Republic of Somaliland

Public Health Department, MoHD

Development of Field-Guide & Standard Operating Procedures (SOPs) for integrated Measles-Plus campaign

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Objectives

- To immunize at least 95% children aged 6 months to 59 months with measles vaccine irrespective of the previous immunization or disease status.
- To immunize at least 95% children from Birth to 59 months with Polio vaccine.
- To supplement all children aged 6 to 59 months with one dose of Vitamin A according to the age of the child.
- To deworm all children aged from 1 year to 5 years with albendazole

Main Goal

The goal of the Measles SIA is to reduce Measles transmission by achieving at least 95% coverage in all districts in line with the National Measles Strategic Plan, and the provision of health and nutrition lifesaving interventions.

Target audience of this field guide

The field guide is intended for national programme staff, Regional, and District health officers, as well as service providers at all levels.

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National level planning

Planning at this level involves reviewing and consolidation of all Regional/District plans. Feedback will be provided to regions which in turn will provide feedback to the districts. The national level will estimate allocation of regional level resources. Below are some of the areas of focus during planning:

- Resources mobilization
- High level Advocacy and cross-sectorial engagements
- National plan of actions (target population, target areas, required supplies, and activities timeline)
- Develop training, advocacy, and social mobilizations materials, guidelines, and plan
- Develop logistic and data management tools
- Supervise and coordinate national, regional and district level micro-planning
- Procurement and distribution of supplies to national , region and district
- Monitoring plan for the campaign
- Evaluation

Regional level planning

The regional level planning will focus more on the development of SIA micro-plans. Micro-planning is critical to the successful implementation of the Integrated Measles SIAs. The regional micro-plan has various components and clarifies ***who*** is responsible for ***what*** tasks as well as ***when*** and ***where*** these tasks should be carried out. Micro-planning should be managed at the regional level.

The micro-planning and budgeting for Integrated Measles SIAs will immediately begin using experiences gained from polio campaign and CHDs. The calculations specified below should be made using a spreadsheet or micro-planning tool for each region/district. As preparation for the micro-planning workshops, guidelines should be sent for representatives/participants to collect in advance and arrive with the following information:

- Target population
- List of villages with target population
- Maps per district to show all villages, high risk/priority area (nomadic, IDP, inaccessible population, access routes, checkpoints, airstrips, etc.

  List of the vaccine storage health facilities and allocate catchment area of each facility
- Cold chain inventory at all levels (vaccine carriers, cold boxes, ice packs, refrigerators, freezers)

- The following actions should be considered during the micro-planning exercise.
- Develop specific strategies for high risk/priority /hard-to-reach areas
- Have planning meeting at National level (region/district level)
- Determine the SIA delivery strategy by area per facility: Fixed and Temporary/outreach vaccination points
- Identify the number of health workers in each district and indicate shortages and strategies for alleviating the shortage.

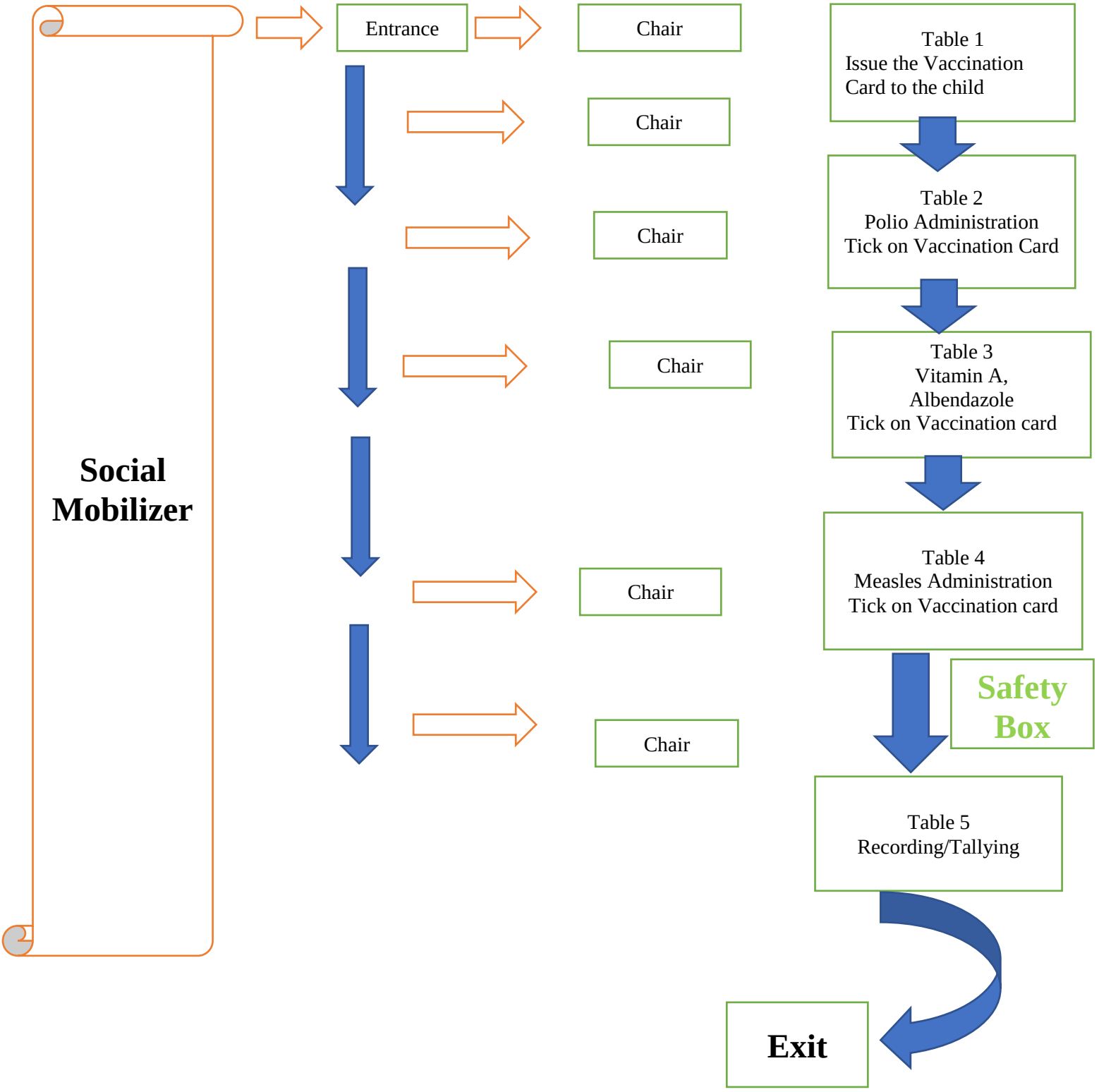
Team Composition, Organization, and Roles

The roles of the personnel at the immunization post are outlined below.

Roles of the personnel at the immunization post

Personnel		Role of personnel
SOCIAL MOBILISER	**SOCIAL MOBILIZATION** One person from the community.	1. Mobilizes the community at least 1 day before the vaccination day 2. During the Integrated Measles SIAs Social mobilizer should continue to mobilize communities.
RECORDER	**RECORDING** One person with reading and writing skills	1.Check that the person is within the target age group. 2.Write the age of the child on the measles vaccination card zones. 3.Recording & tallying vaccinated children
VACCINATOR 1	**PREPARATION** One qualified health worker to prepare the measles vaccines	1.Mix or reconstitute the vaccine, record vials used. 2.Prepare the AD syringes for administration. 3.Ensure safe and clean vaccination area 4.Ensure correct storage of vaccine 4.Tallying of vaccinated children
VACCINATOR 2	**VACCINATE** Qualified health worker to administer measles vaccine	1.Vaccinate the child 2.Ensure procedure safety 3.Monitor and respond to reactions 4.Observe and promptly refer cases of AEFI
VACCINATOR 3	**VACCINATOR** Qualified health worker to administer OPV	1.Vaccinate child with 2 drops of OPV 2.Monitor and respond to reactions 3.Observe & promptly refer cases of AEFI
NUTRITION FOCAL PERSON	**Team Member** Qualified person to administer Vit A and Albendazole	Health worker to administer Vit A and Albendazole

Layout of Vaccination Site



Estimating the Number of Teams Required

A standard Integrated Measles SIAs team of 6 persons has been allocated a daily target of 120 vaccinations in rural areas and 150 vaccinations in urban areas. Therefore, each rural team of Integrated Measles SIAs vaccinators in Somaliland will be expected to vaccinate at least 600 children during the campaign. On the other hand, teams in urban areas will vaccinate an average of 750 during the entire campaign:
One measles vaccination team = 5 persons + 1 person for deworming and vitamin A

Urban/dense Population: 150 vaccinations/day

Rural/sparse Population: 120 vaccinations/ day

The number of teams required is the population group (urban or rural) divided by the number of vaccinations / numbers of vaccination days.

Components of operational micro-planning

District level: the micro-planning exercise is a bottom-up approach beginning with consolidation of facility/site level plans with community involvement. The opportunity will maximally be used to look into the cold chain status, logistics and waste management. The involvement of other Ministries, NGOs, civic society groups and other stakeholders in the planning stage will help to pool resources.

Regional level: micro-planning at this level involves reviewing and consolidation of all district/regional plans. Feedback will be provided to districts/regions and will also support district activities and advocate for resource Mobilization.

