MINISTRY OF HEALTH

MEASLES VACCINE SECOND DOSE INTRODUCTION IN ROUTINE IMMUNIZATION

A Guide for Health Workers



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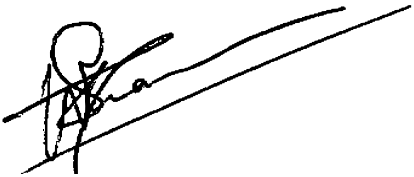
JULY 2013

ACKNOWLEDGEMENT

The Ministry of Health through the Division of Vaccines and Immunization is grateful to all partners and individuals whose valuable contributions and technical support made it possible to produce this manual for health workers.

I especially want to thank the technical team of the Division of Vaccines & Immunization for their dedication to the development of this document. In addition i sincerely appreciate the technical and financial support received from CHAI, USAID-MCHIP, UNICEF and WHO throughout the process.

We hope it will be useful to health workers and welcome feedback from all stakeholders on the content.



Dr. Tatu Kamau

Head, Division of Vaccines & Immunization

FOREWORD

Measles disease remains a public health concern in Kenya. It contributes significantly to the burden of disease among under five children. Although tremendous progress has been made in reducing both mortality and morbidity associated with measles, Kenya has continued to report resurgence of the disease every 3 years. This can be explained by the persistent suboptimal measles coverage leading to an accumulation of susceptible children.

Since 2002, Kenya has implemented measles control activities in line with the African Regional measles control efforts, aiming to reduce measles mortality by 50% by the end of 2005 as compared to 1999 levels. The implementation of these activities proved very successful and led to a dramatic drop in measles levels from the pre-2002 levels. Recently, Kenya committed to the goal of measles elimination by the year 2020 in line with WHO-AFRO resolution of 2012 (Global Vaccine Action Plan). In order to achieve this ambitious target, the Ministry of Health through the Division of Vaccines and Immunization is calling upon all stakeholders to intensify the implementation of key control activities that include strengthening of routine immunization, providing a second opportunity for measles vaccination through supplemental immunizations activities, monitoring disease trends through measles surveillance, and improving measles case management through the strategy of Integrated Management of childhood illnesses (IMCI).

Having attained and maintained a national measles coverage with the first dose of measles at over 80% since 2009, Kenya qualifies for the introduction of the second dose of measles vaccine into the routine immunization schedule. This introduction will provide a second opportunity to children left out at nine months and those who did not develop protective antibodies after vaccination at 9 months. The Ministry of Health envisages that as routine coverage with two doses

increases, catch up/ follow up campaigns will need to occur less frequently, and can eventually cease altogether.

This guide for health workers will address key technical issues concerning the introduction of the second dose and will empower the health workers with knowledge and skills to adequately respond to questions or concerns that the guardians may raise regarding the vaccine. It is my sincere hope that health workers will find the guide useful.



Dr. S.K. Sharif, MBS

Director Medical Services

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INTRODUCTION

Measles illness still remains a significant contributor of childhood morbidity and mortality in most rural and urban populations and a cause of disease outbreaks in Kenya. Although much progress has been made towards achieving high immunization coverage, Kenya is yet to meet the GIVs goal of over 95% coverage for measles vaccination to achieve adequate population immunity.

Kenya currently provides a second opportunity for measles vaccination through supplemental immunization activities (SIAs). The initial catch-up SIAs were conducted nationwide in June 2002 and targeted all children aged 9 months to 14 years. A total of 13,302,991children received measles vaccine, attaining coverage of 98%.Subsequent supplemental immunization activities were conducted in 2006, 2009 and 2012.

Measles control/elimination strategies

In Kenya, there are four disease reduction strategies adopted for Accelerated Measles Control namely:

- Strengthening Measles Routine Immunization
- Strengthening Measles Surveillance
- Conducting Supplemental Immunization
- Strengthening Measles Case Management

