

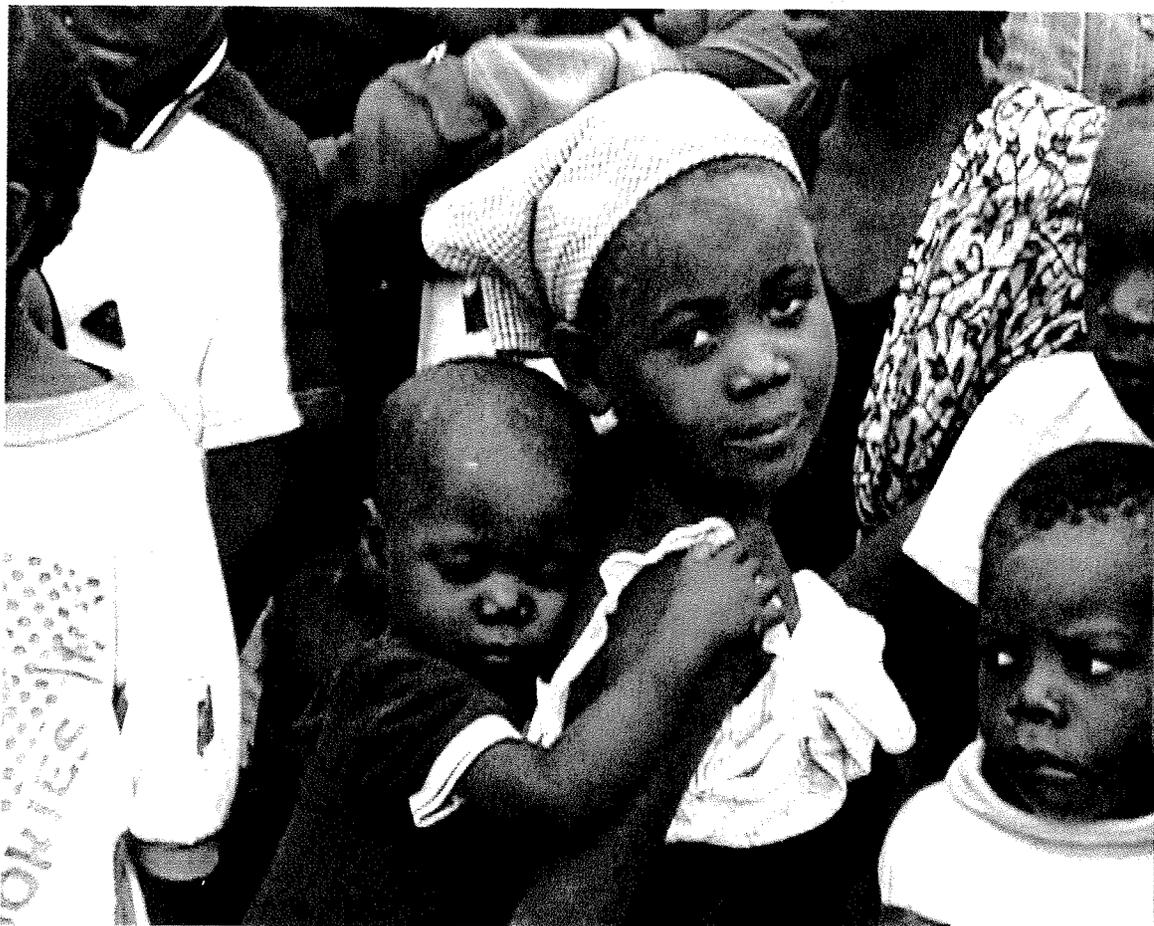


THE REPUBLIC OF UGANDA

PROTECT YOUR CHILD

IMMUNISE  
**N**  **W**

# UNEPI STANDARDS



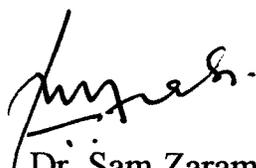
**FIRST EDITION**  
**December 31, 2003**

## Foreword

The Ministry of Health has a responsibility to initiate, review and develop policy and standards as part of decentralization strategy. The Ministry through UNEPI has been implementing a revitalization plan for immunisation services since 1999. One of the strategies in the plan is to review the policies and standards guiding the EPI delivery. These standards therefore form part of the process to revitalise delivery of immunisation services in the country. The standards are derived from the EPI Policy objectives of increasing accessibility to immunization services; providing safe and potent vaccines; creating and sustaining demand for immunization services; and preventing immunisable diseases in line with the Health Sector Strategic Plan and National Health Policy.