National level: micro-planning at this level involves reviewing and consolidation of all regional plans. Feedback will be provided to regions, which in turn will provide feedback to the districts. The national level will estimate allocation of National and regional level resources. Below are some of the areas of focus during micro-planning:

- Determine the target population
  - Target population for measles= 6 months – 59 months (18% of the total population)
  - Target population for Polio = 0 – 59 months (20% of the total population)
  - Target population for deworming = 12—59 months (4% of the population (12-23 months), 12% of the population (24-59 months).
  - Target for Vit A 6 months – 59 months (18% of the total population)

Target Population = % targeted x total population estimate
Consider the number and type (urban, rural, mobile etc.) of households in the catchment area for community mobilization

Example of how to calculate Target Populations for Integrated Measles SIAs

Integrated Measles SIAs for children under 5 years

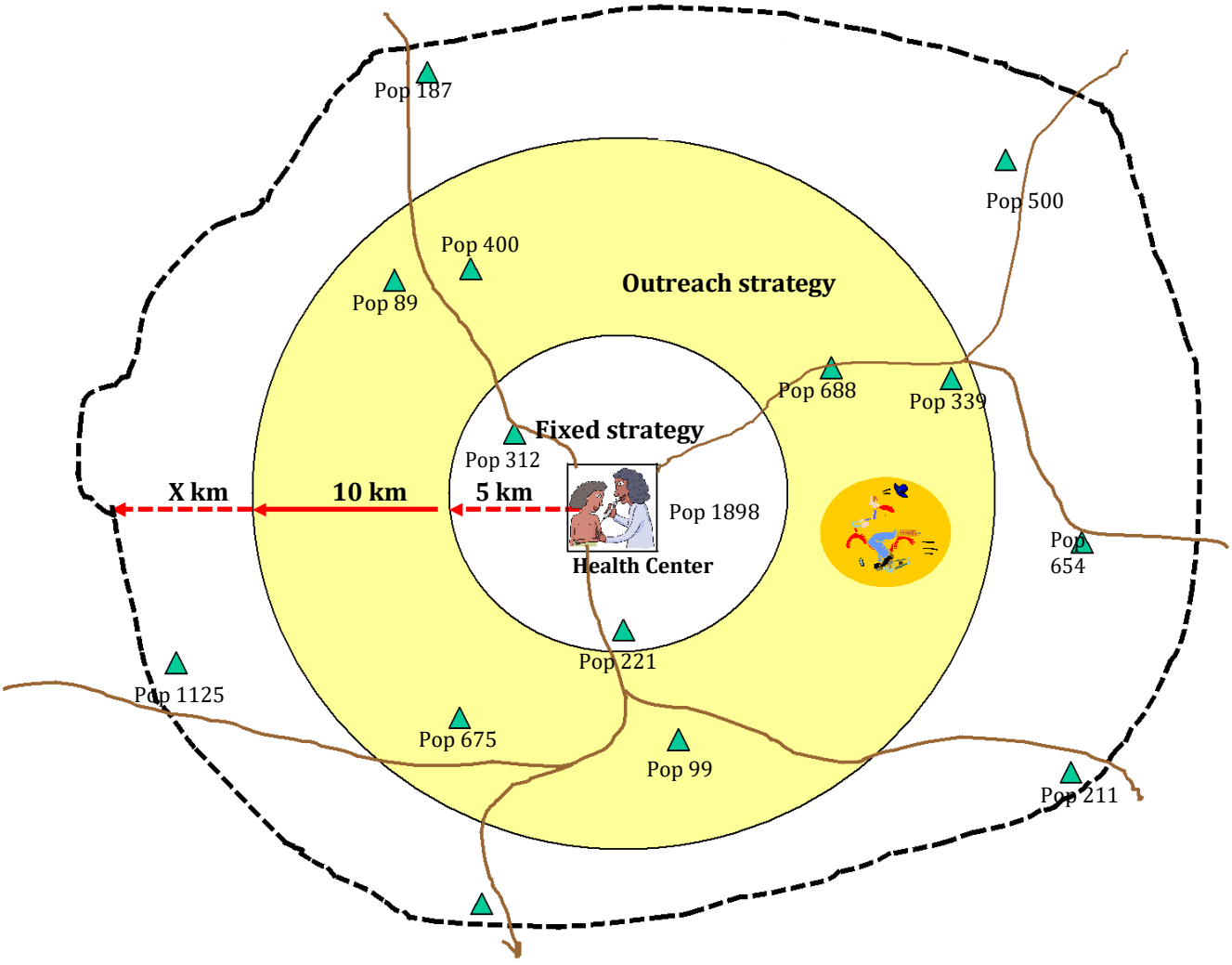
If the total population of Sahil region is 474,960

- Then the measles vaccine target population (6 months to 59 month) is: 474,960 x 18% = 85,493 children
- OPV vaccine target population (0 to 59 months) is: 474,960 x 20% = 94,992 children

Determine the strategy (fixed, temporary vaccination post or mobile) to conduct Integrated Measles SIAs activities in:

ALL health facilities will be used as fixed sites (to serve a population within a radius of 5km).

- Selected temporary Integrated Measles SIAs vaccination sites (outreach) to be set up with the communities living between 2km radius. It is advisable to use sites previously used during CHDs. The temporary strategy will cover communities living between maximum of 2 km radius from the vaccination site.



Types of Vaccination posts to be employed during Integrated Measles SIAs will be fixed, temporary or mobile.

- **Fixed**- Immunization posts: These posts are located at permanent health facilities. Immunization will be provided at the health facilities the whole day for the entire duration of the Integrated Measles SIAs. These sites will also serve as depots for storage and distribution of vaccines to temporary fixed sites and mobile teams.
- **Outreach** - Immunization posts: These posts are located at schools, mosques, bus stops, roadblocks, border posts and market areas. Immunization will be provided at these sites for the duration of the Integrated Measles SIAs or partially depending on the population targeted.

Each immunization post/site should have the following:

1. Two tables and chairs, usually a contribution from the community
2. Two health workers – one for vaccine administration and one for reconstitution
3. One recorder and one social mobilizer for mobilizing the community
4. One person to administer Vitamin A and Albendazole tablets
5. One person for Polio vaccine administration.
6. At least one vaccine carrier with 4 conditioned ice packs
7. Appropriate measles vaccine and diluent depending on the daily target of the post/site
8. Appropriate vitamin A capsules and albendazole
9. Bundled auto disable syringes (0.5ml), reconstitution syringes/needles (5ml), safety boxes
10. A roll of cotton wool and a scissor
11. An finger marker to mark fingers of immunized children
12. Appropriate number of tally sheets and measles vaccination cards
13. AEFI case investigation and reporting forms
14. One plastic bag for non-biologic and non-sharp waste per day.
15. A banner/poster to identify the area as a service delivery post for the duration of the campaign

Planning to reach "hard-to-reach" and special populations

To effectively control and/or eliminate measles, it is important to immunize the hard-to-reach, and underserved populations who are often missed by routine vaccination. These populations may not necessarily be living in remote corners with poor geographic access. They may be living in the capital cities of Hargeisa or Buroa BUT need extra efforts to understand the necessity of supplementary doses of immunization. It is important to note that special populations like IDPs are increasing in urban and peri-urban areas due to the current drought situation. Each regional and district micro-plan should be reviewed to ensure that it has special innovations and strategies to reach:

- Areas of un-immunized (zero dose) or under-immunized children in urban settlements of capital cities.
- Populations inhabiting difficult or mountainous terrain like the mountain areas in Sanaag , Awdal and Sahil regions
- Nomadic populations
- Affluent and elitist suburban communities in cities and major towns
- Religious groups who oppose vaccination
- Populations living in newly access negotiated areas (use lessons learnt from Polio campaigns).

Micro-planning

District micro-plans: The district micro-plans should start at the health facility level, where each health facility should engage with the local stakeholders and communities to develop the facility-based micro-plan (map showing different key locations, special populations, and resource needs). The district team will review and consolidate the health facility micro-plans. The review of plans to reach hard-to-reach areas shall focus on (a) **'who'** and **'where'** the unreached populations are (b) **'Why'** these populations are under-served and (c) strategies on **'how'** to reach them. The additional considerations should be made with respect to social mobilization, cold chain and vaccine logistics, and various means of transport (e.g. boat, camel, donkey, etc). In the capital cities, the private hospitals and medical associations shall be used to reach the affluent/ elite populations as part of social mobilizations. Mapping of NGOs, Civil Society, Red Cross/Red Crescent etc. would be done and engaged to support the planning and implementation of integrated Measles SIA campaign.

District Micro-planning Workshop: The objective of this workshop will be to review and consolidate all districts micro plans and submit to regional task force for consolidation and approval.

Regional Micro -planning workshop: Micro-planning at this level will be to review and consolidate all regional micro plans and forward them to national task force for endorsement and funding.

Other Considerations for Micro-planning

- Determine location of vaccination posts
- Determine Human Resources for each district/ develop ToR and selection criteria (vaccinator, health worker, social mobilizers, supervisor/coordinator, logisticians)
- Organogram, communication flow and reporting lines
- Determine quantities of vaccines, Vitamin A, albendazole, equipment and supply needed

- Determine the cold chain needs
- Determine the training material for supervisor, social mobilizer, health worker
- Develop waste management plan
- Determine transportation needs
- Develop distribution plan for Integrated Measles SIAs materials
- Develop social mobilization plan per district (religious leaders, women groups, youth groups, community leaders and local media)
- Develop district budget including communication budget
- Determine resources gaps and develop a plan to meet them
- Determine security related needs together with the community and community leaders)
- Determine communication equipment needs e.g. megaphones.

Validation of Micro-plans:

Validation of the micro-plan will be done jointly by MoH and UNICEF through desk review and field validation at all levels.

Vaccine and supplies distribution

The Integrated Measles SIAs micro-plan should include distribution of vaccine/injection equipment at each level: central level to regions/districts, articulate the points from where distribution goes out to the health centres and the immunization posts. The plan should consider the following:

- Number of kilometres round trip for vaccine distribution
- Method of transport for vaccine distribution with fuel costs
- Personnel required (drivers, technicians for last minute cold chain checks and maintenance)
- Duration of time required for distribution
- Delivering vaccines for the Integrated Measles SIAs should be strategically timed when stocks for routine vaccines are low (to allow for more space for the higher but temporary demand on the cold chain system), and should be in time for the Integrated Measles SIAs.

Estimating resources and logistics for Integrated Measles SIAs implementation

1. Determine modality of release of SIA supplies and operational funds
2. Measles vaccine and diluent
3. OPV vaccine

4. Vitamin A and Albendazole
5. Injection materials and safety boxes
6. Cold boxes, vaccines carriers and ice packs
7. Cold chain requirements
8. Temporary sites requirements (table, bench…)
9. Stationeries
10. Maintenance and repairs of cold chain
11. Warehousing facilities (Determine storage space required for dry supplies)
12. Planning transport requirements (transport vaccines, supply and personnel), determine lead times and means of transportation (airlifting, road, sea)
13. Supply distribution plan
14. Contingency plans (in case deterioration of security, flooding)

Estimating the Target Population for Integrated Measles SIA

The most important step in calculating resource requirements is to determine the size of the target population. In Integrated Measles SIAs catch up campaign the target population to receive services is children aged 6 months to 5 years. The target population for Vitamin A supplementation is children aged 6-59 months. The type of settlements (urban, rural, isolated settlements etc..) should be factored in when estimating target population to ensure to better planning, and implementation.

