REPUBLIC OF THE GAMBIA

Implementation Plan

Measles-Rubella Immunization Campaign November 2015
EXECUTIVE SUMMARY

Measles is one of the highest causes of mortality in children under five worldwide. In Africa, measles accounts for 5% of all under five mortality and 50% of all vaccine preventable deaths by 2010. The WHO AFRO region in 2000, set a goal of 90% reduction of measles deaths by 2009 compared to 2000.

The Gambia has been implementing measles reduction strategies which include strengthening routine immunization, catch-up and follow up SIAs and effective surveillance since the late 2000s. These strategies have led to significant reduction in the incidence of morbidity and mortality due to measles in the past decade. Suspected cases of measles have reduced significantly and no known deaths attributable to measles have been recorded in the country since 2003 after first mass catch-up campaign for children aged 9months – 14 years in December 2003. The Country then adapted a mass campaign cycle following the 2003 catch-up and subsequent follow-up campaigns have successfully been conducted in 2007 and 2011.

With the active implementation of surveillance, in 2013 a total of 135 suspected measles cases were identified and 66(49%) were confirmed rubella IgM positive and none for measles. In 2012, a total of 93 suspected measles cases were identified and 39(42%) were confirmed rubella IgM positive and none for measles. Also in 2011, a total of 114 suspected measles cases of which 42(37%) were confirmed rubella IgM positive and none for measles. A recent study conducted in The Gambia by Medical Research Council (MRC) described around a 10% sero-prevalence of Rubella-Specific antibodies in 9 and 10 months old infants, providing evidence of ongoing rubella transmission within The Gambian population.

In this regard, The Government of the Gambia deemed it fitting to conduct another round of measles vaccination campaign in November 2015 using measles-rubella vaccine. The campaign will target all persons aged 9 months to 14 years old using a 10 dose LYOPHILISED MR vaccine as the preferred choice of vaccine presentation. A total of 802,245 persons have therefore been targeted for the campaign based on the 2013 census figures. The Measles-Rubella vaccines will then be subsequently introduced nationwide into the routine EPI programme in March 2016.

The 2014 EVM indicated an overall storage capacity of 84% in the country. It is however noted that with the introduction of new vaccines like the IPV, HPV, possible storage gaps could be realised. The EVM Improvement Plan has recommended the expansion of the storage capacity with support from partners.

The proposed activities to be implemented for the MR campaign will include micro planning, training at all levels, advocacy and social mobilization, design and production of data collection tools, training manual, logistics distribution, and mass vaccination using mobile and fixed posts at schools, markets,
health facilities, communities and the management of all the waste generated during the campaign. A post campaign evaluation will be conducted to validate the administrative campaign results, which will as well highlight constraints, challenges, best practices and recommendations for future campaigns.

The seven day MR campaign exercise is planned to be conducted in November 2015. The total estimated cost for the campaign is **US$ 1,323,807.00**, which will cover procurement of vaccines and supplies, social mobilization activities, planning and training, health worker incentives and operational costs. GAVI will provide **US$ 673,967.00** as the cost of vaccines and supplies, **US$ 503,459.00** for operational cost summing up to **US$ 1,177,426.00**. The Government of The Gambia will also contribute **US$ 83,767.46** towards the operational cost, while partners like WHO and UNICEF will be contributing **US$ 62,613.54** towards the total cost of the campaign.
1.0 BACKGROUND AND SITUATIONAL ANALYSIS

The Gambia is one of the countries on the west coast of Africa with an area of 11,000 square kilometres and an estimated population of 1.7 million people. About 4% of the population is less than 1 year old. The country is divided into 5 Administrative Regions which are divided into 7 Regional Health Management Teams (RHMT) responsible for the planning and day to day administration together with the monitoring and supervision of health services, including immunization services.

The Gambia started EPI services in 1979 in order to reduce morbidity and mortality due to vaccine preventable diseases, The Gambia added hepatitis B (1990), \textit{Haemophilus influenza} type b (1997), Pneumococcal (2009), Measles 2 (2012), and Rota-virus (2013) vaccines to the traditional ones. The country has impressively high immunization coverage (Penta 3 at 97% in 2013 at national level) mainly due to increasing access, service utilization and good programme management.

The Gambian health care delivery system is based on the Primary Health Care (PHC) Strategy adopted since 1979. The health services are delivered through a network of many primary health posts and health facilities. These are staffed by Medical Doctors, Nurses, Public Health Officers and Community Health Workers. They provide curative, preventive, promotive (community sensitization and rehabilitative health services) and child health services including immunization. The infant and under-five mortality now on the decline still stand at 34/1000 live births and 54/1000 live births respectively (2013 census).

