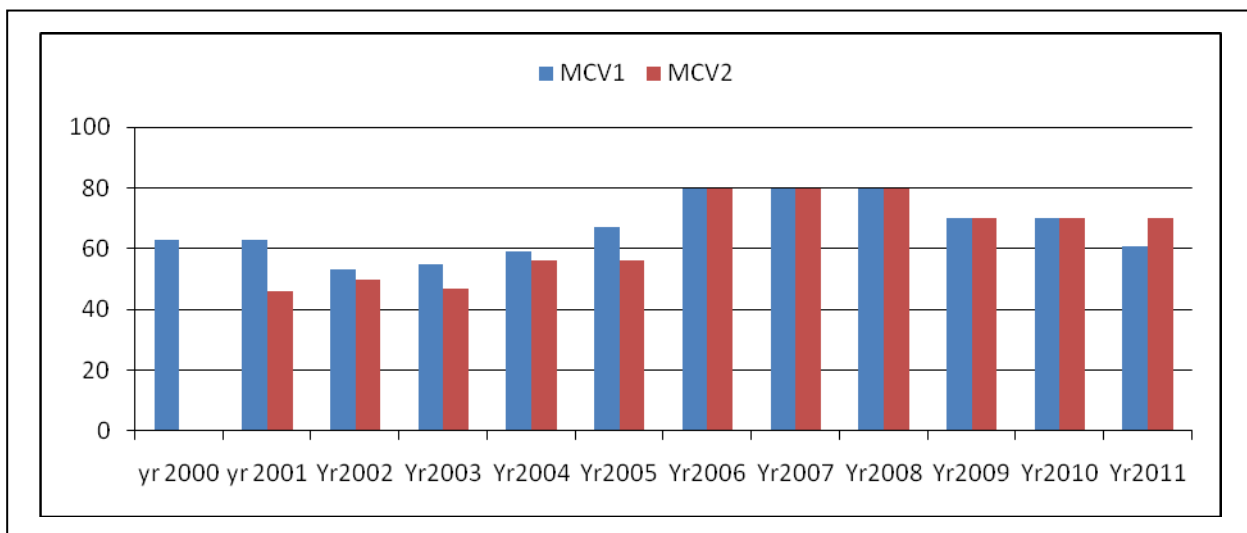


Fig 5: Performance coverage of MCV1 vs MCV2 by year Lesotho, (administrative report from JRF)



Furthermore as shown in Figure 4, in 2006 to 2011 the proportion of districts that achieved 80% is way below the 80% target. Twenty percent (20%) of districts are still performing below 50% which gives fertile ground for measles outbreaks.

This low performance calls for intensified scaling up of the operationalization of all the components of reaching every district strategy with effective and regular monitoring.

### 3.1.4 Level of Implementation of the RED Approach

In appreciation of the limitation of the program in not reaching the intended minimum 90% target at national and at least 80% in each district, the MoH has introduced scale up of Reaching Every District (RED) since 2008 but full components of RED is being operationalized since 2012 in the four prioritized districts with high numbers of unimmunized children namely (Leribe, Berea, Maseru and Mohale's Hoek).

To address the continued performance decline or stagnation in performance of routine immunization, RED

strategy was initially introduced in 2008 with minimum results due to non-operationalization of all components of RED. In 2012, the country conducted a national training on RED and DQS with technical support from IST. Four prioritized districts namely Maseru, Leribe, Mhale's Hoek and Berea that have large numbers of unvaccinated children with measles were targeted for implementation of full components of RED strategy. Trainings of health workers from selected health facilities have been conducted to operationalize all components of RED strategy.

### **3.1.5 Financing for the Purchase of Vaccines**

The Ministry of Health regularly allocates budget for vaccines and other immunization supplies. This is increased each year as per the cMYP 2012-2016. In addition, the GOL is committed to co-financing the new vaccines planned to be introduced; pneumococcal in 2014 and rotavirus in 2015 including under-used vaccine (pentavalent until 2016) with GAVI, in preparation for total financing of all vaccines in the future.

### **3.1.6 Relevant Findings from Latest Cold Chain Review and Vaccine Management Assessment Exercise**

Effective Vaccine Management Assessment (EVMA) was conducted in 2011 in the 10 districts of Lesotho. It covered selected sample of 22 health facilities. Cold chain equipment was assessed at central and in all district cold stores. The findings indicated the need for expansion of cold chain capacity especially at district level to accommodate the introduction of new vaccines in the future that is being implemented currently. District level data management on vaccine is institutionalized to ensure vaccine stock is monitored.

### **3.1.7 Logistics and Immunization Safety**

The country used WHO/UNICEF recommended vaccine supplies including auto-disable syringes and safety boxes. For health facilities which do not have working incinerators, arrangements are made for transportation and disposal of waste.

### **3.1.8 Adverse Events monitoring and Surveillance**

AFRO guidelines are followed in the management of Adverse Events Following Immunization (AEFI) that forms part of health worker orientation. In addition, First Aid kits are prepared and provided for the Teams to take with as they go out to the vaccination sites. AEFI surveillance forms are also made available and referral lines are clarified to vaccinators. AEFI is given high emphasis during SIAs, however, the system is not well established in Lesotho. Recently, AEFI guidelines and investigation forms have been adapted and they form part of integrated disease surveillance system in Lesotho that is intended to be fully institutionalized for all vaccines.

### **3.1.9 Relevant Findings from Latest EPI Review**

The latest EPI review was conducted in 2006 of which most of the recommendations are addressed. Plan is underway for combined EPI/Surveillance programme review in 2014. This intends to review gaps and improvement plan to address limitations. The desk review of VPD surveillance that was conducted in July 2007 analyzed strengths, gaps and gave specific recommendations for improvement.

## **3.2 Supplemental Immunization Activities (SIAs)**

Lesotho adapted the WHO accelerated measles control strategic activities to reduce morbidity and mortality since 1999. The first catch up measles vaccination campaign was conducted in 1999 and was completed in 2000. It targeted children aged 9 months to 14 years, and achieved 71% national coverage. In 2001, in line with the continuing effort to sustain the achievement of reducing the burden of measles, the country has introduced

measles 2<sup>nd</sup> dose in the routine immunization program. The country had conducted three periodic follow up campaigns in 2004, 2007 and 2010 where close to 2 million cumulative numbers of targeted children were vaccinated against measles (Table 2 below).