The recommended formula for calculating the various Target Populations is as follows:

(a) Measles: The Target population (6 months to 59 months) is 18 % of the total population.
(b) Vitamin A: The target population (6 months to 59 months) is 18 % of the total population.
(c) OPV Vaccine: The target population (0 to 59 months) is 20% of the total population.
(d) Albendazole: The target Population (12 months to 23 months) is 4 % of the total population and the target population (24 months to 59 months) is 12 % of the total population.

Estimating vaccine requirements

Measles Vaccine

The following formula is used to calculate the number of vials of measles vaccine:

Target population x Wastage Factor (10% wastage Rate) = number of doses of measles vaccine.
Example: Population of 70,000 people

N.B. Wastage Factor = 100 / (100 - Wastage Rate)

Wastage Factor = 100 / (100-10)

Wastage Factor = 1.11

Target population (18%) * 70,000 * 1.11 = 13,986 doses

Measles vaccine is supplied in 10 dose vials therefore divide the number of doses required by 10. Example: 13,986 doses / 10 = 1,398.6= 1,399 vials

OPV

The following formula is used to calculate the number of OPV vials
Target population x Wastage Factor (10% wastage Rate) = number of doses of OPV.

Example: Population of 70,000 people

N.B. Wastage Factor = 100 / (100 - Wastage Rate)

Wastage Factor = 100 / (100-10)

Wastage Factor = 1.11

Target population (20%) * 70,000 * 1.11 = 15,540 doses

Estimating syringes and safety boxes requirements

Auto-disable syringes for injection.

The policy of one child-one syringe-one needle should strictly be observed in all immunization sessions. For ease of calculation, the same wastage factor is used for vaccines and syringes. The number of AD syringes equals number of doses of measles vaccine calculated above.

Total number of syringes required = Target number of doses required
Continuing the example above: 13,986 doses required = 13,986 AD syringes

= 13,986 **AD Syringes**

Disposable syringes and needles for reconstitution of measles vaccine

The total number of 10-dose vials of measles vaccine per target population = total number of 5ml syringes (reconstitution) and needles required.

Example: 13,986 doses /10 = 1398.6 = 1,399 vials = 1,399 syringes (5mls for reconstitution).

Safety boxes

One 5-litre safety box can hold 100 syringes and needles. Therefore, use the following formula to estimate the number of safety Boxes required:

= (Number of AD syringes (0.5ml) + Mixing RUP syringes (5ml) / 100 Using the example above:
Safety Boxes required = (15,385 AD Syringes (0.5ml) /100 =

= 15,385 / 100 = 153.85

= **154 safety boxes**

It should be noted that safety boxes and AD syringes are ordered together with the measles vaccines using a principle called **bundling**.

Cotton Wool

Two 500 gm rolls of cotton wool should be provided for each vaccination team, approximately 2 gm per child.

Albendazole

Albendazole is administered to eligible children aged from 12 months to 59 months.
Albendazole 200 mg (12 months to 23 months) is given to 25% of the eligible children.
Albendazole 400 mg (24 months to 59 months) is given to 75% of the eligible children. Each team should be given two tins of Albendazole 200mg and five tins of Albendazole 400mg for the entire duration of the campaign.

Vitamin A capsules

Two Vit A formulations will be used during the Integrated Measles SIAs. The tins containing 500 capsules of 100,000 I.U shall be provided for children aged 6-11 months while tins containing 500 capsules of 200,000 I.U shall be provided for children aged 12-59 months. Each team should be given two tins (100,000 I.U and 200,000 I.U) of Vit A for the entire duration of the campaign

Estimating Cold Chain Space requirements

To estimate the cold storage requirements, use the following formula

Total Storage Volume (cm^3) = Total vaccine doses x packed volume per dose

(This volume /1000 = required storage volume in litre)

Note: The cold storage volume for MCV vaccine is 2.6cm^3 for 10-dose vials packaged in a box of 50. Therefore, the total cold storage requirement will be calculated using the formula above.

The following two calculations are needed at each level to verify whether there is sufficient cold space for integrated Measles SIAs supplies.

1. Calculate the total cold chain space available

Obtain an inventory of the functional cold chain equipment available. To calculate the available cold storage volume, each level will update their cold chain equipment inventory and use it to analyze how much space is available. The following storage volume guides will be used for the current refrigerators we have in the system in Somaliland

No.	Type of CCE	Model	Storage Capacity (litres)
1	Solar Direct Drive Refrigerator	TCW2000SDD	76
2	Solar Direct Drive Refrigerator	TCW4000SDD	220
3	Solar Direct Drive Refrigerator	TCW40SDD	36
4	Solar Direct Drive Refrigerator	TCW2043SDD	70
5	Solar Direct Drive Refrigerator	TFW40SDD	64
6	Dulas Solar Refrigerator	VC65-2	37.3
7	Vestfrost Ice-lined Refrigerator	MK204	75

8	Vestfrost Ice-lined Refrigerator	MK304	105
9	Vestfrost Deep Freezer	MF314	264
10	Haier Deep Freezer	HBD 286	180
11	Cold Box	RCW25	20.7
12	Standard Vaccine Carrier	Giostyle	2.6
13	Freeze- Preventive Vaccine Carrier[1]	Giostyle	
14	Polio Vaccine Carrier		

[1]*The Freeze Preventive vaccine carriers should be used with Frozen ice packs, and NOT CONDITIONED ice packs.*

2. **Subtract space used for routine immunization**

To calculate the amount of cold chain space available for vaccine supplies for campaigns, subtract the estimated amount of space used for routine immunization and COVID-19 antigens from the total space available.

General rules for calculating vaccine storage requirements

The amount of cold chain space required for measles is 130 litres per 100,000 population. Every 1,000 doses (100 X 10 dose vials) of measles vaccine require approximately 2.2 litres of storage space, i.e. approximately 450 doses per litre.

Sample calculation: District Y

A certain district Y has a MF314 freezer whose vaccine storage capacity is 264 litres and MK304 ice-lined refrigerator whose storage capacity is 105litres.

If one-fourth of the MF314 freezer (66 litres) is full of ice packs, and the body of the ice-lined refrigerator MK304 is half full (52.5 litres) of vaccines for routine EPI, then the remaining space available for the Integrated Measles SIAs is roughly (264-66) + (105-52.5) = 261.5 litres.

Therefore, the maximum quantity of measles vaccine that can be stored in this freezer and refrigerator for the Integrated Measles SIAs is 261.5 litre X 450 doses = 117,675 doses = 11,768 vials.

Storage space at the most peripheral level is usually sufficient. The most serious problems of inadequate space usually occur at the central, regional and district level. The following options can usually solve this problem:

- **"Borrow"** cold space temporarily from the private sector, other ministries or NGOs.
- **Use a "fast cold chain"**. This means storing vaccines with adequate icepacks in a cold box at a facility temporarily. The icepacks should be replaced frequently based on their condition and guided by the temperature monitoring device.
- **Strategically timed vaccine delivery**. Deliver vaccine for campaigns at a time when there is adequate storage space at the vaccine stores and health facilities

Calculating vaccine carrier and ice pack requirements

Each vaccination team will have at least 1 vaccine carrier with 4 conditioned ice packs. Some vaccination points will also have a cold box for additional storage of vaccines especially in urban areas and densely populated areas. Teams spending one or more nights in the field before returning to a facility with a refrigerator require 2 sets of 4 conditioned ice packs every two days per vaccine carrier. In circumstances that ice packs are not adequate, 2 ice packs may be used in the vaccine carrier and guided by the VVM.

1. Standard EPI vaccine carrier (durable or nondurable).
2. Polio vaccine carrier.
3. Cold box can carry vaccine and diluents.

Planning transport requirements

All supplies required for the Integrated Measles Campaign should be bundled as per micro plan before delivery. Transport is needed at all levels before and during the Integrated Measles SIAs for the following purposes:

- Transportation of vaccines, Vitamin A, albendazole, cold chain equipment such as cold boxes, ice packs, vaccine carriers and other supplies from the central MOH) to periphery levels of service delivery points.

- Distribution of social mobilization and monitoring materials.

- Transport of vaccination teams in rural areas and personnel for monitoring/supervision of the Integrated Measles SIAs planning and implementation, other personnel to conduct independent observation of the Integrated Measles SIAs process and manning the vaccination posts.

There is no simple formula for calculating transport requirements, as these will vary significantly in each area. Regions/Districts are expected to use the existing fleet of vehicles for the exercise. However, it is unlikely that the health sector alone will have sufficient transport for the campaign. Therefore, local sources of transport must be mobilized possibly from other government departments, Non-Governmental Organizations, private businesses, religious sectors and use of local transport means such as camels and donkeys. Where the above sources are not adequate, each region should make plans/budgets for renting private vehicles.

Waste Management Plan

Immunization safety is of paramount importance in any mass vaccination campaign. The campaign should be implemented with a high level of immunization safety that benefits all (Health care facilities, Injection providers and communities). Sharp waste management is an important component of the immunization safety strategy within the main campaign plan.

The immunization safety & waste management strategy will contain the following core elements:

Safe practice: all immunization posts will be prepared to handle immunization procedures properly (fixed, outreach and mobile teams). All personnel will be trained on immunization safety with inclusion of waste management in the curricula of the national training package for the campaign. In addition, they will also be trained on health risks and on safe practice for waste management. Sharps waste will be collected in safety boxes and disposed using the available options for waste management (burning and burying, or incineration >800^{o}C where available).

Equipment and supplies

All vaccinations will be conducted using AD syringes and safety boxes. The logistic plan will be developed for distribution of bundled supplies, i.e. one vaccination – one AD syringe; one vial – one reconstitution syringe; 100 syringes – one safety box.