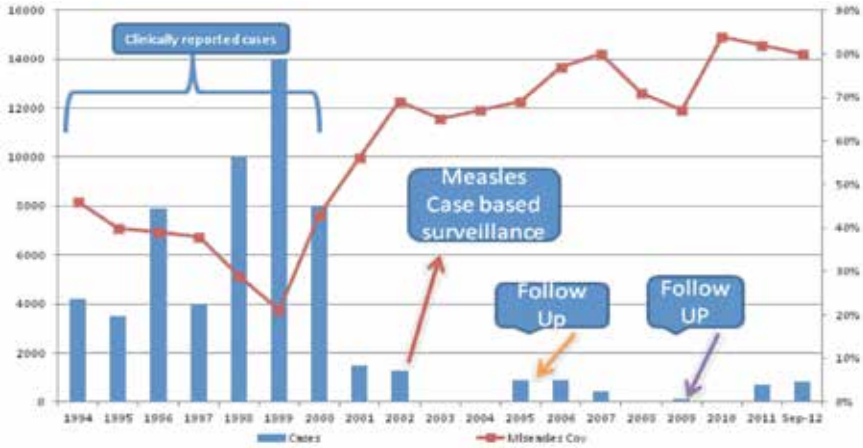
WHO recommends introduction of 2nd dose measles vaccine in a set up where the coverage with the first dose is high (>80%). Since Kenya has attained > 80% coverage of measles first dose, DVI intends to introduce the 2nd dose to maintain the high coverage so far attained routinely in the National EPI programme.

Justification for introduction

Kenya has adopted the goal of measles elimination by the year 2020 in line with WHO-AFRO resolution of 2012.

The figure below demonstrates the significant progress made in reducing measles cases and the improvement in immunization coverage.

FIG 1: Measles trends



Kenya is planning to introduce a measles second dose through the routine system and has made changes on the cold chain infrastructure, logistics, and transportation that will ensure a successful launch and roll out of the vaccine. The provision of measles second dose in the routine system offers several advantages such as;

1. High coverage maintained through the years ensures that the pool of susceptible children do not increase rapidly over the years thereby increasing herd immunity.

2. Reduced cost of providing measles second dose compared to campaigns since the labour cost, advocacy and mobilization and logistics are borne by the government through the routine system.

3. Targeting children over 1 year will improve routine system and can improve the coverage in children who were lost to follow up when infants.

4. Providing measles second dose through the routine system improves Vitamin A coverage and provides a platform to target children with other health interventions including different vaccines.

Moreover, supplementary immunization activities are a huge cost to the Government and immunization partners since the operational cost of providing the vaccine such as labor, advocacy and social mobilization activities are borne as stand alone cost. Supplementary immunization activities are not responsive in dealing with challenges that occur such as conflict, refugee and other mass movement of people and drought. This disasters lead to immunization gaps that can lead to outbreaks.

This guide focuses on:

- Key operational aspects on measles second dose in routine immunization
- Immunization reminder for health care providers
- Key messages on measles second dose frequently asked questions

01 MEASLES DISEASE

Definition

Measles is an acute viral and highly infectious illness transmitted through the respiratory droplets or direct contact with nasal and throat secretions of the infected person.

Clinical presentation

The symptoms of measles generally begin about 7-14 days after a person is infected; a typical case of measles begins with mild fever, cough, runny nose, red eyes, and sore throat. Two or three days after symptoms begin, tiny white spots (Koplik's spots) may appear inside the mouth.

Three to five days after the start of symptoms, a red or reddish-brown rash appears. The rash usually begins on a person's face at the hairline and spreads downward to the neck, trunk, arms, legs, and feet. When the rash appears, a person's fever may spike to >38 degrees centigrade, the rash lasts for five to six days, and then fades out.

The measles virus reduces immunity and children may die of pneumonia, diarrhea and encephalitis after contacting measles. Children infected with measles may also suffer permanent disability (e.g. blindness and encephalitis)

Treatment: Measles is a viral infection hence has no specific treatment; management is purely supportive especially to prevent complications.

Prevention: Vaccination with measles vaccine is the only preventive method.

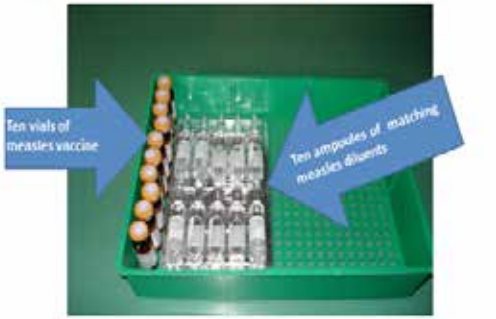
02 MEASLES VACCINE

Vaccine management

Points to remember

1. Both the measles vaccine and the diluent **must be at the same temperature at the time of reconstitution**: – vaccine and diluent should be kept in the refrigerator overnight in the same tray as shown, so as to ensure both vaccine and diluents are at the same temperature while being reconstituted to avoid thermo-shock