Table 2: Summary table of Measles SIAs performance in Lesotho

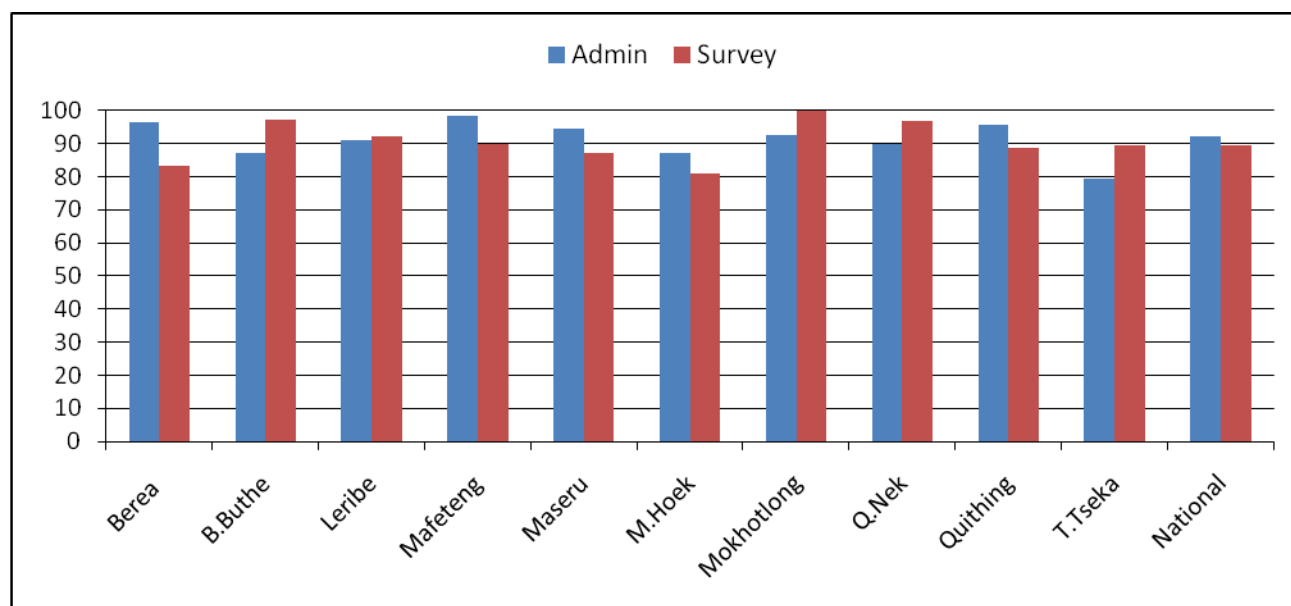
Extent of SIA	Dates of campaign	Target age group	Target population	Population vaccinated	Campaign vaccination coverage
National Phased	Oct99/00	9m-14yr	891,233	628,938	71%
National	Apr-May 03	9-59M	204,786	178,522	87%
National	Oct 07	9-59M	212,800	196,416	92%
National	Sep 10	6M-15Y	615,109	558,335	91%

The first catch up SIAs targeted children below 15 years to ensure majority susceptible populations were given 2<sup>nd</sup> opportunity of vaccination against measles. The follow up SIAs have been conducted every 4 years interval. However, due to the sub optimal coverage, performance of the measles routine immunization program, unprotected children have accumulated. This is due to failure to sero-convert, and also due to non-vaccination which resulted in an intense measles outbreak was confirmed in 2010. The majority affected (i.e. 92%) were within the age group below 15 years of age where the follow up campaign had to be changed to an outbreak response campaign targeting the children below 15 years of age.

There is a very good experience in Lesotho in coordinating and implementing the measles periodic campaigns. However the minimum target of achieving 95% in each district was only achieved by 3 of the districts.

Post SIAs survey conducted in 2007 has indicated performance gaps in that, although administrative coverage was 92% the cluster survey indicated that performance was 87%, indicating missed opportunities even during the measles SIAs. The 2010 SIAs administrative result indicated that only two of the ten districts have not achieved the target of  $\geq 95\%$  coverage (figure 6). The survey has indicated that 77% of the targeted children were reached through outreach and temporary mobile vaccination posts.

Fig6: 2010 Measles SIAs admin coverage performance and post SIAs coverage survey results



The implementation of SIAs in Lesotho, as per the 2010 experience, showed that there is good experience in reaching the communities through community participation and partner collaboration that can be used to sustain immunization performance.

### 3.3 Integration of Key Child Survival Interventions and Provision of Vitamin A and Case Management

Lesotho has managed to integrate delivery of Vitamin A and deworming for children below the age of 5 during each of the measles SIAs conducted, that is contributing to the acceleration in the achievement of the MDG 4. Lesotho has adapted Integrated Management of Childhood illness as strategy to effectively reduce child mortality. The measles case management is in the standard guideline that is institutionalized in all health care settings of Lesotho. Routine Vitamin A supplementation is provided during the immunization contacts as well as through vaccination campaigns.

### 3.4 Measles Case-Based Surveillance

Measles control and elimination plans have been in place since 1997. Lesotho has established measles case-based surveillance since 2003 supported by national measles laboratory.

#### 3.4.1 Performance of Measles Case-Based Surveillance

The measles case-based surveillance has been established since 2003 and has been improving in performance progressively. As per the Table below, among the two major performance indicators, Lesotho has been achieving the Non-measles febrile rash illness rate of more than 2 per 100,000 population. However, the proportion of districts notifying suspected cases of measles is not met every other year.

Table 3: Performance of major Measles surveillance indicators

	<i>Principal Indicators</i>	2007	2008	2009	2010	2011	2012
1.	Proportion of district ( $\geq 80\%$ ) should report at least 1 suspected case of measles with a blood specimen per year	58%	90%	56%	90%	70%	90%
2.	Annualized detection rate (2/100,000 total population)	3.1	7.9	6.9	10.4	7	9.3

Source; Measles case-based surveillance Lesotho

The measles case-based surveillance as indicated in Table 3 shows performance gaps especially in districts

notifying a suspected case. This is a reflection that the surveillance is not sensitive and outbreaks could easily be missed. There is a need to reinforce the case detection in all districts.

### **3.4.2 Measles Case-Based Surveillance Linkage with AFP Surveillance and the IDSR System**

Resources for surveillance in Lesotho are not always sufficient and surveillance intervention is expected to be linked where possible. In that regard, AFP and measles surveillance activities are carried out concurrently with trainings, active search, social mobilization, and other interventions aimed at improving measles surveillance in the country. However the IDSR staff is housed under Diseases Prevention and Control unit while the EPI surveillance officer is within the EPI unit under Department of Family Health.