Sharps waste management

The guideline is developed to include the designation of focal persons at all levels with clear responsibilities to follow plan implementation, training and monitoring during the campaign for safe collection, handling, storage, treatment and disposal.

Monitoring and evaluation

Extensive supportive supervision activities during the campaign will give attention to immunization safety and safe waste management, using a supervisory checklist to monitor campaign indicators e.g.:

- Proportion of facilities where used injection equipment can be seen in the surrounding environment
- Proportion of immunization sites provided with adequate safety boxes.

Advocacy and Social Mobilization

In order to achieve quality Integrated Measles SIAs, effective advocacy, social mobilization and communication is essential and needs to be planned and implemented to get support and participation of decision makers, individuals, families and communities. It is not enough to just produce posters, radio announcements and promotion by political and community leaders. Planned activities should be based on lessons learnt from past SIAs as well as an assessment of the best methods of getting across to the community.

Social Mobilization Objectives

- To create awareness to parents/caretakers on Integrated Measles Campaign
- To advocate for community leaders and influencers' support to mobilize their communities to demand for the campaign services
- To use the culturally acceptable communication channels to disseminate the key messages on the campaign.
  To identify and address issues regarding vaccination refusals/hesitancy. To provide crisis communication plan to provide prompt response to reported cases of AEFI.

Planning for social mobilization

Planning should be done well in advance, as part of the overall micro-planning for the Integrated Measles campaign. At each level regional, district and community), a work plan with objectives, activities, responsible persons and budget should be prepared. Planning for social mobilization should answer the following questions:

- What was learned from previous measles campaigns, and routine immunization?
- Who should be involved?
- What information or messages needs to be given to the various groups and possible barriers to these messages?
- What are the available and most effective channels of communication?
- What activities should be planned for and their timeline?
- Whom can be partnered with?
- What should be the roles of the various actors?
- What mechanisms will be used to monitor the implementation of community mobilization activities?
- What measures are in place to systematically conduct post campaign assessment?
- What measures are in place to cases of AEFI during and post campaign?
- What will be the strategies to reach the hard-to-reach and marginalized and mobile groups?

It is also important to consider other issues such as:

- Who are the hard-to-reach or vulnerable populations?

- Are there likely to be any resistant groups against immunization?

Activities to be included in the plan include advocacy activities, the launching (opening) ceremony, social mobilization, mass media engagement communication for behaviour change, and the budget. These are outlined below.

The launching (opening) ceremony:

The launching (opening) ceremony can be an important occasion if attended by eminent personalities. It is therefore crucial that any launching ceremony be planned in advance and conducted extremely well. Key public figures should be contacted *well in advance* to ensure their participation. During the launching ceremony, such eminent personalities are recommended to give Vitamin A and polio drops. **In view of injection safety precautions, measles injection should be administered only by a trained health provider.** In speeches that are made, all *participating* groups and individuals should be acknowledged. The event should be well covered by the media. The launching ceremony should also be used as an information dissemination opportunity and simple 'take away' fliers with key information should be distributed

Mobilizing the community:

Community mobilization activities are an integral part of the micro-plans. Integrated Measles campaign should reach all eligible children. This requires dynamic information flow with communities and parents by answering their questions, clearing misconceptions/fears and informing the unknowing partners or those simply busy. Clear messages, therefore, need to be designed and disseminated through methods that are suitable for reaching such parents and others who can influence or motivate them. While these methods include the traditional media, experience has shown that interpersonal communication or "word of mouth" plays a major role in informing and motivating parents/caregivers to bring their children. Therefore, social mobilization plans should give due importance and resources to this method of communication.

Social mobilization activities in the districts and communities should start at least 1 week before and be intensified in the last 4 days before the Integrated Measles campaign. While actual activities will depend on each community, these may include door-to-door canvassing, media (especially through the use of radio programs and spots), and announcing measles immunizations days at all community meetings, and religious gatherings.

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At every opportunity, acknowledge all participating agencies, groups and individuals. This gesture fosters continued support towards other similar national events.

Communities should actively participate in social mobilization!

<u>Communication for behaviour change</u>

Key Messages on Vaccination and Vitamin A Supplementation[1]

The key messages in respect of vaccination and Vitamin A supplementation are outlined below. It helps to put developed key message in a table featuring columns for primary target audience, secondary target audience, influencers/ opinion leaders, interface, communication channels and timeline.

IMMUNIZATION

Key messages on measles:

- Measles is a disease caused by a germ (the measles virus). The signs include a red, maculopapular rash over the whole body, fever and a runny nose or red eyes or a cough.
- A child with measles must be brought to the health facility for immediate medical attention. If not, the child can suffer from serious complications such as pneumonia, blindness and deafness. Complications of measles can kill your child.
- Vaccination is the only effective way to protect against measles.
- In routine services, all children should be vaccinated with 2 doses of measles at the age 9 months and 15 months.
- During the campaign, all children aged 6 months to 5 years should be vaccinated against measles, even if they were already vaccinated or had measles disease.
- Children receiving their first measles dose during the campaign should still receive their routine measles vaccination doses after 1 month as per the routine immunization schedule.
- There are no reasons for a child not to receive measles vaccination, even if the child is sick.
- Immunizations are offered free of charge in all health facilities and at community level.

Key Messages on Vitamin A

- Vitamin A is necessary for healthy child growth and development; it promotes good eyesight and helps children to defend themselves against infections such as diarrhoea and measles.
- Vitamin A deficiency (low levels of Vitamin A in the body) is a disease caused by not eating foods rich in Vitamin A.
- Children suffering from low levels of Vitamin A may experience poor eyesight, especially at night; complete blindness or have weak body defence against diseases.
- Administering Vitamin A supplements to all children aged 6-59 months every 6 months can prevent Vitamin A deficiency.
- It is also very important to eat foods rich in Vitamin A, such as breast milk, whole milk, liver, green vegetables, carrots and foods with yellow/orange/red colour e.g. paw paws, mangoes, sweet potatoes, pumpkins, palm oil and yellow maize.
- The measles campaign is an opportunity to give vitamin A supplements to the same children who will receive measles vaccination.

Key Messages on Albendazole

- Deworming using Albendazole is necessary for healthy child growth and development; it prevents worm infestation that can lead to anaemia (shortage of blood), underweight and stunting.
- Worm infestation is caused by drinking water or eating food that is contaminated with feaces from an infected individual or sometimes walking barefooted.
- Albendazole is given to all children from age 12 – 59 months every 6 months.
- Albendazole is safe for every child

Prepare materials in advance and distribute them on time

Posters, FAQs (leaflets), aprons, and banners should be designed, prepared and pretested, ordered and distributed in advance of the campaign. Most of the materials will be prepared at national level, however regional teams are encouraged to arrange some of them locally through the resources generate

Intensify Efforts in Under-served Areas

One of the key elements for successful campaigns is to reach zero dose and underserved children. Mobile populations such as pastoralists often move from place to place for livelihood, therefore it's crucial to track and list sites with mobile populations and prepare micro-plans for mobilization and coverage. Since rural areas are usually difficult to mobilize communities due to distances, social mobilization efforts through community leaders (nomadic elders) should be particularly strong. However, under-served populations living in densely populated urban areas should not be forgotten, especially IDPs.

Social mobilization efforts should prioritize underserved areas!

Efforts should be tailored to reach underserved populations, particularly minority groups or marginalized populations and religious communities that may resist public health interventions. Such efforts might include:

- The NMC holding preliminary meetings with opinion leaders of those communities.
- Followed by intense house-to-house visits by local volunteers from the same minority group.
- Working closely with leaders of the minority communities.

Ensuring that health professionals from the area are working at the immunization post.

Training

Ensuring effective Training

Training for measles campaigns should occur as a cascade. The national training of trainers should be followed by the training of the district health officers and vaccination teams at the district level. The trained trainers at the regions should in turn be responsible for training of vaccination team supervisors and post-level (vaccination team) workers by district. Training at each level should build the capacity of participants on the following points:

- Objectives of the Integrated Measles SIAs
- Dates of the Integrated Measles SIAs
- Target age group of under 5 years (0 to 59 months for Polio and 6 months to 59 months for measles) for the Integrated Measles SIAs and for the different interventions (Immunizations, Vitamin A, Albendazole and MUAC)
- Scope and strategy for the campaign
- Development of micro-plan
- Chronogram of activities and responsibilities with task lists
- Issues of social mobilization and responding to community and media concerns about the measles campaign
- How to prepare and manage an immunization post
- Screening for the different age groups
- How to take care of the vaccine and ensuring that cold chain is maintained
- How to reconstitute the measles vaccine
- How to safely administer measles vaccine by subcutaneous route using auto-destruct syringe
- How to prevent needle stick injuries by using the puncture proof containers
- How to safely dispose of the syringes
- How to administer OPV
- How to handle and investigate adverse events following immunization
- How to open and give the right dose of Vitamin A capsule to the appropriate age groups
- How to complete tally sheets, and logistics forms at each level
- Guidelines for supervision (Supervisory Checklist, Injection Safety Checklist and Exit interview)
- How to teach the same topics at the next level of service delivery.
- How to complete the data collection tools
- Report writing
- It is advisable to limit the overall duration of training to 2 days.

Key issues for Training:

It is crucial that all social mobilisers receive training in the following areas:

- Interpersonal Communication, accurate transmission of the key messages, especially during translation by script and song writers, Health Education, use of IEC materials,
- How to deal with false rumours, allay fears, persuade and convince.
- Crowd control, dressing, language, courtesy,
- How to do child tracing.
- Facts about measles, other vaccine preventable diseases, vitamin A deficiency, worm infestation, and MUAC
- Relevant facts about AEFIs, such as vaccine reactions, complications and actions parents/caretakers can take when child is not well after vaccination,
- Expected contributions from host communities, the roles of schools, religious organizations, NGOs, the private sector,
- Use of drama, songs, the participation of journalists, and how to motivate, mobilize the various groups of stakeholders to participate in the campaign.

Integrated Measles SIAs implementation

During the Integrated Measles SIAs

each vaccination team should vaccinate at least 150 children in urban areas and 120 in rural areas daily.

Steps to follow during administration of measles vaccines and supplements:

Step 1: Wash your hands

Wash your hands with clean water and soap or use hand sanitizer before reconstituting vaccines and handling supplements.