These standards are essentially meant to provide performance guidelines at National, District, Health Sub District and health facility levels for managers and providers. They provide guidelines for planning, management, implementation and monitoring of immunisation services at all levels.

In addition, the standards will provide useful reference material for technical support supervision, on job training and quality improvement of the EPI services.



Dr. Sam Zaramba  
Director of Health services (Clinical and Community)  
Ministry of Health

## TABLE OF CONTENTS

<b>Foreword .....</b>	<b>i</b>
<b>Table of Contents .....</b>	<b>ii</b>
<b>List of Acronyms .....</b>	<b>iii</b>
<b>SECTION ONE</b>	
<b>VACCINE STANDARDS .....</b>	<b>1</b>
<b>EPI Vaccines .....</b>	<b>1</b>
<b>National Immunisation Schedule .....</b>	<b>1</b>
<b>SECTION TWO</b>	
<b>NATIONAL LEVEL STANDARDS .....</b>	<b>2</b>
<b>SECTION THREE</b>	
<b>DISTRICT LEVEL STANDARDS .....</b>	<b>4</b>
<b>SECTION FOUR</b>	
<b>HEALTH FACILITY STANDARDS .....</b>	<b>7</b>
<b>Acknowledgements .....</b>	<b>14</b>

## List of Acronyms

ACAO	Assistant Chief Administrative Officer
AEFI	Adverse Events Following Immunization
RDC	Resident District Commissioner
BCG	Bacillus Calmette Guerin (vaccine against tuberculosis)
CAO	Chief Administrative Officer
CED	Central EPI Division
DDHS	District Director Health Services
DHMT	District Health Management Team
DPT	Diphtheria, Pertussis, Tetanus
EPI	Expanded Programme on Immunization
Hib	Haemophilus influenzae type B
HSD	Health Sub Districts
LCV	Local Council V
MOH	Ministry of Health
NGO's	Non Government Organizations
OPV	Oral Polio Vaccine
TT	Tetanus Toxoid
UNEPI	Uganda National Expanded Program on Immunization

# SECTION ONE

## VACCINE STANDARDS

### 1.1 EPI VACCINES

The following immunizations shall be given routinely to all children by their first birthday according to the schedule.

<u>Disease</u>	<u>Vaccine</u>
Tuberculosis	BCG (Bacillus Calmette Guerin)
Measles	Measles
Polio	OPV (Oral Polio Vaccine)
Pertussis	DPT <sup>1</sup> or DPT-HepB+Hib <sup>2</sup>
Diphtheria	DPT <sup>1</sup> or DPT-HepB+Hib <sup>2</sup>
Tetanus	DPT <sup>1</sup> or DPT-Hep B+Hib <sup>2</sup> or TT (Tetanus Toxoid)
Hepatitis B	DPT-HepB+ Hib <sup>2</sup>
<i>Haemophilus Influenza</i> type B	DPT-HepB+ Hib <sup>2</sup>

<sup>1</sup> Diphtheria Pertussis Tetanus  
<sup>2</sup> Diphtheria Pertussis Tetanus and Hepatitis B and *Haemophilus Influenzae* type B

### 1.2 MOH/UNEPI National immunization schedule

Vaccine/ Antigen	Dosage	Doses Required	Minimum Interval Between Doses	Minimum Age to Start	Mode of Administration	Site of Administra- tion
BCG	0.05ml up to 11 months, 0.10ml after 11 months	1	None	At birth (or first contact)	Intra-dermal	Right Upper Arm
DPT/DPT- HepB+Hib	0.5 ml	3	One month (4 weeks)	At 6 weeks (or first contact after that age)	Intra-muscularly	Outer Upper Aspect of Left Thigh
Polio	2 drops	0+3	One month (4 weeks)	At birth or within the first 2 weeks (Polio 0) and six weeks or first contact after 6 weeks (Polio 1)	Orally	Mouth
Measles	0.5 ml	1	None	At 9 months (or first contact after that age)	Sub-cutaneously	Left Upper Arm
Tetanus Toxoid	0.5 ml	5	TT1 & TT2: Six months TT2 & TT3: one year TT3 & TT4: one year TT4 & TT5: one year	At first contact with a pregnant woman or women of child bearing age (15- 45 years)	Intra-muscularly	Upper Arm

Tetanus Toxoid (TT) vaccine shall be given routinely to all women of childbearing age (15 – 45 years) according to the vaccine schedule.