There are no regular coordination meetings to harmonize the surveillance data between IDSR and case-based measles surveillance. That is a missed opportunity where notified cases through the IDSR are not filtered for case-based investigation. The monitoring of timeliness and completeness of surveillance reports as key performance indicators which was around 18% in 2010, has currently improved to around 60%. This, compared to the minimum target of 90%, is still very low to allow sensitive surveillance implementation in the country. Hence Lesotho may be missing outbreaks that are not detected and investigated at current level of performance.

At the district level, IDSR has focal persons assigned to coordinate surveillance activities while at health facility level, case investigation and notification is the duty of the Health Facility Nurse. The current arrangement has weak links at the district level where the case-based surveillance investigation is conducted and data transmitted without linkage and harmonization with the IDSR focal person at district level. This needs to be coordinated and reflected in the Terms of Reference of the focal persons at Health Facility and District levels. The weekly IDSR reports document more suspected cases of measles as compared to the case-based measles surveillance that is indicative of the weak link at district level and national level.

### **3.4.3 Linkage with the National Laboratory and the EPI Programme**

There is regular communication between national laboratory and EPI programme, all the cases investigated are reported to EPI and kept in measles case-based data. However, results to district and health facility levels are not sent on time and may not reach the point of care. This may discourage the notifying health facilities from reporting suspected cases. Lesotho is following IDSR guidelines, and the laboratory uses IDSR case-based laboratory reporting form.

### **3.4.4 Quality Control Mechanisms and Status of Accreditation of the Measles Laboratory**

Lesotho as part of the network of WHO measles laboratory relies on strong quality assurance programme that monitors country performance through proficiency testing and external quality assurance. Measles laboratory receives periodic accreditation that is conducted every two years by WHO regional office to ensure quality control. The National Measles Laboratory (NML) continues to send 10% of the specimen of measles cases to National Institute of Communicable Diseases (NICD), the regional reference laboratory in South Africa, for External Quality Assurance (EQA). As per the standard WHO protocol, every suspected case of measles is tested for IgM antibody against measles, if IgM is –ve, then it is tested for Rubella. There is evidence now that Rubella has increasingly being confirmed in Lesotho.

The NML has been able to achieve performance targets during the accreditations. The latest accreditation conducted in September 2011, indicated that the laboratory achieved all the WHO set criteria; total number of serological assays (1667), timeliness in reporting IgM results in 7 days (91%), accuracy in testing samples in parallel with the Regional Reference Laboratory at the NICD (97.2%), full implementation of Internal Quality Control procedures, passing of the WHO measles (95%) and rubella (100%) proficiency panels and onsite operating procedures (90%). Consequently the lab will be accredited for the next 24 months. (Source: Measles Accreditation report, Lesotho (2011)).

### **3.4.5 Financing and Provision of Supplies for Cases-Based Surveillance**

The national measles laboratory receives financial support and provision of supplies both from MoH and WHO. As accurate diagnosis of measles remains essential for monitoring progress and detecting outbreaks, measles laboratory provides information about circulation of measles virus using the IgM testing/ELISA. Once suspected febrile rash illness is notified the health facility has the required specimen collection and transport means to send the specimen to the national laboratory. The laboratory moved to a new building in 2013 and will have additional equipment to perform beyond the basic serological tests that are currently done at national level.

### **3.4.6 Data Quality and Harmonization with the National Surveillance Program**

Data harmonization meetings are convened between lab, disease control/IDSR and EPI. The purpose is to ensure that data which is collected is reviewed for irregularities and discrepancies prior to sharing with external environment. Where discrepancies are identified, reporting sites are followed up. This forum exists at central level and the plan is to have the activity decentralized to encourage quality data management.

## **4 Changing Epidemiology of Measles in Lesotho**

The country has seen a significant reduction in the number of reported measles cases from 2000 to 2009, where there were no recorded deaths due to measles. As shown in Figure 2, reported cases of measles reached almost zero as a result of the accelerated efforts of measles mortality reduction.

In 2010, similar to the neighboring country South Africa and the other southern African countries, Lesotho had experienced resurgence of measles. In the large measles outbreak of 2010, among 3,125 suspected cases, a total of 2,485 cases of measles were recorded, of whom 13 died. Of these 318 were lab confirmed while 2,167 were epi-linked, giving total of 2485 cases. The investigation result indicated the reason for this measles outbreak to be mainly failure to vaccinate.

In response to the large measles outbreak, the MoH in collaboration with its partners has, mounted an outbreak response vaccination campaign targeting all children between 6 months to 15 years of age. The outbreak continued for 9 months following which the measles cases have reduced. However, surveillance performance had not met the target in 2012.

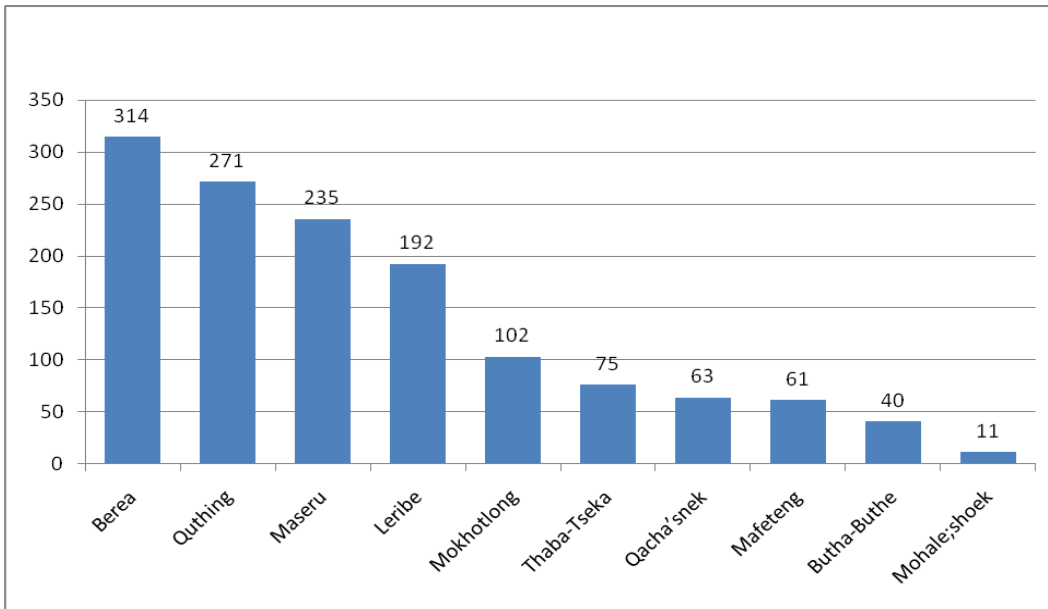
### **Characteristics of The 2010 Confirmed Measles Outbreak**

Figure 7, below indicates that the peak of the incidence of measles were recorded in March and declined as of August 2010. The documentation of the measles outbreak indicated that suspected cases could have been missed as the completeness of IDSR reporting was around 20% at the time. Efforts were made to use line listing and link subsequent cases epidemiologically where appropriate.

