
# VACCINE
## COVERAGE SURVEY
## EWARN
## NORTHEAST SYRIA
July 2021

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وحدة تنسيق الدعم
ASSISTANCE COORDIANTION UNIT

EWARN
EARLY WARNING
ALERT AND
RESPONSE NETWORK

# ABBREVIATIONS

| | |
|---|---|
| ACU | **Assistance Coordination Unit** |
| EWARN | **Early Warning Alert and Response Network** |
| SIG | **Syria Immunization Group** |
| NGO | **Non-Governmental Organization** |
| WHO | **World Health Organization** |
| UNICEF | **United Nations Children's Fund** |
| BMGF | **Bill & Melinda Gates Foundation** |
| SIAs | **Supplementary Immunization Activates** |
| MOV | **Missed Opportunity of Vaccination** |
| PPEs | **Personal Protection Equipment's** |
| DLO | **District Level Officer** |
| NES | **Northeast Syria** |
| QRC | **Qatar Red Crescent** |
| VPDs | **Vaccine Preventable Diseases** |
| PPEs | **Personal Protective Equipment's** |
| INGO | **International Non – Governmental Organization** |
| TPM | **Third Party Monitoring** |
| REC | **Reach Every Child** |
| GIVS | **Global Immunization Vision and Strategy** |
| GVAP | **Global Vaccination Action Plan** |
| TOT | **Training of Trainers** |
| EPI | **Expanded Program on Immunization** |
| BCG | **Bacillus Calmette Guerin** |
| IPV | **Inactivated Polio Vaccine** |
| OPV | **Oral Polio Vaccine** |
| MMR | **Measles, Mumps & Rubella** |
| MR | **Measles & Rubella** |
| TT | **Tetanus Toxoid** |
| Hep B | **Hepatitis B** |
| Penta | **Pentavalent vaccine (DTP - Hep B - Hib)** |

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# ACKNOWLEDGMENT

This vaccination coverage survey was planned and implemented in favor of Assistance Coordination Unit (ACU). EWARN is the technical program that represents the head of core team and oversight of all phases and activities of the survey and own its results. The survey was conducted by independent volunteer staff in Tell Abiad and Ras Al Ain districts. Survey data was analyzed by EWARN Technical support team, Dr. Mohammed Salem, Dr. Amar Al-Ani, Dr. Anas El-Ftaieh, Dr. Turki Daher, and Dr. Wael Alfadel who have imparted their expertise in supporting the survey while program manager supported the planning and implementation of the survey throughout all phases as the head of survey core group. Thanks to the EWARN data management unit, Eng. Hiba Alwan, Eng. Jamal Jaadan who provided immense help in establishing the data base of the survey and providing critical analysis to dose validity and mapping. Also, we would like to extend our thanks and appreciation to Mr. Mamdouh Samuel for supporting the survey using BMGF funds. Finally, we would like to express our deep appreciation for the dedication of field workers and independent field supervisors from Qatar Red Crescent (QRC), those who completed the work with high quality and according to plans.

# EXECUTIVE SUMMARY

The vaccine coverage cluster survey (VCCS) was conducted in two districts accessible for EWARN and SIG teams in NES. The two districts of Tell Abiad and Ras Al Ain are parts of two governorates of Ar-Raqqa and Al-Hasakeh respectively, but due the political situation and accessibility in addition to the geographical location they could be considered as one. The area consists of 5 subdistricts and 604 communities. 30 clusters were selected based on the selected methodology that followed the cluster sampling approach promoted by the World Health Organization (WHO). The overall purpose of this cluster survey is to provide information on vaccine coverage of children under 5 years of age who are living in military conflict-affected areas in NE Syria and thought to be either deprived from health care services including vaccination or receiving late vaccine doses at ad hoc basis and remain susceptible to vaccine preventable diseases for long time. This information is collected to guide decision-makers of local authorities, WHO, UNICEF and all other partners included in Syrian Immunization Group and beyond. The sampling frame was developed where each sub-district was considered one stratum and a sample was selected independently from each stratum. The sampling method used followed the cluster sampling approach promoted by the World Health Organization (WHO). Survey planners opted to start an advocacy plan to facilitate field work and interview families in selected houses; in addition, Lessons learned from the previous vaccine coverage survey that carried out by EWARN in northwestern Syria in 2018 are considered where the data collection forms, and some definitions were updated to cope with prevailing circumstances. The survey was conducted in July 2021 and 630 children 12-59 month of age were included in the analysis.