Ensuring that lyophilized vaccines & their diluents are at the same temperature



2. Reconstitute measles vaccine with a matching diluent when the first child arrives, **even if only one child who has arrived.**

3. Discard the reconstituted vaccine **after 6 hours or at the end of session whichever comes first.**

4. Do not withdraw vaccines into the syringes in advance

5. Administer 0.5 ml of vaccine subcutaneously in the upper outer quadrant of the right arm (deltoid muscle).

6. Dispose-off used syringe and needle immediately into the provided safety box.

7. **Remind the mother about the return date for the *second dose of measles and vitamin at 18 months.***

Vaccine Vial Monitor

A vaccine vial monitor (VVM) is a label attached on a vial or, for freeze dried vaccines, placed on the vial cap. The white square inside the circle changes colour (darkens) irreversibly when exposed to heat over period of time.

At a glance the vaccine vial monitor can show whether the vaccine can be used or not.

HOW IT WORKS

If exposed to heat for a period of time the square takes the same colour or darker than the circle

- **USE VACCINE WHEN THE SQUARE IS WHITE (stage 1)**
- **LIGHTER THAN THE CIRCLE (stage 2).**
- **DISCARD WHEN THE SQUARE IS AS DARK AS THE CIRCLE (stage 3),**
- **DARKER THAN THE CIRCLE (stage 4).**



Revised routine immunization schedule

In the revised routine immunization schedule, every child will get two doses of measles vaccine; the first dose between 9 and 12 months of age and the second dose between 18 and 24 months of age. If a child has missed the first or second, both doses should be administered up to five years of age maintaining the interval of at least 4 weeks between the doses.

TABLE 1: The National Immunization Schedule

	Vaccine dose	Age of child	Dosage	Route
1	BCG OPV birth dose (trivalent)	At birth or at first contact At birth or at first contact (within the first two weeks of life)	• 0.05 ml • 2 drops	• Intradermal • Oral
2	OPV I DPT-HepB+Hib 1 PCV10 - 1	At six weeks of life or at first contact	• 2 drops • 0.5ml • 0.5ml	• Oral • Intramuscular into the upper outer aspect of the left thigh • Intramuscular into the upper outer aspect of the right thigh
3	OPV II DPT-HepB+Hib 2 PCV10 - 2	At 10 weeks or 4 weeks after OPV I and DPT-HepB-Hib 1	• 2 drops • 0.5 ml • 0.5ml	• Oral • Intramuscular into the upper outer aspect of the left thigh • Intramuscular into the upper outer aspect of the right thigh

	Vaccine dose	Age of child	Dosage	Route
4	OPV III DPT-HepB+Hib 3 PCV10 - 3	At 14 weeks or 4 weeks after OPV II and DPT-HepB-Hib 2	• 2 drops • 0.5 ml • 0.5ml	• Oral • Intramuscular into the upper outer aspect of the left thigh • Intramuscular into the upper outer aspect of the right thigh
5.	Vitamin A 100,000IU	At 6 months of age	One capsule	Orally
6	Measles 1st dose	At 9 months or first contact after 9 months	0.5 ml	Subcutaneous into the right upper arm (deltoid muscle)
7	Yellow fever	At 9 months or first contact after 9 months – in four special districts	0.5 ml	Subcutaneous into the left upper arm (deltoid muscle)
8.	Vitamin A 200,000IU	At 12 months of age	One capsule	Orally
9	Measles 2nd dose	At 18 months or first contact after 18 months	0.5 ml	Subcutaneous into the right upper arm (deltoid muscle)
10.	Vitamin A 200,000IU	At 18 months of age	One capsule	Orally

NB: Yellow fever vaccination is currently only given routinely to children in Baringo and Marakwet Counties.

03 MONITORING OF MEASLES VACCINE SECOND DOSE

The introduction of the measles second dose has neccesitated revision of all recording and reporting tools to conform to the uniques requirements of the vaccine as follows:-

Mother & Child Booklet – MOH 216

1. Dose number and date – Measles second dose was added to the current dataset

2. Date of the next visit - Measles second dose date due was added, while measles first dose for infants <1 year remain the same

Immunization Permanent register – MOH 510

- Measles doses and date due for child – has been adjusted to include Measles second dose for age 1½ to 2 years.