### **Figure7: Trend of confirmed cases of measles in Lesotho 2008 -2011 by month (Figure 7 is missing in this document)**

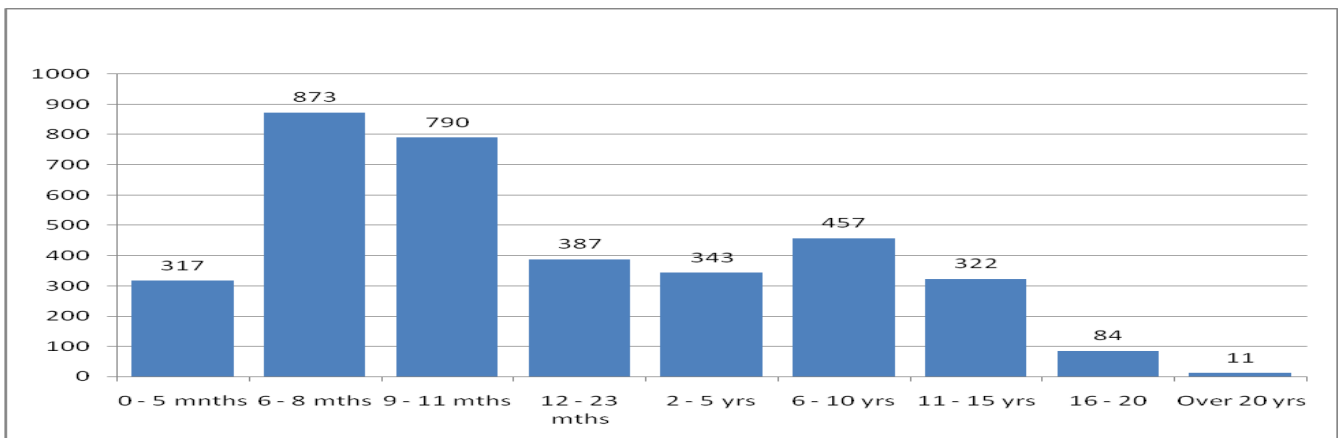
Although all the ten districts were affected by the measles outbreak, four of them, (Berea, Quthing, Maseru and Leribe) stood out in respectively recording 314, 271, 235 and 192 confirmed incidences in the population. Mohale's Hoek district was the least affected as indicated in Figure 8 below.





**Figure 8; Confirmed Incidence of Measles by District, 2009/2010 Lesotho**

The age distribution of the confirmed cases indicated that the majority were below 20 years of age and the highest attack rate was in the 6-11 months age group, followed by 6-10 years. This has necessitated for the response to target age group below 15 years taking the resources available into consideration (Figure 9).



**Figure 9: Age Specific Incidence Rate of Measles by District: Lesotho 2009.2010**

#### *Documentation of viral strains*

The 2010 measles outbreak did not affect Lesotho alone, but also neighboring South Africa, which had an outbreak earlier than Lesotho. The laboratory results revealed that the virus that caused the outbreak in Lesotho was circulating in South Africa. It was further learned that the index case had contacts with measles in South Africa prior to the outbreak.

This experience of Lesotho, despite having 2 doses of measles through the routine immunization programme and providing additional opportunity through the follow up measles, SIAs is indicative of its performance gaps that needs attention for improvement to ensure it gets the benefit from the resources spent in preventing morbidity and mortality from measles.

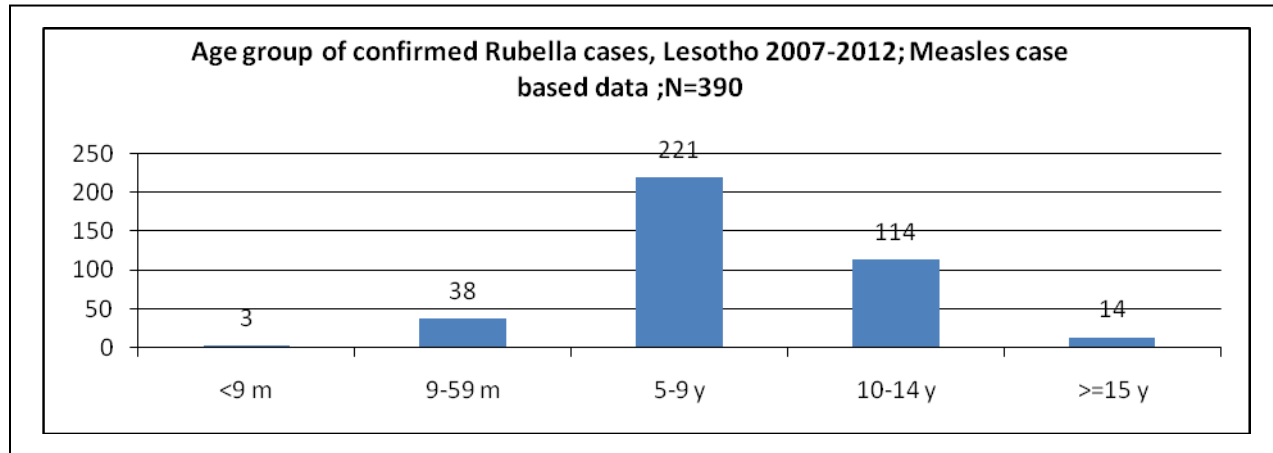
Concluding from this situation analysis, Lesotho is unlikely to achieve the measles pre-elimination targets set for 2012. Some of the epidemiologic evidences in support of this include the fact that the routine immunization coverage (MCV1) is declining/stagnating. 70% of districts in Lesotho have attained MCV1 coverage below

minimum of 80% target. Only few districts have reached the minimum 95% target during the latest SIAs and the country is yet to sustain the measles case-based surveillance target that fails every other year.

However the effective strategies proven elsewhere if implemented strategically will facilitate the attainment of the elimination goal.

### Documented Rubella Cases in Lesotho

As per the standard surveillance guideline, all negative measles cases by serology are tested for Rubella and trend of confirmed cases is increasing.