## SECTION TWO NATIONAL LEVEL STANDARDS

**2.1** The Central UNEPI Division shall initiate, develop and disseminate the EPI Policy and standards. The Central UNEPI Division shall provide Districts with updated guidelines/protocol for the EPI program and shall monitor and ensure adequate and correct utilization of distributed guidelines at the District level.

**2.2** The Central UNEPI Division shall forecast and procure correct and adequate EPI vaccines and supplies on an annual basis according to the national EPI policy. Estimates for ordering vaccines and supplies shall be based on projected target populations, coverage targets, vaccine wastage, and balance in stock and should allow for the presence of a buffer stock at the start of each supply period equivalent to 25% of expected usage.

**2.3** The Central UNEPI Division shall review the quantities being “carried forward” before each order is placed, so that adjustments to the annual forecast based on unanticipated usage or projected demand can be made.

**2.4** The Central UNEPI Division shall complete and submit to the supplier a “Vaccine Arrival Report” each time an international supply of vaccine is received.

**2.5** The Central UNEPI Division shall supply EPI vaccines and supplies to districts on a monthly basis according to demand and known balance in stock.

**2.6** The Central UNEPI Division shall maintain a Central Vaccine Store (CVS) capable of storing vaccines at the recommended temperatures. Measles, Polio and BCG shall be kept at  $-20^{\circ}\text{C}$  to  $8^{\circ}\text{C}$ , while DPT, DPT – HepB, Hib and TT shall be kept at  $+2$  to  $+8^{\circ}\text{C}$ . DPT – HepB, DPT and TT shall not be frozen. [NB: UNEPI currently uses the lyophilized Hib vaccine which can be frozen. However, the liquid Hib vaccine should not be frozen.]

### Minimum Supplies for districts:

- Vaccines (according to national protocol)
- AD syringes (0.05 ml and 0.5 ml),
- gas cylinders and gas
- cotton wool
- mixing needles and syringes (2ml and 5ml)
- child health & TT cards
- tally sheets
- supplies control cards
- vaccine and supplies control book.

**2.7** The Central UNEPI Division shall carry out technical support supervision, monitoring and provide feed back to each district at least once every quarter.

### **Key areas for follow up during support supervision**

- Regular vaccine distribution
- Management of vaccines and supplies stock (Requisitions, records management, estimation of vaccines and supplies requirements)
- Completeness and timeliness of HMIS reporting.
- Coverage, Drop out, and Vaccine wastage rates.
- Functioning of outreaches
- Adherence to safe injection practice and policy
- Communications approaches and advocacy
- Flow of Financial Resources for EPI activities.
- Human resources – adequacy , knowledge and skills..
- Support supervision to lower health units
- Cold chain maintenance and vaccine potency
- Availability and use of EPI standards and guidelines
- Provider knowledge and skills

### **2.8 The Central UNEPI Division shall have annual and quarterly plans on Immunisation activities. The plan shall cover but not limited to:**

- Forecasting, ordering, storage and distribution of supplies and vaccines to all districts.
- Collection, analysis, use and dissemination of immunization information with feedback to politicians, civic leaders and other stake holders, and to technical people and health workers
- Coordination of EPI activities between various partners and districts
- Capacity building activities at both national and district level
- Technical support supervision and monitoring all districts.
- Cold chain maintenance, inventory and repair.
- Surveillance
- Advocacy and lobbying for program support
- Communication and behavior change activities
- Safe injection
- Review and adapt new technologies for possible introduction
- Operational research
- Coordinate and support for supplemental immunization activities

2.9 The Central UNEPI Division shall monitor and follow up reports of Adverse Events Following Immunisation (AEFI) within a period not exceeding 14 days following the notification of such event.