Step 2:

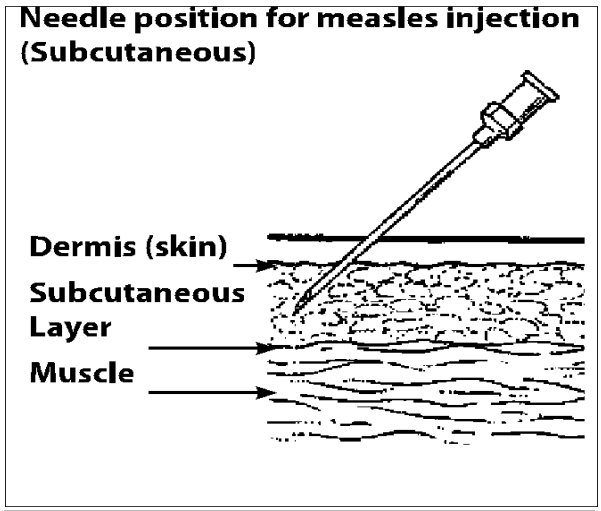
Wear gloves as per universal precautions.

Step 3: Inspect the vaccine vial or ampoule

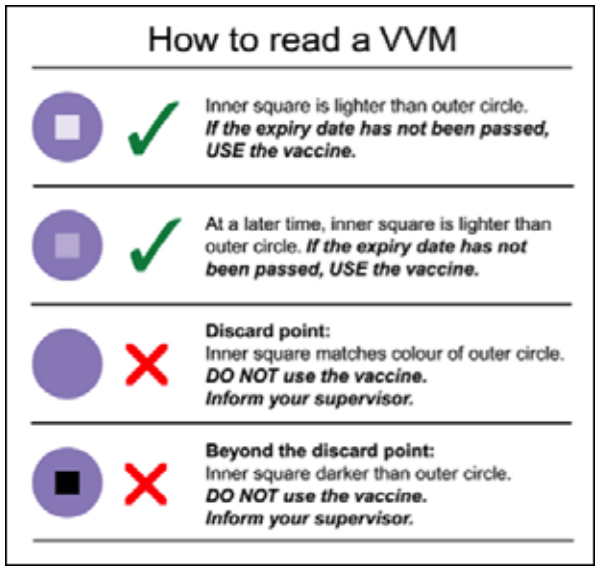
- Read the expiry date on the label to make sure that you can still use the vaccine. If the date has passed, discard the vaccine.
- Read the VVM to ensure that the vaccine has not been heat damaged. Discard all measles vaccines that have reached VVM Stage 3 or 4.

Step 4: Mixing– Read the label on the diluents, ampoule or vial

Make sure that you are using the diluents the manufacturer sent with the vaccine and the expiry date



Needle positions for administering various antigens



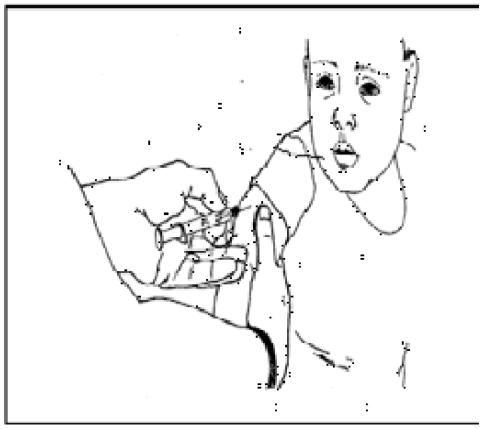
has not passed. Diluent must be pre-cooled before the campaign day by keeping diluents under same temperature of +2°C - +8°C with the Measles vaccine to be used the next day. **DO NOT GIVE COLD VACCINE WITH WARM DILUENT AND NEVER PRE-COOL DILUENT IN A FREEZER.** to avoid vaccine shock.

Step 5: Loading

- Use the standard 5ml AD syringe/needle to draw the reconstituted measles vaccine
- Always make sure that one 0.5ml AD syringe/needle is used for one child.
- For children above 6 months to 5 years old, ask the caretaker to carry and hold the child firmly. Make sure the child is calm before you display the syringe with the vaccine. BE PATIENT. For older children, invite them to sit down on the chair provided and reassure them before displaying the syringe with the vaccine.

Step 6: Injecting

- Clean the skin with cotton soaked in clean water (DO NOT USE ANTISEPTIC OR SOAP)
- Hold the child's arm from underneath. Your fingers should reach around the arm and pinch up the skin.
- Push the needle into the pinched skin to a depth of not more than 1 cm. The needle should go in at a sloping angle (45 degree), not straight down. Ensure that the needle is NOT in a blood vessel before pushing the plunger.
- Press the plunger with your thumb to inject the vaccine.
- Withdraw the needle and press with cotton wool over the injection site. If there is any bleeding, keep pressing with the cotton wool until the bleeding stops.
- **DO NOT RE-CAP THE NEEDLE**
- Discard the used syringe + needle into the assembled safety box immediately.
- **After administration of measles vaccine, ask the mother to remain at the vaccination site for <u>15 minutes</u> after injection, to observe in case of AEFI with rapid onset.**



Remember:

- Never pre-fill vaccine syringes to keep before the child comes.
- Do not touch the needle.
- Do not use the needle if paper cover is found open
- Do not inject a child in the buttocks - this may injure the sciatic nerve and cause paralysis of the legs and acute pain.
- Do not give measles vaccine to any child who has had an anaphylactic reaction following the administration of ANY vaccine.
- Measles vaccine can be safely given together with Vitamin A and OPV.

The following are NOT contraindications to measles vaccination

- HIV infection
- Malnutrition: Malnutrition is an indication to immunize. Malnourished children should be referred to the health centre for assessment and treatment after they have been immunized
- Minor illness: Low grade fever, mild respiratory infections, and diarrhoea. Sick children should be referred for treatment after they have been immunized.

Step 7: Keep the OPENED VIALS in the Sponge covering the vaccine carrier during the vaccination session.

Step 8: DISCARD RECONSTITUTED MEASLES VACCINE AFTER 6 HOURS OR AT THE END OF THE SESSION WHICH EVER COMES FIRST (read vaccine leaflets instructions)

- Always keep the vaccine carriers and cold box under the shade, to protect the measles vaccine from direct sunlight

Step 9: Tallying of administered dose of vaccines after vaccinating each child: ensure tallying is done in all documentation tools – card, tally and summary sheets.

Administration of Oral Polio Vaccine (OPV):

OPV must only be administered orally. Two drops are delivered directly into the mouth from the multidose vial by dropper. Care should be taken not to contaminate a multidose dropper with saliva from the vaccinated children. Once opened, multi-dose vials should be kept between +2°C and +8°C.

ADVERSE EVENTS FOLLOWING IMMUNISATION (AEFI)

Although vaccines are safe, no vaccine is entirely without risks. An adverse event following immunization (AEFI) is an occurrence of any medical condition following immunization that is believed to be caused by the vaccination. Serious AEFI's are very rare. However, since a large number of children will be vaccinated in a short time during measles SIAs, there is a slim possibility of observing AEFI's.

AEFI's are classified into five categories:

1. **Vaccine reaction:** An event caused or precipitated by the vaccine when given correctly; caused by the inherent properties of the vaccine.
2. **Program error:** An event caused by an error in vaccine preparation, handling, or administration.
3. **Coincidental:** An event that happens *after* immunization but **not** caused by the vaccine - an association due to chance.
4. **Injection reaction**: an event from anxiety about, or pain from, the injection rather than the vaccine.
5. **Unknown**: the cause of the event cannot be determined.

Most AEFI are due to program errors. However, all health workers should be prepared to recognize and respond to any AEFI, especially those that are dangerous. If a serious AEFI is not addressed immediately, a child's life could be in danger, and the vaccination program could be in jeopardy.

By monitoring AEFI during the campaign, health workers can detect and solve program errors quickly, and respond urgently to rare serious AEFI's. Health workers/ post coordinators/or supervisors should

respond to any reports rapidly to ensure that coincidental events are not falsely blamed on vaccinations, and to maintain the community's confidence in vaccinations.

Most vaccine-induced reactions are mild and will subside in few hours by themselves, usually a localized reaction at the injection site or fever >38^{o}C. Less common reactions are rashes or febrile seizures within 6-12 days of vaccination. Very rarely, thrombocytopenia (low platelets) occurs within 15-35 days, an anaphylactoid (severe allergic) reaction (within 0-2 hours), anaphylaxis (within 0-1 hour) and encephalopathy (6-12 days).

Severe AEFIs are very rare and if they happen, need to be dealt with by the health worker decisively.

- Treatment must always be the first response to an AEFI. All severe AEFI cases should be referred immediately to the nearest health centre or hospital for treatment.
- Cases of anaphylaxis should be treated at the health facility where the immunization took place or at the facility with an emergency kit that is closest to the immunization site.

Public health nurse and social mobilization personnel should be prepared to handle any fallout from potential AEFIs, especially to re-assure the community of the safety of the vaccine.

How do you report an AEFI?

Report immediately by phone, in case of a serious AEFI to your district public health nurse. Give the following mandatory information in your report:

Description of the event.	If available, also try to include the following information:
Timing of the event in relation to the vaccination.	Vaccine manufacturer and lot/batch number
The vaccine(s) given.	Diluent: Was the diluent used the same provided with the vaccine and from the same manufacturer - or was it accidentally replaced with another drug stored with the vaccine; or was non-sterile diluent or another substance used as diluent?
Patient's identifying details	Route and site of administration
(name, age, sex, address)	Name of vaccinator and supervisor
	Outcome (patient recovered? Died?)

\\

EMERGENCY PROCEDURE IN THE CASE OF ANAPHYLAXIS

Anaphylaxis is a very severe reaction, which may occur rarely after any injection including a vaccination. The patient collapses with signs of shock and breathing problems. If this occurs, follow the steps described below immediately.