The confirmed Rubella cases above 15 years of age are few but, if susceptible, could be at risk for the females if they get pregnant

## 5 Rationale of the Strategic Plan

### 5.1 Coordination and Partnerships

The ICC meets regularly and advocates with the senior management of MoH for critical activities including introduction of new vaccines and major immunization activities like the SIAs. The elimination of measles cannot be achieved without commitment and support of the global, regional and local partners. WHO and UNICEF play a coordinating role to mobilize resources required for the implementation of the periodic follow up measles campaign. These campaigns were successfully conducted with the support of government, global measles partnership and local partners including UNICEF, WHO, World Vision and other partners.

### Coordination and Management of the National Measles Control Program

The Family Health Department, where EPI programme is housed, is mandated to the immunization service delivery, while the IDSR under the Disease Control unit of the Ministry of Health serves, is responsible for IDSR, including measles. However, there is a surveillance officer among the EPI Team that is responsible to coordinate VPD surveillance including measles surveillance in the country. Although erratic, the Team from the national laboratory of measles desk collaborates with IDSR and EPI programme through EPI manager coordination supported by WHO EPI focal person.

### 5.2 Roles of Partners

WHO provides technical support in terms of setting the norms and standards; provision of technical guideline adaptations; surveillance and outbreak management; data management; monitoring the program performance, and regular accreditation of measles laboratory including supplies. UNICEF supports the vaccine procurement process and advocates with the WHO through the ICC and health partners coordination forums.

The Christian Health Association (CHAL) supports immunization programme by partnering with MoH.

Financial support, specifically for measles control, is mainly coming from Government resources but complemented by health partners, specifically during the periodic campaigns. The contribution from Government is predicted to increase, while advocacy will be held to solicit the required resources in collaboration with partners, to ensure elimination goal is achieved.

This strategic plan presents strategic activities and targets to allow the country achieve the measles elimination goal by 2020. It is an eight year strategic plan from 2013 to 2020, and the planned strategies include:

- 1) Achieving high immunization coverage  $\geq 90\%$  at national level and  $\geq 80\%$  at district level;
- 2) Achieving WHO standard case-based measles and rubella surveillance (Laboratory-backed surveillance, monitoring and evaluation);
- 3) Outbreak preparedness, monitoring and prompt response with appropriate management of cases;
- 4) Create demand from Communication through participatory community involvement;
- 5) Conduct operational research and programme evaluation.

The implementation of national measles strategic plan provides guidance towards protection, improvement of population immunity that is sustained against measles disease. The intensive recorded measles outbreak in 2010 has been a set back to the achievement by the country where measles was nearly eliminated for about a decade of accelerated efforts. It is through this plan that Lesotho intends to prevent resurgence of further measles outbreak that could be prevented, and if it occurs, is timely picked up and managed accordingly. It also aims to confirm each outbreak and document the genotypes of measles circulating in the country. Contacts will be traced to contain outbreak at earliest possible time based on the confirmatory results from the laboratory.

Efforts to address the performance gaps in Lesotho

## 6. Measles Elimination Strategic Plan

### 6.1 Goal

To achieve and sustain elimination of measles by 2020

**Mission Statement** – the EPI Programme in Lesotho is committed to a measles free Lesotho by 2020 and beyond.

### 6.2 Specific Objectives:

- To achieve at least 85% coverage with both the first and second routine doses of measles vaccine (or measles –containing vaccine as appropriate) in each district and nationally;
- To achieve 95% coverage of each district in SIAs in 2016;
- To sustain the achievement of major measles surveillance performance indicators;
- To document burden of Congenital Rubella Syndrome for possible introduction of Rubella vaccine in 2016;
- To respond measles outbreak.

### 6.3 Targets for 2020:

- Achieve and sustain high coverage of measles with following targets:

By 2013 achieve 85%, by 2014 90% and by 2015 sustain achievement in all districts at least 95% in both first and second dose

And

- Sustain confirmed incidence of measles to be  $< 1/100,000$  by 2015 and  $< 1$  per million by 2020:
  - Non measles febrile rash illness rate of  $> 2/100,000$ ;
  - 90% of districts notify a suspected case of measles with specimen every year;
  - Document strains of confirmed measles genotypes;

- Contact tracing of confirmed outbreaks;
- Immediate response to outbreaks (contain within one month).

## **6.4 Key Strategic Approaches:**

### **6.4.1 Increasing Access**

- Implementation of outreach services through the RED/REC strategy;
- Commemoration of African Vaccination Week with launch of measles key messages ;
- Implementation of quality SIAs (achieve >95% in all districts during SIAs).

### **6.4.2 Ensuring Equity**

- Provision of immunization services to all eligible children regardless of gender, religion, political inclinations or economic and social condition.

### **6.4.3 Promoting Integration**

Outreach services and SIAs will be used to deliver vaccines with other child interventions such as vitA, de-worming and health education

### **6.4.4 Fostering and Strengthening Partnerships**

- Engagement in advocacy for adequate resources, provision of technical support;
- Communicating to communities;
- Introduction of measles-rubella containing vaccine through SIAs.

### **6.4.5 Assuring Political Support and Financing**

- Strengthening political commitment; ensuring availability of skilled staff to deliver immunization services, planning for SIAs at least 9 months before the activity;
- Sharing best practices and lessons learnt.

### **6.4.6 Ensuring Data Driven Programme Management**

- Review of both routine immunization data and surveillance will be conducted and action taking at district level- introduce data harmonization meetings in all districts;
- Feedback will be provided to all relevant stake holders; districts, health facilities and partners through a quarterly bulletin. The forum of the Joint annual performance review of the health sector will be used to disseminate annual performance where detailed immunization programme performance will be presented including progress to the measles elimination in Lesotho;
- Regular data harmonization meetings on monthly basis will be held at central level with coordination of the EPI programme to review routine immunization data, vaccine management, and VPD surveillance Integrated Disease Surveillances and Response units;
- At least to Plan and implement EPI/surveillance review meeting with districts;
- Weekly tracking of outbreaks, genotype identification, outbreak response (lab supported).

## **6.5 Priority Activities:**

### **6.5.1 Programme Coordination**

Elimination of measles requires commitment from all areas. MoH, through the departments of Family Health and Disease Control will play the role of coordination to ensure that all partners are brought to one table to support the country to achieve its goals.

The MoH will establish and coordinate Measles Elimination Technical Working Group (TWG) which will work closely and collaborate with the Medical Council, including Health Professionals Associations, to advise and oversee implementation of the strategic plan. The committee will have specific Terms of Reference for its operation from WHO. It will meet at least two times a year to monitor progress at country level, and through the WHO country office, produce an annual progress report on measles elimination progress to the regional level for programme monitoring.