- Measles Second dose (MSD) has been added to enable HW monitor and review the performance of immunization on infants < 1Yr and children aged above 1½ to - 2 years.

- Review of permanent register shall be conducted at every two weeks to identify child who failed to receive doses due.

Tally and summary sheets (MOH 702 & MOH 710)

- Both tally and summary sheets were revised to include measles

1 & 2 doses

- Vitamin A supplements were re-arranged to conform with infant immunization schedule in Kenya as per World Health Organization standard of fully immunized (FIC).
- See revised tools in annexes 1 and 2

Guiding principles to facilitate proper use of recording tools

- Focus on the dose and the age when tallying for measles and Vitamin A supplements
- Record child information in the permanent register on first contact with the infant/child
- Transfer same information to Mother-Child Booklet
- Tally the vaccinated infant/child appropriately as you immunize
- Transfer the information from tally sheet to the summary form at the end of each session or the day on daily basis.
- Summarize facility data and forward to the district by the 5th of the following month.
- District shall upload the summarised data from MOH 710 on DHIS by 15th of the same month

Calculating the target for Measles second dose

Calculate measles second dose – from the total population of the catchment areas (County/district/division etc)

Example:

- Number of surviving infants calculated from total projected

population for district X in 2013 (as census of 2009) in 2013 was 1,112

- The same denominator (1,112) will be followed up for next 12 months for the year 2014.
- This method will slightly overestimate the actual number of children. More precise numbers from the Kenya Central Bureau of Statistics will be used in subsequent years.

Reducing wastages

- Measles second dose will reduce wastage from open vials due to the anticipated increase in total number of children coming for the measles vaccine per session. That is, some of the second measles doses will be administered using vaccine that would have been previously "wasted" using a 1-dose schedule
- Districts/facilities in charges should monitor and improve the reduction of wastage that can occur due to
  - *Overstocking leading to expiry*
  - *Cold chain failure*
  - *Vial breakage (especially diluents)*

Increasing coverage and reducing missed opportunities

- Screen all eligible children at every opportunity.
- Ensure that each child receives all vaccinations that are due on the same visit. If not possible, give appointment for follow up.

- Encourage defaulter tracing by working closely with community.
- Offer regular immunization services.

Calculating MSD vaccine coverage

Example:

- If the number of children vaccinated with MSD in district X in 2014 is 1101 (numerator), and
- The number of surviving infants for district X in 2013 was 1211 the coverage of MSD in 2014 is...
- 1101/1211 X 100% = 90.9%.
- Note: The denominator used in calculating the MSD coverage for the current year is the number of surviving infants of the previous calendar year

Definition of Fully Immunized Child (FIC)

FIC at 1 year is an infant who has received all the routine infant immunization by the end of one year (i.e. denominator is surviving infant)

The FIC at 2 yearrs is a child who received all the antigens under infant immunization schedule and the second dose of measles at 18-24 months.

04 ADVOCACY, COMMUNICATION AND SOCIAL MOBILIZATION FOR MEASLES SECOND DOSE

Answers to frequently asked questions

Q1.What are the symptoms of measles

The symptoms include fever, cough, runny nose, red watery eyes (conjunctivitis), and feeling run down (malaise).The blotchy rash usual lasts 5 to 6 days

A typical case of measles begins with mild to moderate fever, cough, runny nose, red eyes, and sore throat. Two or three days after symptoms begin, tiny white spots (Koplik's spots) may appear inside the mouth.

Q2. How serious is measles

Measles is often a severe illness. Severe measles is particularly likely in malnourished young children, especially those with vitamin A deficiency, or whose immune systems have been weakened by HIV/AIDS or other diseases. Children usually do not die directly of measles, but from its complications. Complications are more common in children under the age of five or adults over the age of 20.

Q3.What are the possible complication of measles

Diarrhoea, ear infections, and pneumonia are common complications when measles disease is not well managed. Approximately, one out of one million cases will develop acute encephalitis, an inflammation of the brain. This serious complication could lead to permanent brain damage.

Q4. What are the contraindications to Measles vaccine

There are no real contraindications to the measles vaccine including HIV infection.

Q5. Is there any specific treatment for measles

Measles is a viral infection hence has no specific treatment; management is purely supportive especially to prevent complications, bed rest frequent feeding, plenty of fluid intake and control of fever. Administer supplementary doses of vitamin A.