1. Call for help and attend to patient immediately.

2. Check breathing and heartbeat.

3. If the patient is not breathing:

- **Secure the airway and ventilate**
- **If there is no heartbeat:**
- **Do CPR (cardio-pulmonary resuscitation)**

4. Give adrenalin 1:1000

- **Children under 3 years: 0.1 ml subcutaneous at once**
- **Children 4-5 years: 0.2 ml subcutaneous at once**
- **Children 5- 10 years: 0.3 ml subcutaneous at once**

5. Give adrenalin as follows: 1 ampoule diluted with normal saline to 10 ml in small amounts slowly IV. The heart rate should not exceed 160/minute.

6. Give hydrocortisone sodium succinate slowly IV in the following doses:

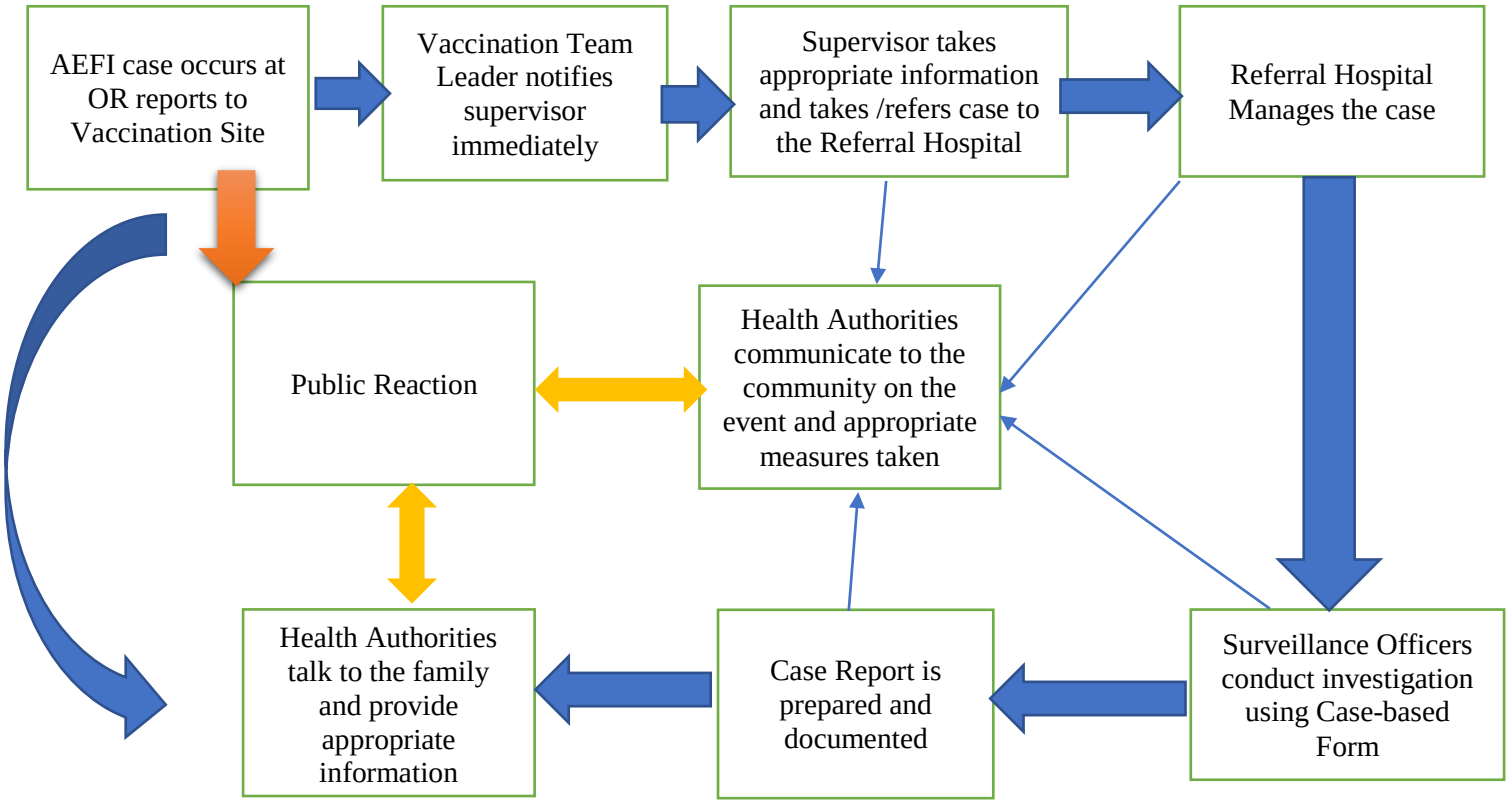
- **Children under 1 year: 100 mg**
- **Children 1- < 3 years: 200 mg**
- **Children 3- < 7 years: 300 mg**
- **Children 7- < 9 years: 400 mg**
- **Children 9 years and above: 500 mg**

7. Set IV drip and run the Normal saline drip fast

How to minimize AEFIs?

- Reconstitute measles vaccine only with the diluent supplied by the manufacturer.
- Discard reconstituted vaccines at the end of each immunization session (or after 6 hours) and NEVER retain them for use in subsequent sessions.
- Do not store other drugs or substances in the refrigerator other than the vaccines and diluents as these are potentially dangerous items that can be taken by mistake.
- Train vaccinators and supervisors to ensure that proper procedures are being followed to prevent deaths or injury following immunization.
- Conduct a careful epidemiological investigation in the' event of an AEFI (especially severe ones). This is critical to identify the cause of the incident, to correct immunization practices and prevent future AEFI's.

AEFI Reporting and Crisis Communication Channel



Injection Safety& Waste Management

All immunization injections are to be administered in such a way that does no harm the recipient, does not expose the health worker to avoidable risk and does not result in waste that puts others at risk.

A safe Injection is defined as an injection that:

Does not expose the Provider to any avoidable Risk
Does not harm the recipient
Does not result in any waste that is dangerous to other people including the community

One sterile needle and one sterile syringe should be used for each dose per vaccine and per child. This is necessary to prevent the spread of infection such as Hepatitis B &C, bacterial abscesses, HIV and other blood or skin borne pathogens.

Waste disposal

- Safety boxes should be used for collection of all sharp wastes at the point of generation.
- Safety boxes should be numbered so as to verify their return to the destruction point.
- Where available high temperature incineration of sharps is the best.
- Where incinerator is not available, then Burning and Burial in designated areas is recommended.
- Any other wastes should not be put into the safety boxes. Instead, other wastes (needle caps, cotton swabs, empty vials, empty Vit-A, syringes' covers, etc) should be disposed of in a bin and burnt regularly along with the safety boxes.

How to Administer Vitamin A and ALBENDAZOLE

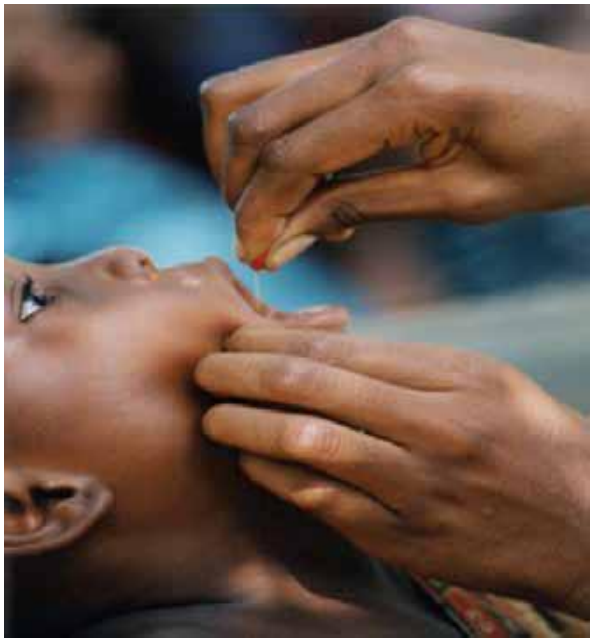
- **KEEP VITAMIN A AND ALBENDAZOLE OUT OF SUNLIGHT AND THE REACH OF CHILDREN.**
- **NO ICEPACKS ARE REQUIRED FOR VITAMIN A AND ALBENDAZOLE**
- **EXPLAIN THE IMPORTANCE OF THE VITAMIN A ADMINISTRATION AND DE-WORMING TO MOTHER**

Step 1: Ask the caretaker to hold the child firmly. Make sure the child is calm. BE PATIENT
Step 2: Give 1 capsule of 100,000 I.U to children aged 6 – 11 months and 1 capsule of 200,000 IU to children aged 12 – 59 months (Give children aged 6-11 months 1 blue capsule of Vitamin A or 4 drops; **Give children** aged 12-59 months 1 red capsule of Vitamin A).

Step 3: Cut the nipple off the capsule with scissor and immediately squeeze the drops of liquid into the child's mouth or unto the child's tongue.

DO NOT DROP THE CAPSULE INTO THE CHILD'S MOUTH OR ALLOW THE CHILD TO SWALLOW THE CAPSULE

ENSURE YOU TALLY EACH CHILD RECEIVING VITAMIN A ON THE TALLY SHEET



Step 4: Check if the child is comfortable after swallowing the Vitamin A drops

Step 5: Put all the empty capsules into the plastic bag. **DO NOT THROW THEM ON THE GROUND**

Step 6: Give 1 tablet of Albendazole 200mg (if available) or break the 400mg tablet to children 12 – 23 months and 1 tablet of 400mg to children 24 – 59 months. Give crushed albendazole tablet with water to 12-23 months children with water, while to the older children, offer tablet to chew or swallow with water.

- **GIVE ANSWERS TO QUESTIONS FROM CAREGIVERS AND CHILDREN IN A FRIENDLY AND RESPECTFUL MANNER.**
- **ALWAYS THANK THE CAREGIVER AND/OR CHILD FOR PARTICIPATING IN THE INTEGRATED MEASLES SIAs**
- **ADVISE CAREGIVERS WITH CHILDREN UNDER-ONE TO CONTINUE AND COMPLETE THE ROUTINE VACCINATION SCHEDULE IN THE NEAREST MCH**
- **Advice parents to keep immunization cards safely**

Training must include the simple steps that should be taken to save a child's life, if he/she chokes.