### **6.5.2 Advocacy and Resource Mobilization**

The WHO and UNICEF which are the main partners of the MoH in immunization programme, will be actively involved in ensuring resource mobilization together with other external and local partners using this document as advocacy tool. The dissemination of performance reports and best practices in conducting measles SIAs and other strategies proved to increase access to immunization services will be used to advocate for additional resources.

### **6.5.3 Community and Social Mobilization, Communication and Advocacy**

The EPI programme is working with the Health Education Directorate who is mandated on health promotion to ensure demand for immunization services is created through strategic approaches. Through regular coordination between EPI, Surveillance and the Health Education Unit of the MoH, continued education of the public and intense community mobilization will be done using the traditional chiefs and the health workers, including use of the public media. At community level, the link with the health service will be strengthened. Linkages created during measles SIAs and routine immunization will be further strengthened involving the Community Health Workers (CHWs), with coordination effort of Local Government structures, for sustainability and ownership at all levels.

Identification of population groups in the low performing areas is regularly done and information shared with Health Education Team to raise demand on regular basis. The CHWs placement is being used to create the link with the community; area catchment population is being worked on as part of the RED strategy to strengthen community partnership for Immunization

Among the special groups identified by the programme, the population along the borders with South Africa is targeted for special collaborative efforts in raising coverage with South Africa through regular cross border information sharing and planning for services. This collaboration has been reactivated and is expected to facilitate in reaching the communities with health services

### **6.5.4 Assuring Quality and Adequate Vaccine Supply and Logistics**

Lesotho conducted an assessment of the cold chain in December 2012, in anticipation of introducing additional new vaccines (Pneumococcal and Rotavirus vaccines 2014). The Essential Vaccine Management Assessment was conducted in 2011. These efforts have allowed the development of rehabilitation plan that is being used for expansion and maintenance of the cold chain equipment. This in addition to institutionalizing the monitoring using the District Vaccine Management Tool (DVDMT) to ensure adequate vaccine stocks availability at all levels.

## **6.6 Preparedness for Implementation**

The MoH through the EPI and Surveillance units, will be focusing on the strategic activities that will be focused to ensure elimination target is achieved as follows:

1. Routine immunization strengthening through scale up of RED strategy focusing on where there are large numbers of unvaccinated children through prioritization at least every 6 months. District level outbreak risk assessment every 6 months to ensure preventive activities are conducted at risk areas;

2. Ensure both MCV1 and MCV2 in routine immunization are increasing in coverage and monitoring drop out between DPT1 and MCV 1;
3. Conducting high quality SIAs;
4. Each district achieving at least 95% coverage in the SIAs;
5. Improving the quality of measles surveillance and lab confirmation;
6. Achieving the two major performance indicators and sustain confirmed incidence of measles to be less than 1 per million population;
7. Improving immunisation monitoring and surveillance data quality;
8. Data quality assurance institutionalized and harmonization of data between lab and surveillance is done including district and health facility level ;
9. Ensuring adequate outbreak preparedness and response;
10. Sensitive surveillance performance for measles sustained to promptly detect measles outbreaks; IDSR indicators achieved (timelines and completeness of reporting  $\geq 90\%$ ; outbreaks investigated within 48 hours of notification);
11. Each outbreak of measles tracked and monitored including contacts and confirmed by laboratory;
12. Throat swab specimen from each outbreak collected to document genotype (differentiate importation from indigenous).

## **6.7 Response to Outbreaks Provided and Documented**

As certification for measles elimination gives prominent emphasis on providing evidence through surveillance outbreak monitoring will be one of the key strategies that will be refined by MoH to ensure that the country has promptly detected, investigated, responded to and documented each measles outbreak as per WHO recommendation.

### **6.7.1 Identification of outbreak**

To ensure that there is dedicated funding and personnel for disease surveillance, the Disease surveillance unit that is currently using IDSR strategy has District level focal persons dedicated for surveillance that are financed by the MoH system.

The Surveillance Unit (SU) has already established regular monitoring of surveillance information. However, improvement is required to increase sensitivity of the surveillance as measured by timeliness and completeness of weekly and monthly surveillance reports. The information exchange between laboratory and the SU, including EPI Team, needs to be regularly done at least once a month, using the mechanism of regular meetings to harmonize data and improve on surveillance data quality.

The National Surveillance Team will monitor surveillance performance by district while the district levels monitors by Health Facility. The results are to be used in provision of surveillance feedback to the sub-national level.

To ensure prompt detection of measles outbreaks and investigation for confirmation, responsibilities of surveillance focal persons at all levels need to be revised and disseminated. The existing protocols for specimen collection and shipment should be widely disseminated. The National Surveillance Unit is mandated in the declaration of outbreak once they are confirmed after investigation, and has developed Standard operating procedures related to:

- a) Procedures for alert and outbreak verification;
- b) Procedures for declaration of outbreak;
- c) Procedures and mechanisms for information flow between national authorities, agencies and partners;
- d) Development and dissemination of information to the public and to partners.

Setting up or mobilizing the necessary technology and networks for rapid communication during an outbreak, i.e., a coordination center and networks for immediate and daily reporting will be facilitated by the national

surveillance unit.

At time of confirmed measles outbreaks, in-depth outbreak investigation including Vaccine Effectiveness field studies will be facilitated to identify the reasons of the outbreak.

### **6.7.2 Response to Outbreaks of Measles**

The national outbreak preparedness and response coordination committee will be activated under the Disease Prevention and Control Directorate as IDSR unit is mandated to coordinate outbreak response in collaboration with EPI programme that is under the Family Health Department.

The standard technical guidelines will be updated in line with WHO measles elimination surveillance targets that will include the clinical case management guidelines, infection control in health care setting during measles outbreaks.

Surveillance will be enhanced in outbreak setting to ensure each and every suspected febrile rash illness is detected and investigated including tracing of contacts of confirmed cases to identify transmission chain.

Based on the evidence from the outbreak investigation and scope of the measles outbreak, appropriate measures will be taken to strengthen routine immunization through selective vaccination or conduct non-selective vaccination campaign targeting at least 90% of the affected age group in the high risk areas.

#### **Protocol of Data Sharing During Measles Outbreak**

In outbreak setting, the existing protocol indicates that data is shared on daily basis listed in line list for close follow up and monitoring of progression and management of the outbreak. To ensure that all facilities have notified suspected cases, completeness and timeliness of weekly reports will be monitored.