2.10 The Central UNEPI Division in collaboration with stakeholders and partners shall carry out potency testing of viral vaccines for every consignment received and field potency testing at least once every six months for quality control purposes.

2.11 The Central UNEPI Division shall carry out surveillance at the national level for diseases targeted for eradication, elimination, and control (polio, measles and neonatal tetanus) using the Integrated Disease Surveillance and Response Strategy (IDSR).

2.12 The Central UNEPI Division shall carry out internal program reviews annually, and external program reviews, needs assessment and coverage surveys at least once every five years.

2.13 The Central UNEPI Division shall continuously advocate for EPI, identify barriers to utilization of the services and support districts to carry out social mobilization strategies at the grassroots level.

Follow up tasks and actions for reports of Adverse Events Following Immunization

- Type, Batch No., Expiry date, Manufacturer of the vaccine
- Possible attributable causes
- Ensure proper management of AEFI
- Minimise reoccurrence
- Minimise impact of event on the programme

### **SECTION THREE DISTRICT LEVEL STANDARDS**

3.1 The district/Health Sub District (HSD) shall have a documented annual and quarterly integrated health plan that includes immunization activities. The plan shall cover but not limited to:

- Forecasting, requisitioning, storage and distribution of supplies and vaccines to all immunization units.
- Collection, analysis, use and dissemination of immunization information with feedback to lower levels (sub counties, HSDs, and health facilities).
- Static and outreach immunisation services to ensure regular services.
- Technical support supervision
- Cold chain maintenance and repair
- Advocacy and Social Mobilisation through various channels
- Capacity building within district
- Coordination of all partners and sectors within the district
- Communication approaches
- Identify barriers to utilization and their solutions

**3.2** The District Health Management Team (DHMT) shall disseminate EPI policy and standards to the political and administrative leaders at district and lower levels and to all the health providers in the entire district.

**3.3** The District Director of Health Services (DDHS) shall prepare, make requisition, and maintain inventory of the annual and monthly EPI vaccines and supplies requirements at the beginning of each year and month respectively, adjusting for balance in stock.

**3.4** The district/HSD shall have in stock at the start of each supply period adequate vaccines to last for a period of six weeks

**3.5** The district/HSD shall store vaccines at the district vaccine store /HSD sub store at between +2 °C and +8°C at all times. However, measles and oral polio vaccines, may be kept at the district store at temperatures ranging from -20°C to +8°C (**Do not freeze DPT, DPT-HepB and TT Vaccines**)

**3.6** The district/HSD shall review vaccine requirements including target population estimates, usage and stock balances.

**3.7** The district/HSD shall distribute adequate vaccines and supplies according to bundling principles to all health units carrying out immunization on a monthly basis and **ensure no stock outs or excess stocks in health facilities.**

**3.8** The district/HSD shall ensure uninterrupted supply of gas and other sources of energy to maintain EPI fridges in the district.

**3.9** The district/HSD shall pay outreach allowances of all outreach activities and have no arrears accrued beyond one quarter. Health providers shall be paid in accordance with their salary scales and government rates of the safari day allowance.

Minimum Supplies:

- Vaccines (according to national protocol),
- AD syringes (0.05 ml and 0.5 ml)
- 2 gas cylinders per fridge,
- cotton wool,
- mixing needles & syringes (2ml. 5ml), child health cards,
- TT cards,
- tally sheets,
- supplies control cards,
- vaccine and supplies control book.

Tasks

- Record and monitor the use of gas
- Collect empty gas cylinders for refilling prior to arrival of the vaccine truck
- Maintain inventory on working status of equipment

**3.10** The districts/HSD shall carry out technical support supervision to each health unit carrying out immunization activities at least once every three months.

Tasks:

- Prepare and disseminate supervision plan to all health units.
- Use the EPI checklist.
- Prepare and disseminate supervision plan to all health units.
- Carry out on-job training
- Compile outreach plans from the lower health units
- Monitor the outreach plan implementation.
- Provide immediate verbal feedback during supervision and written feedback within two weeks after the supervisory visit.
- Review of vaccine and supply stock position and storage conditions
- Meet and attend meetings with LC leaders
- Review coverage, dropout, and wastage data and functioning of the HMIS
- Identify and overcome barriers to utilization of services

**3.11** All districts/HSD shall give written feedback on immunization activities to the district and sub-county political and administrative officials, on a quarterly basis.