Q6.How does a person contract measles?

Measles is an acute and highly infectious illness transmitted through the respiratory droplets or contact with nasal and throat secretions of the infected person and can be transmitted four days before rash becomes visible to four days after rash disappear.

Q7. How is the disease prevented?

Vaccination with measles vaccine is the only preventive method.

Q8. Why is a second dose of measles vaccine being introduced in the national immunization schedule?

WHO recommends that the optimum age of immunization in endemic areas be 9 months of age. The Kenya EPI program adopted the 9 months of age for the first dose of measles in 1980. However, due to 85% seroconversion among children vaccinated at 9 months and the suboptimal routine immunization coverage, Kenya is planning to introduce a second dose of measles vaccine at 18 months of age. This will protect children who remained unprotected after the first dose.

Q9. What side effects have been reported from measles vaccine?

Measles vaccine is a safe vaccine which has been associated with minimal side effects e.g. low grade fever, mild rash.

Mothers need to be assured that the mild reactions are expected and this does no harm to the child.

Q10. If the diluent for measles vaccine is missing for either reason is it safe to use sterile water for injection?

Only the diluents supplied with the vaccines should be used to reconstitute any vaccine.



Q11. If a child has received the measles vaccine before 9 months of age, is it necessary to repeat the vaccine at 9 months

Yes, because the sero-conversion rate before 9 months of age is very low. <60% due to interference from maternal antibodies.

Q12. If a child received one dose of measles vaccine during SIA (Supplemental Immunization Activity) campaigns, should the child receive the routine dose of measles vaccine

Yes, the child should receive the routine doses of measles vaccine irrespective of the SIA dose, but this must be done 4 weeks after the campaign dose.

Q13. If a child comes after 18 months for the first dose of measles vaccine; can the second dose be given

Administer the measles vaccine but record it as Measles 1st dose Mother - Child Health booklet. Then instruct the mother/caregiver to return one-month later to receive the second dose.

In this case the 1st dose will be tallied in the MOH 702 form as measles 1st dose above one year of age.

Q14. If you meet a child at first contact after 2-5 years of age, what vaccines would you give

Give BCG, 3 doses of OPV, 3 doses of penta vaccine, and 3 doses of pneumococcal vaccine. Give 2 doses of measles vaccine. ***However the intervals between series antigen doses must be retained as per the national immunization schedule of 4 weeks apart.***

Q15. Does the risk of AEFI (Adverse Event Following Immunization) increase with the second dose of measles

No the second dose of measles vaccine does not increase the risk of reaction.

FACT SHEET FOR COMMUNITY LEADERS



MINISTRY OF HEALTH

KEY MESSAGES ABOUT MEASLES

Measles is a highly contagious, serious disease caused by a virus. It often causes serious complications and even death .

The disease spreads rapidly from infected persons to un – infected persons through sneezing, coughing and close personal contact.

The first sign of infection is high fever that lasts for 4 – 7 days. This is followed by a rash which starts from the face and spreads downwards to the rest of the body. At this stage severe complications may arise such as severe pneumonia, blindness and brain damage among others

Measles can be prevented through vaccination with the first dose given at 9 months and the second dose given at 18 months.

Every child needs at least two doses of vaccine to ensure adequate protection against measles disease.

Q1.What is measles

Measles is a highly infectious disease caused by a virus that results in rash and other complications that can lead to death. It is one of the most contagious viral diseases and the most dangerous among children that results to serious complications and death.

Q2. How is measles spread

It easily spreads through sneezing, coughing and close personal contact with an infected person.

In most cases measles infects anybody who have not been vaccinated before or has never contracted measles before.

- The period between infection and actual presentation of measles signs and symptoms is usually one to two weeks.
- Infected persons can transmit the infection four days before rash onset and up to five days after rash appears.
- Measles spreads quickly especially when unvaccinated children come into contact with infected child.

Q3.what are the signs and symptoms of measles

- High grade fever of 38c and above
- Flu-like symptoms including coughing, sore throat and running nose
- A skin rash that mainly begins in the face and spreads to the rest of the body.
- Reddish eyes and/ or sensitivity to light.

Q4.what are the measles complications especially to children

Complications may include one or a combination of the following:

- Severe diarrhoea
- Severe pneumonia
- Ear infections (Otitis – media) with sometimes presence of pus from the ears.