### **6.7.3 At the End of the Outbreak**

Each measles outbreak response will be assessed on the process of investigation, confirmation and the response measures to improve on performance. The details that will be assessed are listed as follows: the timeliness of case investigation; timeliness of outbreak investigation following attainment of outbreak threshold; timeliness of initiation of response measures; level of involvement of the district outbreak committee; availability of drugs and treatment protocols; case fatality rate.

## **7 Programme Risks and Risk Management Strategies:**

The strategic activities to reach the measles elimination goal will be carried out. However, the stagnant routine immunization performance, coupled with the limitation of resources for the periodic SIAs may be significant challenge to ensure achievement. Regular risk assessments at least once a year will be implemented to put measures in place to prevent anticipated measles outbreak. Therefore Government led high level advocacy will be required.

## **8 Monitoring and Evaluation:**

Methods and Tools for monitoring and evaluation:

- 1) Performance of Routine Immunization as validated by coverage survey;
- 2) Performance of quality SIAs that will be validated by survey;
- 3) Performance indicator targets of measles surveillance will be tracked to monitor progress and impact.

Indicators that will be utilized are as follows:

- WHO standard performance indicators for measuring the targets achieved will be utilized;
- Coverage of immunization (both first and second dose of measles); SIAs;
- Targets for measles case-based surveillance;
- Genotypes of measles virus isolated if confirmed outbreak;
- Performance of accreditation of the laboratory.

The TWG will be submitting annual progress reports towards measles elimination using the WHO guideline from MoH through WHO country office that will be shared with Regional WHO Offices. Where required, the TWG will also advocate with the senior management of the MoH to ensure the country is on track with implementation.

## **9 Milestones for Mid-Term (2016):**

1. Coverage of Measles first dose to reach 90% at national and 89% in 50% of districts while 100% of districts will achieve > 80% ; similar for Measles second dose;
2. Measles SIAs achieving minimum 95% in every district;
3. Confirmed measles incidence <1 per million with both major measles surveillance indicators achieved.



## Annex 1 Key Strategic Activities Estimated Budget for Lesotho Measles Elimination Strategic Plan

Strategic element	Key activities for operations	Estimated cost per year
Increasing and sustaining high coverage using quality measles vaccine	<ul style="list-style-type: none"> <li>Scale up RED strategy to all the 10 districts by 2013</li> <li>Ensure increase demand of community for immunization ( Health Education team collaboration)</li> <li>Establish TWG for measles elimination ( annual report towards measles elimination produced )</li> <li>Use Child health days or AVW to increase coverage; Mop up in low coverage areas</li> <li>Institute defaulter tracing</li> <li>Regular Feedback per quarter</li> <li>Introduce Rubella vaccine</li> </ul>	30,000 USD per year ; 200,000 USD for 7 years
Sensitive measles/rubella case-based surveillance supported by Lab	<ul style="list-style-type: none"> <li>Provide refresher training to health workers on measles case-based surveillance</li> <li>strengthen the outbreak coordination committee</li> <li>Form a TWG that reviews progress towards elimination of measles</li> <li>Conduct annual risk analysis for measles outbreaks</li> <li>Monitor performance indicators</li> <li>Prompt outbreak detection and response including contact tracing and response</li> <li>Maintain WHO standard for the lab accreditation</li> <li>Conduct baseline assessment for CRS disease burden</li> </ul>	20,000 USD per year= 140,000 USD  Retrospective documentation 10,000 for a year  Subtotal 150,000
Quality SIAs implementation ( Consider MR Introduction in 2016 targeting under 15)	<ul style="list-style-type: none"> <li>Advocate and mobilize resources using cMYP 1 year ahead of SIAs for 2013, 2016 and 2019</li> <li>Use opportunity of SIAs to strengthen RI and surveillance</li> <li>Monitoring of preparation and implementation to ensure 95% achievement in every district.</li> <li>Conduct mop up if intra SIAs monitoring indicates missed areas.</li> <li>Conduct coverage survey to validate performance</li> </ul>	For 2013; \$387, 605 ( at 1 USD per child)  For 2016 inclusive of MR (at 1.5 USD per child) and is under 15 years ; \$1,260,944  For 2019 targeting under 5 children using MR using 1.5 USD per child ; \$ 618643 USD  Subtotal SIAs =2,267,192 inclusive of MR introduction
Total estimated cost		\$ 2,617,192



## Annex 2 Timeline by Year, by Planning Element

	2013	2014	2015	2016	2017	2018	2019	2020
Increasing coverage of routine immunization & Sustain	RED scale up Use AVW to intensify messages on RI Conduct program Review Re-initiate regular quarterly feedback	Sustain RED Strategy AVW Regular feedback on quarter Provide trophy for best performing district	Sustain RED Strategy AVW Regular feedback on quarter	Sustain RED Strategy AVW Regular feedback on quarter	Sustain RED Strategy AVW Regular feedback on quarter	Sustain RED Strategy AVW Regular feedback on quarter	Sustain RED Strategy AVW Regular feedback on quarter	Sustain RED Strategy AVW Regular feedback on quarter
Increase sensitivity of case-based measles/rubella lab surveillance	Disseminate updated Surveillance guideline Establish a TWG to review the measles elimination progress annually Provide orientation of the TWG on measles elimination certification process Conduct accreditation of lab	Document diseases burden on CRS Train of measles outbreak tracking and monitoring Provide annual report on progress to measles elimination	Track measles outbreaks and respond Conduct accreditation of lab Provide annual report on progress to measles elimination	Provide annual report on progress to measles elimination Trace measles outbreaks and respond	Track measles outbreaks and respond Conduct accreditation of lab Provide annual report on progress to measles elimination	Provide annual report on progress to measles elimination Track measles outbreaks and respond	Provide annual report on progress to measles elimination Conduct accreditation of lab Track measles outbreaks and respond	Provide annual report on progress to measles elimination for certification of elimination Conduct accreditation of lab measles
Quality SIA implementation	Implement SIAs 9-15years Conduct post SIAs coverage survey integrated with RI			Implement SIAs MR? introduction months Conduct post			Implement SIAMR introduction months Conduct post SIAs	

				SIA coverage survey integrated with RI			coverage survey integrated with RI	
Advocacy Program communicat ion; social mobilizatio n								

### Annex 3. Estimated Target population used

	2013	2014	2015	2016	2017	2018	2019
Population	1 938 026	1 958 957	1 980 113	2 001 498	2021513	2041728	2062145
Births	56 203	56 810	57 423	58 043	58663	59306	60000
Surviving Infants	51 088	51 640	52 198	52 762	53372	53992	54622
Child Bearing Age Women	515 515	521 082	526 710	532 399	539070	544460	549905
9-59 months (20%)	387605	391791	396022	400299	404302	408305	412429
9mths -14 years (42%)	983170	822762	831647	840629	849035	857525	866101