The Gambia continues to maintain high routine measles vaccination coverage from 95% in 2012 to 96% in 2013 as reported in the WHO-UNICEF JRF. The country also introduced Measles second dose in August 2012 to boost population immunity.

2.0 OVERALL GOAL FOR 2015 MR CAMPAIGN

The overall goal of the MR immunisation campaign is to contribute to the improvement of the health and well being of children in the Gambia as well as the attainment of the MDGs (e.g. goal 4) through the control of Measles and Rubella.
3.0 OBJECTIVE OF THE MR CAMPAIGN

The 2015 MR campaign will be conducted in November targeting all children aged 9 months to 14 years of age in the country

3.1 SPECIFIC OBJECTIVES

- To vaccinate over 95% of children age 9 to 14 year in every district.
- To ensure highest quality of the campaign by ensuring vaccination safety (vaccine quality, injection safety and surveillance of AEFI)
- To increase the chance for every child to receive at least one dose of MR vaccine
- To promote and strengthen the existing partnership with all stakeholders in the area of routine immunisation in the Gambia.

4.0 JUSTIFICATION OF THE CAMPAIGN

The Gambia has been implementing measles reduction strategies which include strengthening routine immunization, catch-up and follow up SIAs and effective surveillance since the late 2000s. These strategies have led to significant reduction in measles morbidity and mortality in the past decade. Suspected cases of measles have reduced significantly and no known deaths attributable to measles have been recorded in the country since first mass catch-up campaign for children aged 9 months – 14 years in December 2003. The Country then adapted a mass campaign cycle following the 2003 catch-up and subsequent follow-up campaigns have successfully been conducted in 2007 and 2011.

However, with the implementation of active surveillance, in 2013 a total of 135 suspected measles cases were identified and 66(49%) were rubella IgM positive and none for measles. In 2012, a total of 93 suspected measles cases were identified and 39(42%) were rubella IgM positive and none for measles. Also in 2011 a total of 114 suspected measles cases of which 42(37%) were IgM positive for rubella and none for measles. A recent study conducted in The Gambia by Medical Research Council (MRC) describe around a 10% sero-prevalence of Rubella-Specific antibodies in 9 and 10 months old infants, providing evidence of ongoing rubella transmission within The Gambian population.
Furthermore, when the first dose is given at 9 months, not all children will develop protective response (15% failure). The second opportunity will increase the protective response and herd immunity as well as increase chances of reaching those who might have missed the first opportunity.

In this regard, with the presence of Rubella as showed in the surveillance data, The Government of the Gambia deemed it fitting to conduct another round of vaccination campaign in November 2015 using measles-rubella vaccine. The campaign will target all persons aged 9 months to 14 years old using a 10 dose LYOPHILISED MR vaccine as the preferred choice of vaccine presentation. A total of 802,245 persons have therefore been targeted for the campaign based on projected population. It is expected that Measles-Rubella vaccines will be subsequently introduced nationwide in to the routine EPI programme in March 2016.

5.0 LINKAGES WITH OTHER INTERVENTIONS

The country plans to introduce IPV in April 2015 and has already administered the first dose of HPV to girls in the demo area. These two interventions are critically looked into and would not interfere with the proposed MR campaign implementation which is scheduled for November 2015 when all the preparatory and implementation activities for the IPV and HPV would have been concluded.

The IPV preparatory activities include social mobilization and training of immunization service providers. Both platforms would be used to inform the communities and immunization service providers on the proposed MR campaign in advance. In addition, routine immunization sessions would be used to sensitize parents and caregivers about the MR campaign and its subsequent introduction into the routine EPI. The HPV uses the school based strategy and would be used to sensitize schools where some of the targeted age groups would be found during the MR campaign.

6.0 COSTING AND FINANCING

The total estimated cost for the campaign is US$1,323,807.00, which will cover procurement of vaccines and supplies, social mobilization activities, planning and training, health worker incentives and operational costs. GAVI will provide US$673,967.00 as the cost of vaccines and supplies, US$503,459.00 for operational cost summing up to US$1,177426.00. The Government of The Gambia
will also contribute **US$83,767.46** towards the operational cost, while partners like WHO and UNICEF will be contributing **US$ 62,613.54** towards the total cost of the campaign.