- Brain damage.
- Blindness

Q5. Is measles curable

Treatment of patients suffering from measles saves lives. Management of a person suffering from measles is only by treating resulting complications that might require specialized care in some cases and is usually expensive.

Q6. Who is at risk of getting measles disease

Any person who has not been vaccinated before is at risk of getting measles.

Can measles disease be prevented?

Yes, measles is preventable through measles vaccination given as two doses, First dose at 9 months and a second dose at 18 months.

Q7. Why a second dose of measles at 18 months

A single dose of the measles vaccine has been given routinely to all infants at 9 months. However due to the high number of measles cases reported recently, there is need to introduce a second dose of measles vaccine. This will be given at 18 months so as to protect more of our children from measles disease.

Q8. Is measles vaccine safe

All routine vaccines given in our health facilities have been tested and recommended by the World Health Organization. The vaccines have also been approved as safe by the government of Kenya through regulatory authorities.

ANNEXES

Annex 1: Immunization and Vitamin A tally sheet (MOH 702)

MINISTRY OF HEALTH

DIVISION OF VACCINATION AND IMMUNIZATION (DVI)

IMMUNIZATION AND VITAMIN A TALLY SHEET (MOH 702)

Name of Healh Facility (Static or Outreach)_____Consitutuency_____District _____ County _____ Month _____ Year____

Tally all the Vaccine and Vitamin A as you Administer (The Tally Sheet should be available in all immunizing health facilities)

Antigen	Age	Days of the month /Name of facilities																							Total
BCG	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
OPV (Birth dose)	Within 2 weeks	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
OPV1	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
OPV2	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
OPV3	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
DPT+HIB+HEPB 1	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
DPT+HIB+HEPB 2	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
DPT+HIB+HEPB 3	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Pneumococcal 1	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Pneumococcal 2	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Pneumococcal 3	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Vitamin A	At 6 Months (100,000 IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Yellow fever	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Measles 1	Under 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 1 Year	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Fully Immunized Child (FIC) at 1 year		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Vitamin A	At 1 Year (200,000IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	At 1 ½ Year (200,000IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Measles 2	At 1 ½ - 2 Years	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Above 2 Years	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Fully Immunized Child (FIC) at 2 Years		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Tetanus Toxoid for pregnant women	1st Dose	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	2nd Dose	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	TT Plus (Boosters)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Adverse Events Following Immunization		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Vitamin A	2 Years to 5 Years (200,000IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
	Lactating Mothers (200,000IU)	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Squint/White Eye reflection (Under 1 Year)		00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	

Revised July 2013

Annex 2: Integrated Immunization, Vitamin A, Ophthalmology and EPI logistics summary sheet (MOH 702)

MINISTRY OF HEALTH
DIVISION OF VACCINE AND IMMUNIZATION (DVI)
INTEGRATED IMMUNIZATION, VITAMIN A, OPHTHAMOLOGY AND EPI LOGISTICS SUMMARY SHEET (MOH 710)

Facility Name_____Constituency_____District_____County_____Month_____ Year_____
Number of Immunizing health facilities (During the month) _____ Total Number of Reporting EPI health facilities (For the month) _____

Complete Section A and B, then in Section B only monthly total to be filled at the Health facility level

SECTION A		FACILITY/DATE OF MONTH												Total out reach	Total
ANTIGEN	AGE														
BCG	Under 1 Year														
	Above 1 Year														
OPV (Birth dose)	Within 2 weeks														
OPV1	Under 1 Year														
	Above 1 Year														
OPV2	Under 1 Year														
	Above 1 Year														
OPV3	Under 1 Year														
	Above 1 Year														
DPT+HIB+HEPB 1	Under 1 Year														
	Above 1 Year														
DPT+HIB+HEPB 2	Under 1 Year														
	Above 1 Year														
DPT+HIB+HEPB 3	Under 1 Year														
	Above 1 Year														
Pneumococcal 1	Under 1 Year														
	Above 1 Year														
Pneumococcal 2	Under 1 Year														
	Above 1 Year														
Pneumococcal 3	Under 1 Year														
	Above 1 Year														
Vitamin A	At 6 Months (100,000 IU)														
Yellow fever	Under 1 Year														
	Above 1 Year														
Measles 1	Under 1 Year														
	Above 1 Year														
Fully Immunized Child (FIC) at 1 year															
Vitamin A	At 1 Year (200,000IU)														
	At 1 ½ Year (200,000IU)														
Measles 2	At 1 ½ - 2 Years														
	Above 2 Years														
Fully Immunized Child (FIC) at 2 Years															
Tetanus Toxoid for pregnant women	1st Dose														
	2nd Dose														
	TT Plus (Boosters)														
Adverse Events Following Immunization															
Vitamin A	2 Years to 5 Years (200,000IU)														
	Lactating Mothers (200,000IU)														
Squint/White Eye reflection (Under 1 Year)															