At the end of the session

- Discard reconstituted measles vaccines at the end of the session
- Review tally sheets and fill in the daily summary forms together
- Transport safety boxes to the designated cold chain sites for safe disposal
- Return unused vaccine and vaccination supplies to the designated cold chain centre

- **Each immunization post should have safety boxes**
- **Close each safety box once it has 100 Syringes and mark (X) as FULL.**

Supervision, Monitoring and evaluation

Supervision is necessary to ensure quality of planning and implementation. The success of the Integrated Measles SIAs will largely depend on the work of motivated and hardworking supervisors who assist in the campaign preparations, support training and who identify and solve problems or refer issues to the next management level. Supervisors should be equipped with transport in order to bring extra and essential supplies with them during visits, such as forms, social promotion materials, guides, (vaccine when appropriate) and any needed funds for activities. The supervisors should be thorough and systematic when performing quality control checks and to ensure that:

- Pre-Integrated Measles SIAs phase: plans are adequate, and estimations are correct
- During implementation: good quality vaccines are safely given
- Post-Integrated Measles SIAs: all children in the target group have been reached and wastes have been safely disposed of.

Campaign Evaluation

This should involve both qualitative/process findings based on the results of the supervisors.' reports and analysis of checklists as well as quantitative coverage results. Immunizations given during supplemental activities must be tallied, compiled, analysed and reported.

Annexes

ANNEX 1: Checklist for Preparedness Monitoring of Integrated Measles SIAs

Annex 2: Observation Checklist for Supervisors of Integrated Measles SIAs

ANNEX 3: Rapid Convenience Survey Tool for Integrated Measles SIAs

ANNEX 4: Reporting Form for Adverse Events Following Measles Immunization

ANNEX 5: Measles Campaign, Technical Reporting Format

ANNEX 6: Measles Line - Listing Form.

ANNEX 7: Field Validation of Micro plan Integrated Measles-Polio SIA

ANNEX 8: Integrated Measles-Polio SIAs Microplan (MP) desk review checklist

ANNEX 9: Measles Vaccination Tally Sheet

ANNEX:10 Child Vaccination Card

ANNEX: 11 DFA Daily summary sheet

ANNEX 1: Checklist for Preparedness Monitoring of Integrated Measles SIAs

Pre-Campaign Checklist

Name of Observer:_____ Designation:_____ Date:__/__/2022

District:_____ Region:_____

This checklist will guide Reginal level Monitors to assess campaign preparedness. Please visit District health offices/MCH as per your assigned supervision level to critically and objectively assess the variables below. With utilization of health diplomacy competencies, meet health staff, local leaders and guardians to assess the variables listed for each. Record and report any observations and recommendations for resolving problems and follow-up.

Date of visit:	Regions:		
Health Facility:	Observer:		
District			
	Yes	**No**	**Comments**
Planning and Coordination			
Micro plan developed?			
High-risk areas & populations identified? Special strategies defined?			
Mechanism for effective partner/inter-sectoral coordination in place?			
Have the health workers been trained prior to the campaign?			
Social Mobilization			
Is funding available for this campaign?			

Is the social mobilization committee functional?			
Is there high-level advocacy for the campaign?			
Are there adequate quantities of IEC materials and have they been distributed?			
Do community members know about the campaign dates and targets?			
Were community dialogue sessions held before the campaign?			
Is this level up to date in the implementation of planned social mobilization activities?			
Logistics and Supplies			
Do you have adequate capacity for storing vaccines, diluents and injection materials?			
Have you commenced freezing adequate ice-packs?			
Do you have a distribution plan (vaccines, injection materials, safety boxes, cotton wool, Vit A, Albendazole and finger markers) in place and means of transport?			
Do you have adequate copies of data collection tools? tally sheets and vaccination cards, AEFI forms…			
Injection Safety and AEFI			

Annex 2: Observation Checklist for Supervisors of Integrated Measles SIAs Campaign
Site Parent Survey v1.19

Do health workers understand how to use and dispose AD syringes?			
Do you have adequate safety boxes?			
Do you understand AEFI procedures and have reporting forms in place?			
Waste Management Practices			
Do you have a waste management plan? Please explain the waste management plan in place.			
Other observations:			

Name of Observer: **Designation:** **Date:** **Day:**

District: **Settlement Type:**

(Circle one)
DFA: **Name of Site:**

Type of Site ☐ **School (S)** ☐ **Outreach (O)** ☐ **Fixed/MCH/HF (F)** ☐ **Mobile (M)**

While observing a Measle vaccination Site, complete this questionnaire with a random sample of 5 to 10 parents/caregivers.

Parent/Caregiver:		**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL Y**
1. Was the caretaker aware of campaign before it started? (Yes = 1; No= 0) If No, skip to Q 2.												
1a. <u>If yes</u>, how did they learn about the current IPV campaign? (Multiple responses possible)	Radio											
	TV											
	Poster											
	Health workers/ Vaccinators											
	Religious/ Community leader											
	Social Mobilizer											
	Mosque Announcement											
	Megaphone											
	Neighbours/ Friends											
	Others (specify)											
2. Have you come across a chid with fever and rash in a child <5 years in the past 3 months? (Yes = 1; No= 0)												
3. Number of children 6-59 months in the caregiver's household currently												
4. Number of mentioned children above brought to the site for vaccination												
5. Before this campaign, did all the children receive measles vaccine? (Y = all received N=if one or more missed)												

Annex 3: Rapid Convenience Monitoring Tools

HOUSE-TO-HOUSE MONITORING FORM

Region: _____	District _____	Vaccination Team Supervisor (name) _____
Date of visit _ _/ _ _ / _ _ _ _	Day of campaign ____	Post Name _____
Monitor Name(s): _____		Additional location information (optional):
AGE OF ELIGIBLE CHILDREN: _____		

HH Number	No. Eligible Children in HH	No. Eligible Children VACCINATED IN CAMPAIGN (CARD/FINGERMARK /RECALL)	If ANY unvaccinated, reason (see list below)	If reason is REFUSAL, reason (see list below)	HH is **COMPLETELY VACCINATED** 1 = YES 0 = NO
	(A)	(B)	(C)	(D)	(E)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
	TOTAL NO. ELIGIBLE CHILDREN	**% OF ELIGIBLE CHILDREN VACCINATED = (B/A)*100 =**			**TOTAL NO. COMPLETELY VACCINATED HHs**

C: REASONS FOR BEING UNVACCINATED
(select all that apply for the HH)
1 - Child was absent/away from home
2 – Unaware of the campaign/ location of post
3 – Vaccine post too far away
4 – Vaccine post did not have vaccine
5 – Plan to go later today/tomorrow
6 - Child is already vaccinated
7 - Refusal
8 - Don't know/decline to respond
9 – Other _____

D: REASON (CARETAKER) REFUSED
(Column C = 7)
(select all that apply for the HH)
1 – Child was sick
2 – Religious beliefs
3 – Fear of vaccine
4 – Respondent does not make that decision
5 – Don't know/decline to respond
6 – Other _____

OUT-OF-HOUSE MONITORING FORM

Region: _____	District _____	Vaccination Team Supervisor (name) _____
Date of visit _ _/ _ _/ _ _ _ _	Day of campaign ____	Post Name _____
Monitor Name(s): _____		Additional location information (optional):
AGE OF ELIGIBLE CHILDREN: _____		

CHILD No.	Where was the child located (example: markets, schools/madrassa, bus stations, water points, border crossings, fields, play grounds)	**Age of child**		CHILD VACCINATED in campaign? 1 = Vaccinated 0 = Unvaccinated	NOTES/COMMENTS (OPTIONAL)
		record age in years if child ≥ 1 year	**record age in months if child <1 year**		
(A)	(B)	(C)	(D)	(E)	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
TOTAL out of house children _____				Total out of house children VACCINATED _____	

1) % VACCINATED = (TOTAL OF COLUMN E/A) * 100 =

Guidelines:

- Conduct the survey on the days of the campaign.
- Complete 1-2 assessments of 20 children in each selected high-risk area or population.
- Record measles and Polio vaccination.
- Direct all unvaccinated children to the nearest vaccination post.
- If more than 2 children are unvaccinated, intensify mobilization in the area immediately.
- Use the reasons given for non-vaccination to strengthen social mobilization.
- Remind all caretakers to take their children for all routine immunizations.
- Submit all completed sheets to the regional or national campaign coordinators.

ANNEX 4:

Reporting Form for Adverse Events Following Measles Immunization

*Patient name: *Patient's full address: Telephone: Sex: ☐ M ☐ F ***Date of birth*: _ _ / _ _ / _ _ Or Age_ _ _ _** *Date of onset:* _ _ / _ _ / _ _ Today's date : _ _ / _ _ / _ _	*Reporter's name: Institution: Designation & Department: Address: Telephone & email: Date patient notified event to health system: _ _ / _ _ / _ _

Health facility (place or vaccination centre) name & address:

Vaccine						Diluent (if applicable)			
Name of vaccine	***Date of vaccination***	***Time of vaccination***	Dose (1st, 2nd, etc.)	***Batch /Lot number***	Expiry date	Name of diluent	***Batch /Lot number***	Expiry date	Date and time of reconstitution

*Adverse event(s):
Severe local reaction ☐ > 3 days ☐ beyond nearest joint ☐
Seizures ☐ febrile ☐ afebrile ☐
Abscess ☐
Sepsis ☐
Encephalopathy ☐
Toxic shock syndrome ☐
Thrombocytopenia ☐
Anaphylaxis ☐
Fever ≥ 38°C ☐
Other (specify).....

Date AEFI started : _ _ / _ _ / _ _
Time _ _ _ _ _
Describe AEFI (signs & symptoms):

*Serious: Yes ☐; If Yes Death ☐ Life threatening ☐ Persistent or significant disability ☐
Hospitalization ☐ Congenital anomaly ☐ Other important medical event ☐
(specify).....