### 7.0 LESSONS LEARNED

Experiences or lessons learnt from previous measles SIAs will serve as good resources for the effective preparation, planning and implementation of the MR campaign.

- Independent evaluation of measles SIAs is the single most tool for monitoring the quality and success of any immunization campaign.
- Volunteer participation borrowed from the Polio Eradication Initiative is expected to pay dividend in the MR campaign by reducing some of the operational burden such as tallying, recording and crowd control.
- The local authority personnel such as alkaloos, chairmen/mayors, Technical advisory committees had been good and dependable partners in community sensitization, mobilization and participation in measles and past SIAs, such structures will also be used during the MR campaign.
- Early preparation and planning leads to better and effective mass vaccination campaigns.
- Conducting micro planning adequately and timely with stakeholders helped to quantify resources for the campaign.
- Inadequate waste management facilities could lead to backlog of sharp boxes at facility level and communities.
- The conduct of ‘rapid convenience assessment’ by supervisors can identify pockets of low coverage and take appropriate actions before the end of the campaign.
- The conduct of post SIA evaluation assisted in validating campaign data.
- Timely availability of logistics for the campaign is important to the success of any SIAs.
- The availability of technical and financial support from partners is crucial in ensuring quality SIAs.

### 8.0 PARTNER SUPPORT

Effective coordination for central and regional levels is critical for the successful implementation of quality SIAs. The MR campaign will be coordinated at two levels, central and regional levels. Central
level coordination is through the ICC which is chaired by the Honourable Minister of Health and Social Welfare with representation from key government ministries, UN agencies (WHO and UNICEF), bi-lateral agencies, NGOs such as Rotary International, Child Fund, The Gambia Red Cross Society, etc. This body is tasked with the responsibility of coordinating and monitoring both for SIAs and routine immunisation activities through quarterly meetings. They are also responsible for coordinating and mobilizing of resources for SIAs.

At the regional level, issues are spearheaded by the Regional Health Management Teams through the Regional Technical Advisory Committee (TAC) chaired by the Regional Governor. The TAC comprises of heads of government institutions in the region, NGOs and civil society organizations such as community media houses, CBOs. They will be responsible for coordination and mobilization of resources for SIAs. There is strong partnership between the RHT and the communities in terms of human resources and social mobilization for participation in SIAs.

9.0 COMMUNICATION TASK FORCE

In order to achieve quality SIAs, effective advocacy, social mobilization and communication need to be planned and implemented to get the support and participation of decision makers, individuals, families and communities. Planned activities will be conducted based on experience and assessment of the best practices in previous SIAs.

Communication Task Force Committees already exist at both central and regional levels comprising of communication actors from the Government and civil society. There is a hierarchy of social mobilization focal persons working with these committees in all the regions. The communication task force committee at the central level is multi-sectoral, however with clearly defined responsibilities for instance development of a specific communication plan and time line for a campaign. The committee will be meeting monthly commencing six months before the MR campaign to draw a timeline, develop a comprehensive communication plan, and IEC materials for the campaign.

10.0 TECHNICAL TASK FORCE

A technical task force committee will be formed to include the EPI, some members from sister units of the MoH&SW, WHO EPI focal person, UNICEF EPI Specialist and some Regional Health Management
Team representatives. Their mandate among other things will be to develop the operational plan and guidelines for the campaign. A timeline will include development of MR training manual, recording and reporting tools. The Technical task force will be meeting on monthly basis and fortnightly two months before the campaign.

11.0 POST- CAMPAIGN STEERING COMMITTEE

The existing National Communication Task Force and Technical Task Force Committee and also representatives from each Regional Health Management Team will meet after the campaign to assess the strengths and weaknesses of the campaign and formulate recommendations for future use.

12.0 LOGISTIC TASK FORCE

Planning logistics in advance is important to the success of SIAs. Critical logistics for MR SIAs includes cold chain equipment, vaccines and injection materials, vaccine carriers, safety boxes, transport, waste management/incinerators etc.