The cluster survey showed overall trend of low coverage for most essential antigens in surveyed age groups where coverage results were shown as 65.71%, 44.76%, 63.33%, 37.62%, 40.00%, 17.57% for BCG, Hep B, Penta1, Penta3, MMR1, TT5+ respectively. The low coverage of valid doses indicates that children in these areas did not get essential doses at proper age at vaccination, consequently, are more susceptible to outbreaks of vaccine preventable diseases (VPDs).

In general, the coverage in the 24-59 months age group is higher than 12-23 months category, and the reason for this is that vaccination services have been suspended in these areas for at least the last three years. All cadres had abided by the recommendations of working in context of Covid -19 pandemic in terms of following the criteria for IPC (wearing masks - hand sanitizing - physical distancing) in all stages.

The survey was funded by Assistance Coordination Unit (ACU) through BMGF and technically supported by (BMGF), The results of the survey are owned by ACU where dissemination of results will be decided by competent authority.

# INTRODUCTION

The World Health Organization has managed to build up effective cooperation with its Member States and provided technical support in the field of vaccine-preventable diseases since 1975.

Since 2011, Syria has been suffering from extremely difficult security situation due to armed conflicts where number of basic services were hampered and greatly affected. Education, WASH, protection and at the top of the list the health-related services. Expanded program of immunization has lost most of its infrastructure and its services declined or stopped due to lack/difficult supply of vaccines, especially in areas outside governmental control (currently served by EWARN, SIG and other partners). As a result, immunization levels (DPT3) have decreased from > 80% prior to 2010 to ~ 40% in 2014; polio resurfaced in 2013 after 14 years of Syria being polio free country. On other side, recent history of vaccinated children less than 5 years of age indicates that the number and frequency of SIAs in NES are not enough to protect against vaccine preventable diseases.

Tell Abiad and Ras Al Ain – unlike NWS – did not receive any support for routine vaccination, given that all NGOs operate only in NWS. This situation predisposed to the two polio outbreaks in 2013 and 2017 which were detected by ACU/ EWARN surveillance network.