SECTION B	FILL MONTHLY "TOTAL" AT FACILITY LEVEL . EVERY COLUMN TO HAVE DATA FROM SAME FACILITY AT DISTRICT LEVEL													
BCG	[A]Doses in stock at the beginning of the month													
	[B]Dose received within the month													
	[C]Total doses stocked in the month (A+B)													
	[D]Doses remaining at the end of the month													
	[E]Doses used in the month [C-D]													
	[F]No. of children vaccinated during the month													
	[G] Doses wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
OPV	[A]Doses in stock at the beginning of the month													
	[B]Dose received within the month													
	[C]Total doses stocked in the month (A+B)													
	[D]Doses remaining at the end of the month													
	[E]Doses used in the month [C-D]													
	[F]No. of children vaccinated during the month													
	[G] Doses wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
DPT+HIB+HEP B	[A]Doses in stock at the beginning of the month													
	[B]Dose received within the month													
	[C]Total doses stocked in the month (A+B)													
	[D]Doses remaining at the end of the month													
	[E]Doses used in the month [C-D]													
	[F]No. of children vaccinated during the month													
	[G] Doses wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
PCV 10 (PNEUMOCOCCAL)	[A]Doses in stock at the beginning of the month													
	[B]Dose received within the month													
	[C]Total doses stocked in the month (A+B)													
	[D]Doses remaining at the end of the month													
	[E]Doses used in the month [C-D]													
	[F]No. of children vaccinated during the month													
	[G] Doses wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
MEASLES	[A]Doses in stock at the beginning of the month													
	[B]Dose received within the month													
	[C]Total doses stocked in the month (A+B)													
	[D]Doses remaining at the end of the month													
	[E]Doses used in the month [C-D]													
	[F]No. of children vaccinated during the month													
	[G] Doses wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
YELLOW FEVER	[A]Doses in stock at the beginning of the month													
	[B]Dose received within the month													
	[C]Total doses stocked in the month (A+B)													
	[D]Doses remaining at the end of the month													
	[E]Doses used in the month [C-D]													
	[F]No. of children vaccinated during the month													
	[G] Doses wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
TETANUS TOXOID	[A]Doses in stock at the beginning of the month													
	[B]Dose received within the month													
	[C]Total doses stocked in the month (A+B)													
	[D]Doses remaining at the end of the month													
	[E]Doses used in the month [C-D]													
	[F]No. of children vaccinated during the month													
	[G] Doses wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
VITAMIN A 100,000 IU	[A]Capsules in stock at the beginning of the month													
	[B]Capsules received within the month													
	[C]Total capsules stocked in the month (A+B)													
	[D]Capsules remaining at the end of the month													
	[E]Capsules used in the month [C-D]													
	[F]No. of children supplemented during the month													
	[G] Capsules wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													
VITAMIN A 200,000 IU	[A]Capsules in stock at the beginning of the month													
	[B]Capsules received within the month													
	[C]Total capsules stocked in the month (A+B)													
	[D]Capsules remaining at the end of the month													
	[E]Capsules used in the month [C-D]													
	[F]No. of children supplemented during the month													
	[G] Capsules wasted in the month[E-F]													
	[H] Wastage rate in the month[(G/E) x 100]													

Logistics			Vaccines and Vitamin A stockout and type									
	Freezers	Number										
	Functional		Type (Vaccine)	No.Days	Type (Vaccine)	No.Days	Type (Vitamin A)	No.Days				
	Not Functional											
	Refrigerators	Number										

Submitted by _____Designation _____Signature _____Date_____ Received by_____Designation _____ Signature _____ Date_____

Facilities: Send the completed form to the Medical Officer of Health by 5th of the following month
Districts upload to DHIS by 15th of the following month and an electronic copy to be send to Dision of Vaccines and Immunizations in Nairobi.