**Annex 4 SWOT for Routine Immunization**

<b>Strengths</b>	<b>Weaknesses</b>
<p>Immunization system providing 12 antigens with mainly Government financing as commitment to control and prevent measles and other Vaccine preventable diseases of priority in the country</p>	<ul style="list-style-type: none"> <li>• Weak social mobilization and communication for EPI to create demand for Immunization in reaching the remaining 30%</li> <li>• No feedback from national level to district councils ; Late or non-analysis of data at district by relevant authorities ( district councils ownership)</li> <li>• Very limited outreach services, immunizations offered in static sites (health facilities)</li> <li>• Irregular data harmonization between lab, EPI and disease control</li> <li>• Comparative analysis not used to motivate performance at district level</li> </ul>
<p>Provision of second dose of measles through routine immunization</p>	
<p>Expansion of cold chain in process to accommodate anticipated new vaccines introduction; vaccine stock monitoring system in districts available</p>	
<b>Opportunities</b>	<b>Threats</b>
<p>Measles coverage on of the indicators for attainment of MDg4;</p> <p>Strategic plan for child survival available (supportive)</p> <p>Annual forum for Health Sector joint review where progress and limitations can be scaled up</p> <p>Strong partnership between WHO and UNICEF</p> <p><b>Human resources retention strategy and incentive package</b></p>	<ul style="list-style-type: none"> <li>• Human resources attrition may require increased funding</li> <li>• Increasing pool of susceptible cohort with likely hood of outbreaks – costly outbreak responses</li> </ul>

**Annex 5 SWOT Analysis from SIAs**

<b>Strength</b>	<b>Weakness</b>
<p>Local mobilization of resources mainly from Government complimented by partners</p> <p>Ability to reach 90% of the target population in nearly all districts including mobilization of Helicopter to reach the unreached</p> <p>Effective planning and early preparation with commitment of staff and high level of MOHSW coordinating the SIAs</p> <p>Establishment of sub committees that coordinate Planning/training, Logistics, Soc mob with very good coordination</p>	<p>Missed opportunity due to noncompliance of care takers</p> <p>Current Social mobilization and communication strategy not reaching the unreached</p> <p>Efforts of micro-plans not used to strengthen routine immunization and scale up of RED strategy</p> <p>Link with district councils not strengthened to level of raising demand for services in communities ( ownership of the program by districts and communities )</p>
<b>Opportunity</b>	<b>Threat</b>
<p>Output of Micro-planning for upcoming SIAs can be used to ensure RI RED strategy is scaled up in all districts and communities</p> <p>Involvement of District councils for SIAs to be maximized for sustaining high routine immunization coverage</p> <p>Cross border collaboration with South Africa to map out floating population</p>	<p>If partners commitment is reducing the required resources may not be matched</p> <p>Demand for services by communities (lay back attitude) in not coming back for RI services (compared to early 1990's)</p>

**Annex 6 SWOT for Disease Surveillance**

<b>Strength</b>	<b>Weakness</b>
<p>Revised IDSR guidelines adapted and IDSR district level focal persons assigned</p> <p>Accredited National measles lab (can confirm existence of measles outbreak)</p> <p>Measles surveillance guideline on revision for dissemination</p>	<p>Limited human resources at national level for Surveillance (IDSR) – national outbreak response team</p> <p>Coordination with Immunization program is erratic ( could be regular for data harmonization with Lab, EPI and IDSR)</p> <p>Timeliness and completeness (IDSR) reporting below 50% for districts hence insensitive surveillance system ( chance of missing outbreaks undetected ); fluctuating attainment of target for measles surveillance</p> <p>Communication facilities limited ( airtime, internet connection with districts for case notification and monitoring )</p> <p>Weekly surveillance relies on phone call from national level ( not proactive reporting from districts)</p> <p>District level Focal person for IDSR not linked with the Health facilities notifying cases hence missing out on cases to be investigated</p>
<b>Opportunity</b>	<b>Threats</b>
<p>Community surveillance can be used for prompt notification using the Community Health Workers net work</p> <p>Linking the District Surveillance focal persons with the health facility notification system could easily increase notification efficiency</p> <p>Measles elimination goal provides opportunity to create a TWG that monitors progress of performance on elimination ( oversee and advise MOHSW)</p>	<p>Community Health workers need to be replaced and retained in all communities for community health services link with community</p> <p>Reliance on financing for outbreak investigation on partners</p>

## Annex 7 SWOT Summary External Environment

Strength	Weakness
<p>System for Immunization exists ( Health facilities, commodities and human resources )</p> <p>Majority of finances for Immunization service is from MOH with credible contribution to co- financing for new vaccines that are co- financed by GAVI</p>	<p>Geographic coverage of Community health workers not sufficient to address equity of service</p> <p>Primary Health Care Service not reaching 100%</p>
Opportunity	Threats
<p>Health System strengthening Support</p> <p>Human resources incentive package</p>	<p>Economic crisis that can affect partners support</p> <p>Retention of trained human resources</p>

### Process of development and finalization of the Plan

- Review of relevant documents
- Consultative meeting with MOHSW and CHAL teams to conduct the SWOT analysis for Immunization and external environment to contribute to improve the draft strategic plan
- Key informants (WHO EPI focal person, UNICEF chief of Health; Measles National Laboratory focal person)

### Reviewed documents

- DHS 2009; Draft child survival strategic plan ;WHO CCS ;HSS proposal
- MOHSW Health Education plan ; IDSR draft adapted document from Surveillance unit ;MOH Health education plan for 2013;Immunization Policy for Lesotho 2010; CMYP ; 2006 EPI review document and 2007 Desk review for surveillance ; DQS debriefing presentation in 2012 ;RED training in 2012
- Post SIAs coverage survey report of 2007 and 2010; Previous SIAs reports ;Current plan for 2013 Measles SIAs
  - Share with WR the draft for country input (one week)
  - Incorporate comment from Country level by IST (one week)
  - ICC endorsement of the plan



Draft TOR of the TWG that oversees the progress towards measles elimination by 2020

Appointed by the MOH,

The working group is expected to

- Advocate for measles elimination strategic plan implementation at country level with higher level of the MOH
- Assisted by EPI /Surveillance secretariat document the progress towards measles elimination on annual basis and share report to WHO/IST regional office