*Outcome: Recovering ☐ Recovered ☐ Recovered with sequelae ☐ Not recovered ☐ Unknown ☐
Died ☐ If Died, date of death : _ _ / _ _ / _ _ Autopsy done: Yes ☐ No ☐
Unknown ☐

Past medical history (including history of similar reaction or other allergies), concomitant medication and other relevant information (e.g. other cases). Use additional sheets if needed:

Past medical history (including history of similar reaction or other allergies), concomitant medication and other

relevant information (e.g. other cases). Use additional sheets if needed:

First decision-making level to complete:

Investigation needed: Yes No	If yes, date investigation planned : _ _ / _ _ / _ _

National level to complete:

Date report received at national level _ _ / _ _ / _ _	AEFI worldwide unique ID :
Comments:	

*indicates compulsory field

ANNEX 5:

Integrated Measles Campaign, Technical Reporting Format (Narrative)

Regions: _____

SIA Dates	
Target population	Measles:
	Vit. A:
	OPV:
Total Number of children vaccinated	Measles:
	Vit. A:
	OPV:
% of children immunized by	Fixed strategy:
	TVP
	Mobile strategy:
	Other strategies
Human Resources for Integrated Measles SIAs	Number of vaccination teams
	Number of health workers
	Number of volunteers
Number of vehicles hired	
Vaccine utilization	Total Measles Vaccines received:
	Total measles Vaccines discarded:
	Balance of Vaccines (physical stock count):
Vaccine quality Icepacks in cold box: Yes/No How many, Please indicate No. Vaccine carriers Yes/No How many	Expiry dates of vaccines OPV Measles Vit. A
	Thermometers in vaccine carriers
	Icepacks monitored during process
High level commitment at regional/ district level	Yes/No If yes, Please indicate who If no, Please explain
Hard-reach-children immunized: Yes/No	If Yes: Which strategies were used e.g.: If No: Please explain, why not?

Number of vehicles used	MoHSS:
	Line Ministries:
	NGOs/UN Agencies:
	Private cars:
	GRN Garage:
	Hired vehicles:
NIDs used to improve routine immuni- zation	YES/NO If yes, please explain how If no, why not?
Any information shared on routine EPI services during NIDs Yes/No Please elaborate	
Number of children immunized with zero doses	
Cost/child immunized	
Major national/local partners involved Please list	
3 Major problems	
3 Major achievements	
3 Major lessons learnt	

ANNEX 6: Measles Line - Listing Form.

Measles Outbreak Investigation Line Listing Form

Ministry of Health _____

Site name address_____

Contact Person Name & ph. #:_____

Date first reported_____

No	Name	Age	Rash onset date	Source of Exposure	Measles Vaccine(Y/N), If yes - first dose date	Vaccine second dose date	Lab done? (Y/N), if yes, specimen collection date and result: IgM/IgG and/or viral isolation	Case Status	Parent/ Guardian Name, Phone #

ANNEX 7: Field Validation of Integrated Measles Microplan

	Field Validation of Micro plan Integrated Measles SIA										
	National:			**Date of Campaign:**				**Date of validation:**			
	District:			**Designation:**				**Agency (MOH/WHO/UNICEF):**			
	Name of validating person:			**Number of DFAs in the district:**							
	Code of DFA whose area is being validated:										
	Number of Teams:		**Number of Outreach sites:**			**Number of Fixed sites:**					
	Has this area been self-validated by the DFA for this campaign? Yes/ No, **In each DFA to be validated, all teams' areas will be validated. In each team area, select one day work and validate as per the questions below. Use District Microplan, DFA maps and Team level operational plan to conduct this activity.**										
	Field Validation Variables (Tick appropriate) (Tick "Not Matching" if field is different from the Microplan or map)	**Team 1**		**Team 2**		**Team 3**		**Team 4**		**Team 5**		**Score**
		Matching	**Not Matching**	**Matching**	**Not Matching**	**Matching**	**Not Matching**	**Matching**	**Not Matching**	**Matching**	**Not Matching**	
1	From the DFA map and cross verify borders – Bordering DFAs, districts, regions											
2	On one day area, Select the 1st outreach site as per the microplan and Map – Verify site location and name											
3	In the same day, Select the 2nd Outreach site as per the microplan and map- verify site location and name											
4	In the same team area, Select the 3rd outreach site as per the microplan and Map Verify site location and name. Space is adequate											
5	Verify the fixed site location and name											
6	Verify the referral hospital location and name											
7	Cross-verify any High Risk Population settlement found in the field with the map.											
	Signature of Reviewing Person: _____Submitted To:_____											

Total Score (matching (Yes=1) Not Matching (No = 0)					
Over all %					

100 % Pass, 90-99% Needs improvement and < 90% fail

ANNEX 8: Integrated Measles SIAs Microplan (Desk review checklist)

Integrated Measles SIAs Micro-Plan (MP) desk review checklist)

Name of the Reviewer		**District**			
Date of Review		**Campaign**		**Total No of DFA**	
DFA Code	**1:**	**2:**	**3:**	**4:**	**5:**

Sr #	Major Component	Indicators Assessed (Yes = 1 and No = 0)	DFA					
			1	2	3	4	5	Total Score
1	Human Resource	Is this MP Developed/Updated for current campaign?						
2		DFA Summary Sheet updated						
3		Operational Plan (Team wise Day wise plan) developed for each team						
4		Does all teams have the 2 skilled persons						
5		Does all teams have 2 polio members, 1 team assistant and 1 SM?						
6		Does the Teamwork load rationalization (150 Urban / 120 Rural)						
7	High Risk Population coverage plan	Does the MP have High risk population Coverage Plan						
8		If Yes, does it indicate type of HRP?						
9		Does the MP indicate the name of the outreach and team assigned for the HRP?						
10	Vaccination Sites	Does the Operational plan have at least 2 sites identified per day for each team?						
11		All sites have names?						
12		All sites have numbers of target households / children?						
13		Is the fixed site identified and named?						
14	Logistic Plan	Logistics plan present with supplies equal to target population? (Check all supplies)						
15		Is the Vaccine distribution among teams according to the requirement (target)?						
16	Teams/AICs Training Plan	Training plan (DFA and Team) is present						
17		Does this plan include Date, Time and Venue for Training						
18		Does training plan include Name of Facilitators						
19		Does Training Plan include the plan for catchup training?						
20	Social Mobilization plan	District Social Mobilization Plan available						
21		If Yes, does it includes plan for Polio Walk and Inauguration details						

22		Does it include the detail of Masjids where the Imam will talk about polio and RI during Juma speech?						
23		Does It Include plan for coverage of missed children through engagement of community?						
24	Supervision plan	Need based Supervision plan available						
25		Does the Supervision plan include Date, Time, and venue for visit?						
26		Does this plan include reasons for selection of specific team/DFA to be visited?						
27	District Map	Does area of this DFA is included and highlighted in District level Map						
28		Does the map clearly mark DFA borders						
29		Does the map indicate Fixed sites and referral hospitals for AEFI?						
30	DFA Map	Does DFA Map included team wise day wise boarders for all teams						
31		Clear Labelling of landmarks						
32		Does the map clearly indicate the major outreach sites per team?						
33		Does the map have Clear identification of High-Risk Population groups- IDP camps, Nomads, Inaccessible						
34	Team Map	Does DFA have separate team map for all teams						
35		Does the map have day wise work division per team						
36		Does map indicate the major outreach and fixed site for each day						
		Total Score (Yes=1 and No = 0)						
		Over all %						

100 % Pass, 90-99% Needs improvement and < 90% fail

Any other comments (regarding any domains not mentioned above)

_____

Signature of Reviewing Person:_____ Submitted To: _____

Annex 9: Measles vaccination campaign Tally sheet

MINISTRY OF HEALTH, SOMALILAND

Daily Tally Sheet for Integrated Measles Campaign

Vaccination Team Code:	**Regions:**		
Name of Vaccination Site:	**Region:**	**Date:**	
Name of Health Facility:	**District:**		
Vaccination Team Type	**Fixed** ☐	**Outreach** ☐	**Mobile** ☐

Antigen / Intervention	Age						Age												Zero-Dose Children				
	6-11 months					Sub-total	12 - 59 months									Sub-total	Total	06-11months		12-59months		
Measles	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000		00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000			00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000		00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000			00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

	0 -11 months					Sub-total	12 - 59 months									Sub-total	Total	0-11months		12-59months		
OPV	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000		00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000			00000 00000	00000 00000	00000 00000	00000 00000	00000 00000
	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000		00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000			00000 00000	00000 00000	00000 00000	00000 00000	00000 00000

	6 -11 months (100,000 IU)					Sub-total	12 - 59 months (200,000IU)									Sub-total	Total					
	00000 00000	00000 00000	00000 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	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000		00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000							

	12 - 23 months (200mg)					Sub-total	24 - 59 months (400mg)									Sub-total	Total					
	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000		00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000							
Albendazole	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000		00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000	00000 00000							

Antigen	Unit	Received	Returned	Name of Vaccination Team Leader: ___________________________ Signature_______

Measles vaccine	Vial																		
Measles diluent	Vial			Comments of the supervisor:															
OPV	Vial			1) _____															
Vitamin A	Tin			2) _____															
Albendazole	Tin			3) _____															
AD syringe (0.5ml	Pieces			Name of Supervisor: _____ Signature_____															
Mixing Syringe (5ml)	Pieces																		

Annex 10: Child Vaccination card

MINISTRY OF HEALTH Development -

Child Vaccination Card for Integrated Measles SIA - 2022

Date: _____
Child's Name_____ Age (Months)_____
Mother's Name_____ Sex_____
Residence_____ Health Facility Name: _____
Vaccination Site: _____ District: _____
Region: _____

Services Administered		
S/No.	*Intervention*	*Tick appropriate box*
1	Measles vaccine	☐
2	Polio vaccine (bOPV)	☐
3	Vitamin A	☐
4	Albendazole	☐

Annex 11: Team supervisor Daily Summary Sheet

Measles integrated SIA, 20

District Supervisor DAILY SUMMA

State: **Region:** **District:**

Name of District Supervisor

Date:

No of team supervisors	Measles administered		Vitamin A administered		Albendazole		OPV administered		Polio Zero-Dose		Measles Zero-Dose				
	6-11 m	12 - 59 m	6-11 m	12 - 59 m	12-23 m (200mg)	24-59 m (400mg)	0 - 11m	12 - 59 m	Zero-Dose: 0-11m	Zero-Dose: 12-59m	Zero-Dose: 6-11m	Zero-Dose: 12-59m	Vials of Measles vaccine	No. of AD syringe	No. of mixing syringe
0															
TOTAL															