Like any other past campaigns in the Gambia, the MR campaign will also have a national logistic task force that will spearhead all logistics issues for the campaign. The national logistic task force meetings will be organized by the EPI and immunization focal persons from WHO and UNICEF will be part of the task force with the sole aim of providing technical advice on all logistic issues for the MR campaign. The availability of adequate and reliable transport before, during and after MR campaign will lead to successful and quality campaign. There is a good transport system under the Ministry of Health managed by Riders for Health. It should be noted that the fleet of vehicles under the Ministry of Health is not adequate for the campaigns. In order to address this situation, the transport manager at Riders for Health will mobilize additional vehicles by liaising with the transport controller. This system had been used in previous campaigns for supply distribution, transporting supervisors and vaccinators in all the regions. The experiences from the previous campaigns showed no major problems with transportation before and during the campaigns. It is therefore prudent to maintain this system of transport for future campaigns. The national transport manager will be part of the task force at central level. The task force will meet monthly at least 6months before campaign to discuss on logistic issues. Furthermore, four day pre-campaign supervisory visits by the logistic task force will be conducted to determine the level of preparedness at the regional level. Campaign logistics would be distributed to the regions at least 3 weeks
before the campaign. Post campaign review meetings will be conducted to review the strengths and constraints realized during the campaign as well as document best practices. Such committees will exist at regional level for the management of campaign logistics. This committee will be assisted by TAC especially in the area of resource mobilization. Experiences from past SIAs showed no shortages of vaccines, AD- syringes, reconstitution syringes, safety boxes and cotton wool due to proper logistic management. The task force will also be assigned with the development of a waste management strategy for effective waste management during the MR campaign.

13.0 ADVOCACY AND INTERSECTORAL COLLABORATION

During the preparatory phase, MoH&SW will obtain high level commitment early from national authorities and major partner agencies to support the SIAs. Advocacy with various leaders at all levels will also be conducted for building community acceptance and support. Early support from the health practitioners is also very crucial. Target groups for advocacy will include Heads of government and non-governmental institutions, parliamentarians, religious leaders, donor agencies, and community opinion leaders. Advocacy would also involve the recruitment of popular celebrities or goodwill ambassadors. Enlisting the support of media will also be important for the success of the SIAs. A variety of advocacy activities will be implemented at various stages.

Key messages will be drawn up including the burden of the disease in the community, the effectiveness of MR SIAs in reducing measles and Rubella morbidity and mortality, the social and economic benefits of MR elimination, and the safety of the vaccines and the injection.

14.0 SUPPLY AND COLD CHAIN

The EPI programme maintains a good cold chain network country wide. At national level, vaccines are stored in a walk-in type cold room before transported to the regions. There are regional vaccine stores in five of the seven health regions that are equipped with refrigerators and freezers adequate enough to handle vaccines for the campaign. However, two of the regions (Western 1 and Western 2) do not have vaccine stores and they depend on the central level for vaccine supply.
In addition, with support from UNICEF, the non-functional walk-in cold room in CRR will be repaired and relocated to the Central level to bridge the gap reported in the 2014 EVM. Three of the smaller Regions (NBER, LRR & NBWR) have just been provided with solar refrigerators (TCW2000 DC) for vaccine storage. As per 2011 EVM recommendation, UNICEF procured ten TCW300SDD. Five are installed in CRR and other major health centres. All public health facilities are solarised thus providing enough storage capacity to accommodate vaccines for MR SIAs.

### Table 1 showing Capacity and cost (for positive storage) National vaccine store

<table>
<thead>
<tr>
<th></th>
<th>Formula</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Annual positive volume requirement, including new vaccine (specify: __________) (litres)</td>
<td>Sum-product of total vaccine doses multiplied by packed volume per dose</td>
<td>7,215 litr</td>
<td>16,431 litr</td>
<td>17,044 litr</td>
<td>17,587 litr</td>
<td>18,305 litr</td>
</tr>
<tr>
<td>B</td>
<td>Existing net positive cold chain capacity (litres)</td>
<td>#</td>
<td>6,410 litr</td>
<td>6,410 litr</td>
<td>6,410 litr</td>
<td>6,410 litr</td>
<td>6,410 litr</td>
</tr>
<tr>
<td>C</td>
<td>Estimated minimum number of shipments per year required for the actual cold chain capacity</td>
<td>A/B</td>
<td>1.13</td>
<td>2.56</td>
<td>2.66</td>
<td>2.74</td>
<td>2.86</td>
</tr>
<tr>
<td>D</td>
<td>Number of consignments / shipments per year</td>
<td>Based on national vaccine shipment plan</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>Gap in litres</td>
<td>((A*(1/D+Stock_reserve/12) - B) - 999</td>
<td>- 999 litr</td>
<td>5,913 litr</td>
<td>6,373 litr</td>
<td>6,780 litr</td>
<td>7,318 litr</td>
</tr>
<tr>
<td>F</td>
<td>Estimated additional cost of cold chain</td>
<td>US $</td>
<td>$0</td>
<td>$54,286</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>
The country does not have any storage gap for negative temperatures and as such both routine and campaign vaccines including MR will be stored adequately as shown in the table below