At district level, inform the following: –  
 LC V chairperson, Secretary for Health, Chairperson Sectoral committee for Health, CAO, and RDC.  
 At sub county level inform LC III Chairperson, Secretary for Health, Sub-County Chief, and the ACAO and ARDC responsible for the respective county

The summary of information to be shared:

- a) Coverage rates by sub counties & HSDs
- b) Drop-out rates by sub counties and HSDs
- c) Functional outreach coverage.
- d) Status of (mobilization for outreaches, difficult to reach communities, groups against immunisations, and specific rumors)
- e) Funding for immunisation

**3.12** The district/HSD shall build the capacity of health units implementing immunization activities (including NGOs, and private sector) to implement quality immunization services on an annual basis.

Tasks:

- Identify knowledge and competence gaps
- Identify equipment and supplies gaps
- Conduct annual EPI inventory
- Mobilize resources for addressing performance gaps

**3.13** The DDHS and HSD in charge shall analyze, utilize and disseminate EPI data on a weekly, monthly, quarterly and annual basis as stipulated in the HMIS guidelines

Tasks:

EPI data includes Coverage, Drop out, and Vaccine wastage rates, AEFI, surveillance data. Facilitate health units carrying out EPI with data collection tools and their proper storage as stipulated in HMIS

**3.14** The DHMT shall plan and carry out advocacy and social mobilisation activities relevant to the local needs of the community in order to create a sustained demand for EPI services.

## **SECTION FOUR HEALTH FACILITY LEVEL STANDARDS**

- 4.1** All health facilities shall have a documented plan on the immunization activities for the year and every quarter
- a. The immunization team shall designate and document the service area and target population of infants (aged between 0 - 11 months), and women of childbearing age (15 years to 45 years).
  - b. Each health facility shall draw and display an immunization program, indicating:
    - that static immunization services are provided daily.
    - the outreaches for the parishes in the service area each quarter (it should include the dates, site location and time of the outreach, and expected attendance).
  - c. Each health unit shall review and use analyzed data from the outreaches and be innovative on the location of the outreaches (change outreach sites when necessary)
  - d. Each health facility shall document the staff on duty for immunization activities (static and outreach) at any specific period/time.
  - e. Each health facility shall indicate the plan of use of appropriate transport for immunization activities.
  - f. Each health facility shall have documented monthly vaccine requirements (depending

- on the target population and consumption rate) and keep stocks (of vaccines, syringes, safety boxes) enough at the start of the supply period for only six weeks.
- g. Each health facility shall document, display and report on target and achieved levels of coverage, drop-out rates, and vaccine wastage rates per month on charts and display the EPI standards.
  - h. Every health facility shall indicate the dates for review/monitoring of immunization activities on monthly basis.

**4.2** The cold chain shall be maintained at a temperature of +2°C to + 8°C at all times.

**4.2.1 In the facility:**

- a. Cold chain equipment and supplies (fridges, solar equipment, and gas) shall be **used exclusively for EPI services**.
- b. The health worker on duty shall maintain the EPI refrigerator.
- c. One functional thermometer shall be placed in the middle of the refrigerator at all times.
- d. Health workers on duty shall read the fridge temperature in the morning and afternoon of every day (including weekends and public holidays), and the temperature shall be recorded on the temperature chart.
- e. Health workers on duty shall check on the gas/electricity or solar supply to the refrigerator everyday to ensure that it is functioning.
- f. There shall be at least four (4) ice packs placed in the freezing chamber of the EPI fridge.
- g. DPT, DPT-HepB and TT vaccines must not be frozen
- h. The In-Charge of the health facility shall keep a filled stand-by gas cylinder and ensure that the tasks for maintenance of the cold chain have been carried out.
- i. Opened vials kept in a labeled box in the refrigerator for early use
- j. Vaccine ledgers maintained
- k. Use earliest expiry dates first)
- l. Refrigerators kept out of the sunlight
- m. Each unit shall have two copies of the UNEPI Handbook, Immunisation Practices in Uganda

**Tasks in Maintaining the EPI Refrigerator**

- Check the spirit level every day, and adjust the fridge-level if necessary.
- Clean the fridge at least once every week.
- Defrost whenever ice forms a thickness of three (3) millimeters or more.
- Check and adjust the thermostat if necessary (when temperature is above or below recommended range of **2°C to 8°C**)

**Tasks to ensure availability of a standby gas cylinder**

- Each filled gas cylinder shall be labeled with the date of fixing/connection and the expected date of expiry.
- The health facility shall send an empty gas cylinder to the District Vaccine Stores/HSD within two (2) days after it is finished.