<table>
<thead>
<tr>
<th>Table 2 showing Capacity and cost (for negative storage) National vaccine store</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formula</strong></td>
</tr>
<tr>
<td>A: Annual negative volume requirement, including new vaccine (specify: ____) (litres)</td>
</tr>
<tr>
<td>B: Existing net negative cold chain capacity (litres)</td>
</tr>
<tr>
<td>C: Estimated minimum number of shipments per year required for the actual cold chain capacity</td>
</tr>
<tr>
<td>D: Number of consignments / shipments per year</td>
</tr>
<tr>
<td>E: Gap in litres</td>
</tr>
<tr>
<td>F: Estimated additional cost of cold chain</td>
</tr>
</tbody>
</table>

Preventive maintenance of the cold chain would be carried out at least 3 weeks before the MR campaign to check on the state of the cold chain equipment nationwide by the national EPI cold chain technicians.

**15.0 STRATEGIES FOR THE CAMPAIGN**

As the campaign will target those aged 9 months to 14 years of age, vaccination teams will be deployed to health facilities, schools, markets, bantabas, ferry crossings and other strategic locations. The campaign would use fixed temporary fixed, mobile posts as well as school base strategy to ensure good coverage.
and quality MR campaign. There are no hard to reach areas in the country per say, but isolated quranic schools and communities will be given due attention to vaccinate all eligible people found there.

16.0 COMMUNICATION AND SOCIAL MOBILIZATION

The conduct of effective social mobilization activities is crucial to the success of any SIAs. In this regard, series of activities will be conducted with a view to increase community awareness. The National Communication Task Force in collaboration with the regional committees will spearhead all communication and social mobilization activities.

Some of the social mobilization activities that will be conducted for the MR campaign include:

- Sensitization of communities using radio and TV, chiefs and opinion leaders about the campaign.
- A step-down sensitisation by all the chiefs and RHTs with support from the village health services CHNs and Public Health Officers.
- IEC materials such as banners, leaflets and T-shirts will be produced and distributed at all levels
- House-to-House sensitisation campaign by the Red Cross Volunteers
- Orientation of both print and electronic media on upcoming NIDs (Media briefing)
- Pre & post SIA social mobilization meetings by the National Communication Task Force for social mobilization
- Launching Ceremony at the national level

The task force would also anticipate for rumours and misconceptions before, during and after the campaign. Therefore effective and proactive strategies will be developed to address the situation. This will be done in the form of:

- Preparing appropriate media materials in advance to facilitate a rapid response to such negative claims
- Having a trained focal person in the media who responds to questions and reviews materials before publishing
- Using a credible spokesperson in the ministry/community to quell the rumours and reassure the community
17.0 STRENGTHENING ROUTINE IMMUNIZATION THROUGH CAMPAIGN

Pre-implementation activities such as cold chain expansion, staff training, and renovation of existing incinerators would be carried out. This will help to strengthen the delivery of quality routine immunization services. There will also be pre and post campaign supervisory visits at regional and facility level to determine the state of preparedness and campaign implementation processes including RI services. The campaign will also serve as an opportunity to refer miss-opportunities to receive their missed antigens. Social mobilisation activities will also focus not only on the MR campaign activities, but will also address social mobilisation gaps existing in the routine immunisation services.

Lessons learnt while developing national and regional micro-plans for SIAs can be used to strengthen micro-planning for routine immunisation. The SIA opportunity can be used to identify national and local partners, NGOs etc that can be brought onboard to support routine immunisation services beyond SIAs.

18.0 WASTE MANAGEMENT

Due to the large volume of waste generated during the campaign, adequate and efficient waste disposal plan with clear assignment of responsibilities in waste management will be developed. Daily monitoring should be in place to ensure immediate corrective actions are taken. Safety boxes are to be used for disposal of used syringes and needles during the campaign. The estimation of the safety boxes will also enable the supervisors to estimate how many full boxes will require disposal and arrange for daily collection of safety boxes and disposal.

The supervisors of vaccination teams will then identify a suitable location for temporal storage of the waste (safety boxes, bags), develop a transport plan of the waste from the HF to the RHT and shared before implementation. The incinerator attendants in consultation with the RHT will receive all safety boxes and properly store them before incineration.
19.0 ADVERSE EVENTS REPORTING AND MANAGEMENT

The objective is to monitor, detect, report, investigate and classify all AEFIs until 42 days after the mass campaign. There would be AEFI focal persons at health facility level, who would be supervised by the regional AEFI Focal persons. At central level, national AEFI Coordinators would be identified for the overall coordination and management of AEFI cases.