**4.2.2 During Outreach**

- a. Health workers shall place four frozen ice packs in the vaccine carrier before leaving the facility; this should be done under the supervision of a qualified health worker
- b. Whenever removing 4 icepacks, health worker should place four icepacks into the freezer to be frozen .

- c. Health workers shall keep the top of the vaccine carrier tightly closed at all times (exception when putting the vaccines/ice in the carrier or when removing the vaccines for immunization).
- d. Health workers shall place a functional thermometer in the middle of the vaccine carrier.
- e. When transporting vaccines in the vaccine carrier, health workers shall:
  - Pack *polio* and *measles* vaccines at the bottom of the vaccine carrier, *BCG* shall be in the middle, then *TT*, and *DPT-HepB+Hib/DPT and diluent* shall be at the top in that order.
  - Separate *TT and DPT-HepB+Hib* from contact with the ice packs (can use hard-paper from packing boxes).
- f. Health workers shall remove the vaccines from the vaccine carrier only when there is a child/woman to be vaccinated. Only one vial of each type of vaccine should be opened at any given time.
- g. Pack needles and syringes and safety boxes corresponding with vaccines doses.

**4.3** Health workers shall minimize missed-opportunities for immunization.

- a. Health workers coming into contact with children for whatever reason shall screen them for immunization and vitamin A status.
- b. All women attending maternal care clinics (ANC, family planning, postnatal and post-abortal clinics) shall be given TT vaccination in accordance with the EPI schedule.
- c. All children or women coming into contact with a health worker and are found not immunized (with any of the vaccines), shall be given the vaccine or referred for vaccination.
- d. All children or women found due for vitamin A supplementation shall be given the vitamin A or referred where it can be obtained.

**4.4** The health worker providing immunization shall always observe infection control practices during and after every immunization session.

- a. The health worker administering the vaccine shall wash his/her hands (with soap and clean water) before and after every client.
- b. The Immunization Team shall keep clean (no stains, no contamination in handling) all immunization materials (syringes, vaccines) at all times.
- c. The Immunization Team shall clean the work place before, during and after an immunization session.
- d. Health workers shall give injectable vaccines using one sterile syringe and one sterile needle for each vaccination. A used syringe and needle shall be discarded immediately after every single use into a safety box without recapping.
- e. Health workers shall use one sterile mixing needle and sterile syringe for reconstituting each vial.
- f. Health workers shall use the reconstituted vaccines within six (6) hours from the time of reconstitution. Any unused reconstituted vaccines must be discarded after six hours or at the end of the day's session, whichever comes first.

**4.5** The health worker providing immunization shall always follow safe injection practices during and after every immunization session.

- a. Every immunization session (whether in the facility or during the outreach) shall be conducted by a qualified health worker.
- b. Health workers shall take the vaccine vial from the vaccine carriers only when a client is ready to receive immunization.
- d. Health workers shall introduce the needle in the appropriate body site (according to the current national immunization schedule).
- e. Health workers shall dispose of used needles and syringes in the safety box immediately without recapping.
- f. Health workers shall dispose of non-sharp used materials in covered container.

**Tasks in Administering Vaccines**

- Clean the injection site (for every child/woman) with clean swab clean cool water.
- Inject the vaccine slowly at appropriate site
- Apply gentle pressure on the injected area, using clean dry cotton swab.

**4.6** Health workers shall carry out growth monitoring, vitamin A supplementation and other promotion activities during immunization session (according to nutrition guidelines).

**Disposing Materials after an Immunization Session**

- Burn the filled safety box and bury the resulting "cake" in the ground in a designated area/pit.
- Dispose empty vaccine vials in a designated area/pit.
- Dispose the other materials (cotton swabs, vitamin A shells, etc) in a compost pit.
- Where incinerators exist, all the waste materials, including the safety boxes shall be incinerated

**4.7** All caretakers/parents shall be educated on immunization, including the schedule at every immunization contact.

- a. The health worker shall educate caretakers/parents and women of child bearing age on immunization.
- b. All caretakers/parent or women of child bearing ages shall be told the vaccines given, the diseases they prevent and return date. This return date shall include the return date for vitamin A supplementation.
- c. All caretakers/parents or women of childbearing age shall be told the potential side-effects and how to manage them.
- d. Where necessary, health workers shall refer caretakers/parent and women of child bearing age for other appropriate health services like family planning, nutrition, or curative care

**Areas to Educate Caretakers/parents on**

- Vaccines given, the diseases they prevent, and the protective advantages of the vaccines.
- The number of doses of the vaccine required for protection and, emphasize the value of completing the immunization schedule.
- The potential reactions likely to be experienced from the immunization being given, and explain what actions the caretaker/parent should take.
- The need to safely keep the child's health card (or in case of women of child bearing age, the TT card) and to bring it during all visits to the health facility.

**4.8** All immunizations shall be recorded, documented and communicated to stakeholders.

- a. Health workers shall record all immunizations on the child health register, immunization tally sheets, the child health card, TT-card, and HMIS forms.
- b. Health workers carrying out immunisation shall record all the vaccines, diluents and Injection materials taken out before and returned after every immunisation session (static and outreach). The Vaccine and Injection Materials Control Book shall be balanced at the end of each day.
- c. At the end of each month the In-Charges of the health facility shall reconcile the vaccines and supplies in the record book with the physical count.
- d. Health workers shall provide a child health card or a TT-card to every child or woman being immunized for the first time respectively.
- e. The In- Charge of each health facility shall compile, analyze and use the immunization data (e.g. by plotting on the coverage/drop-out chart) for planning. This shall be done monthly.
- f. The In- Charge of each health unit shall submit monthly summary reports (HMIS Form 105) to HSD headquarters by the 7<sup>th</sup> day of the following month.
- g. The In- Charges of each health unit shall give feedback to the Health Unit Management Committee and the Local Council, on immunization coverage, dropout rates and vaccine wastage on quarterly basis.
- h. The In -Charge of each health unit shall requisition for and ensure availability of adequate stocks of Child Health Cards (CHC), TT cards and HMIS forms.

**4.9** Each parish in the service area shall receive at least one integrated outreach per month. Each static unit, in addition to its routine services shall provide at least one integrated outreach per month to hard to reach populations located more than 5km from the static unit and within its service area.

The In-Charge of each health unit shall draw and display an outreach immunization program to reach all parishes at least once a month (this shall include the dates, time and location of the outreach and shall be done on a quarterly basis).

**4.10** Each health unit shall undertake community mobilization activities in its service area.

- a. A social mobiliser shall work in conjunction with the health unit staff to increase the utilization of immunization services.

**Tasks for the social mobiliser**

- o Register infants (0-11 months) and women of the childbearing age in their service areas, and update the registers quarterly.
- o Use the registers to follow-up the immunization status of eligible target group.
- o Carryout at least 20 home visits per month.
- o Conducts public health education sessions at least once a month.
- o Distribute IEC materials to the community during each mobilization session.
- o Identify homes and communities needing extra support
- o Identify Model homes to use as examples.
- o Report all the above activities to the in charge of the health unit at least once a month.
- o Develop locally appropriate means to remind parents/guardians on the next immunization session/ when one is due for vaccination
- o Use low cost means for social mobilization such as announcements in church/mosques, LC meetings, weddings, funerals; Displaying messages about immunization in all public places

- b. Health workers shall visit all homes and communities identified/reported by the social mobiliser as needing extra support on immunization, and other health issues.
- c. The HSD In- Charge, the health facility In-Charge and Sub County Health Assistant shall provide support supervision to social mobilizers at least once a month.
- d. Health unit staff in conjunction with the community leaders shall create a quarterly forum to discuss health issues with the community, provide feedback and develop solutions.