The management of AEFIs include diagnosis, treatment, reporting, communication, and correction of any immunization errors. For this to be promptly and effectively carried out, vaccinators:

1. **Must** know how to differentiate a **SERIOUS AEFIs** (which are those that result in death, hospitalization) from a **MILD AEFIs**
2. **Must** know how to treat mild AEFIs
3. **Must** know how to diagnose, commence emergency treatment for serious AEFIs and when to refer
4. **Must** report serious AEFI immediately
5. Must know that each event should be listed on the **line list form**, and indicate whether if serious or mild

All reported AEFIs, whether minor or serious detected during the session should be entered into the **AEFI linelist** by each RHT. At the end of the campaign, the total number of AEFIs should be reported, and if there are no cases, zero must be reported (**zero reporting**) using a monthly AEFI Surveillance form.

20.0 DATA MANAGEMENT

Data Collecting Instruments: These are the primary data collection tools that will be utilized in the campaign. They consist of daily vaccinators’ tally sheet, team supervisors’ daily summary sheet, Regional and core supervisors’ summary sheet, and AEFI forms and summary sheets.

Data Collection: This activity will be executed primarily by the recorders, vaccinators and supervisors at different levels as well as independent evaluators. The regions will summarise the data according to health facility catchment area while the central will summarise all the regional data to obtain information on national performance. The results will be forwarded to the WHO sub regional office in Burkina Fasso on daily basis.
21.0 MONITORING AND EVALUATION

These are very critical activities for ensuring safety, high coverage and quality service during mass campaigns particularly measles SIAs. These activities will be conducted by all supervisors and monitors at different levels and these supervisors include national coordinators, central team leaders, central core facilitators, regional supervisors, central and regional AEFI supervisors.

Evaluation: This would involve assessing three types of performances:

Process- this will look at how well the staff are prepared for the planning and implementation of the campaign; for example how well the staff identified and vaccinated all the target aged children as well as how well they addressed quality and safety of vaccination services.

Process evaluation will be conducted 2 weeks before, during and immediately after the campaign.

Outcome- this will concentrate on the immediate observable achievements of the campaign activities measured by percentage vaccination coverage. The vaccination coverage rates will be obtained through the administrative figures validated by a post campaign evaluation to be conducted by an independent evaluator within one (1) month of the campaign- using the revised WHO cluster Sampling Technique.

Impact- this is the long term gain from the campaign measured overtime. For example- the resultant reduction in measles morbidity/mortality (disease burden) as measured by surveillance

22.0 DISEASE SURVEILLANCE

The national surveillance programme follows the PHC system with a bottom top approach. This is coordinated by EDC with support from the EPI and NPHL. There is a strategy and work plan including VPD for IDSR but they need to be updated on annual basis. The central level provides guidelines, data collection and analysis tools for the field staff. At national level surveillance trainings are conducted by resource persons drawn from EPI, EDC and the NPHL. In each of the health regions, the RPHO serves as the focal person for surveillance. The case investigators in all the public health facilities investigate and transport samples collected from both IDSR priority diseases including VPD to the national laboratory. During the MR pre-campaign activities, surveillance training will be conducted and surveillance tools will be reviewed and updated to capture CRS surveillance.

Measles vaccine can cause a local reaction at the injection site and acute allergic reactions that can rarely be very severe (anaphylaxis). Anaphylaxis, while potentially fatal, is treatable without leaving any long-term effects. Most reactions result from vaccine virus infection, 6-12 days after immunization. Generally,
these vaccine reactions (except local reactions and anaphylaxis) do not occur if the child is already immune. Therefore, in campaigns, where many vaccinees are already immune, fewer vaccine reactions are to be expected.

During the 2015 MR Vaccination Campaign, AEFI surveillance would be strengthened at all levels. The following would be enhanced during the campaign:

- Use sterile needle & syringe for every injection
- Use a reconstitution syringe for each vial
- Reconstitute only with specific diluent/right diluent
- Ensure that all reconstituted vaccines after six hours are be discarded
- Ensure that drugs & other medicines are not stored in the same fridge with the vaccines and diluents
- Train & supervise health workers to ensure safe injection practices
- Monitor, Investigate and Act when AEFIs occur