**4.11** Health workers shall look out for occurrence of notifiable diseases and adverse events following immunization and report them within 24hours to the HSD/District.

- a. The health facility In-Charge/health workers shall report all suspected cases of *Acute Flaccid Paralysis (AFP)* to the district surveillance focal person, immediately.
- b. The health facility In-Charge /health workers shall report all suspected cases of neonatal tetanus and measles to the district surveillance focal person, immediately.
- c. Health workers shall document and report all the *major adverse events* following immunization.

**4.12** All health facilities carrying out immunization services shall have the recommended essential requirements.

**Essential requirements for an immunization Session**

- The vaccines according to national protocol
- Two vaccine carriers with appropriately-sized ice packs each with sponges and 8 extra ice packs in the freezer for the next session
- Two thermometers
- Polythene sheet of at least 2m x 1m
- Two kidney dishes (medium sizes)
- Clean water and soap
- Vaccine and Injection Material Control Book
- Safety boxes
- Covered container for used swaps and none-sharp waste materials
- Cotton wool
- Bag for carrying the supplies
- Child health cards and Tetanus Toxoid cards,
- Tally sheets
- Fridge certified by UNEPI located at the static immunization site or a neighboring facility able to serve the static and outreach points.
- Auto disabling syringe and needles
- Mixing needles and syringes
- Any other agreed items

**Additional Requirements**

- Weighing scale (for children and adults)
- Weighing pants for children
- A pair of scissors
- Vitamin A capsules
- A register for children

**WHO Policy for use of opened vial (Multi-Dose Vial Policy)**

OPV

Save unless

- Expired, contaminated or has no label
- The VVM is at or beyond the discard point
- Vials have been open for 4 weeks or more
- Vials opened during outreach sessions

Vaccines have not been stored under appropriate cold chain conditions

TT Save unless

- Expired, contaminated or has no label
- Frozen The VVM is at or beyond the discard point.
- Vials have been open 4 weeks or more
- Vials opened during outreach sessions
- Vaccines have not been stored under appropriate cold chain conditions
- Vaccine vial septum has been submerged in water

BCG Discard within 6 hours after reconstitution

DPT-HepB + Hib - Discard within 6 hours after reconstitution

DPT - Discard within 6 hours after reconstitution

Measles - Discard within 6 hours after reconstitution

**Vials opened and saved at the static unit shall not be taken for outreach sessions.**

**Vaccine vials opened at the outreach sessions shall be discarded after the session. Unopened vials after an outreach session that have been stored under appropriate cold chain conditions should always be brought back for storage at static unit for subsequent early use.**

4.13 All health facilities shall minimize vaccine wastage.

a. The health facility In-Charge shall order for the correct amount of vaccines on a monthly basis, taking into consideration existing stock of each vaccine

b. Health workers shall observe and correctly implement the Multi Dose Vial Policy.

c. Health workers shall correctly observe the storage and cold chain temperature requirements for each of the vaccines in the EPI schedule as recommended in the EPI standard No 4.2 above.

**Ordering Vaccine**

Information required;

- Previous month's stock = A
- Present stock = B
- Previous month's usage = A-B=C
- Reserve stock for static unit = 50 % of C
- Vaccine stock required for the month = (C +50%C)
- Additional vaccines to be ordered= (C+50%C)-B

- d. Health workers shall only use diluents provided for mixing of vaccines only and never to mix other drugs. (Always use diluent of same batch as the vaccine)
- e. The health worker providing immunization shall always observe infection control practices during and after every immunization session as detailed in the EPI standard No. 4.4 above.

## **Acknowledgements**

The UNEPI programme would like to extend its innermost gratitude to the Regional Centre for Quality of Health Care (RCQHC), Makerere University for the invaluable support in the development and finalization of these standards.

Furthermore, the technical and financial support offered by BASICS II Project in the production of this document is acknowledged

*This Standard was printed with support from BASICS II Project*



**BASIC SUPPORT FOR INSTITUTIONALIZING CHILD SURVIVAL**  
Plot 38 Lumumba Avenue, Nakasero, Kampala  
Tel: 256-41-340127, 256-41-347861 E-mail: [basics2@infocom.co.ug](mailto:basics2@infocom.co.ug)