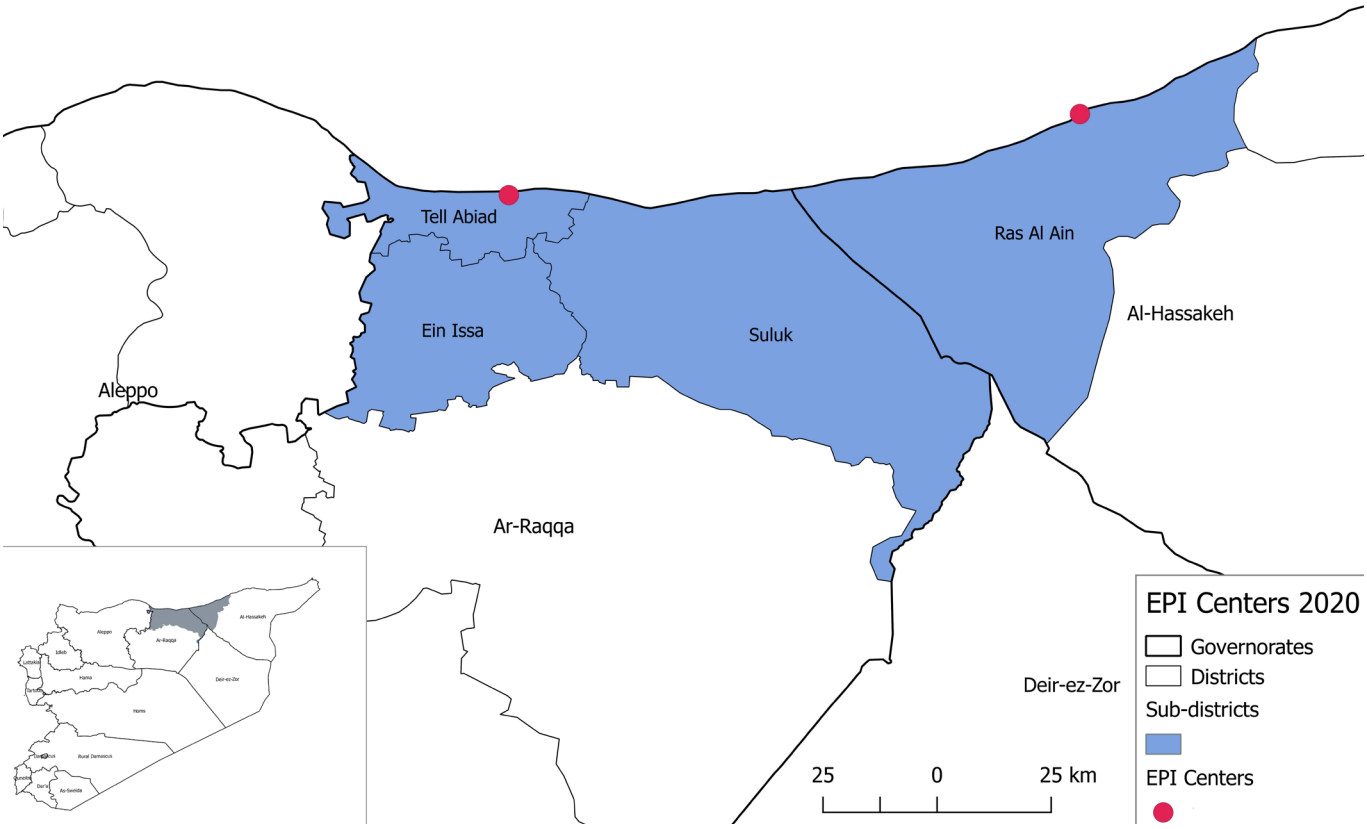
This established the foundation for the two polio outbreaks in 2013 and 2017. The two outbreaks were detected by ACU/ EWARN surveillance network.

At present, there are only two EPI centers supported by EWARN, one in Tell Abiad and the other in Ras Al-Ain. Immunization services in these two centers are provided through fixed sessions and cover between 30% to 40% of the targeted population, in addition to two OPV campaigns implemented in 2020.

In this situation, EWARN planned in near future to implement a household cluster survey to assess the vaccination coverage in NES.

A vaccine coverage survey is useful in providing the opportunity for the health workers to understand where they are standing and enables health planners to develop necessary plans for establishing a routine immunization program and implement supplementary immunization activities (SIAs) to build up satisfactory and protective immune response.

Map 01: EPI Centers in Tell Abiad and Ras Al Ain.



## PURPOSE OF THE SURVEY

The overall purpose of this cluster survey is to provide information on vaccination coverage in targeted area to guide decision makers in policy planning.

## OBJECTIVES OF THE SURVEY

1. To assess vaccine coverage of different categories of children and mothers including the following:
    - Mothers who gave birth to infants 0 – 11 months of age, for vaccination against tetanus.
    - Children (12 – 23mos) for all antigens included in vaccination schedule,
    - Children (24 – 59mos) for all antigens included in vaccination schedule,
2. To identify reasons of un-vaccination in all categories.
3. To assess coverage of Syrian children with valid doses.
4. To set up specific recommendations to improve the routine immunization program.

## PLANNING PROCESS

- ✔ Development of sampling frame and selection of clusters.
- ✔ District Level Officers (EWARN/DLO) were appointed as district coordinators.
- ✔ Selection of independent field supervisors (from Qatar Red Crescent).
- ✔ Develop Macro and Micro-plans.
- ✔ Independent interviewers from community; Mixed teams (male and female) volunteers.
- ✔ Modified data collection tools and forms.
- ✔ Training of interviewers, supervisors, and coordinators.
- ✔ Development of advocacy plan.
- ✔ Adopt WHO training material

## METHODS

The methodology of the cluster survey for vaccination coverage conducted based on the WHO immunization coverage cluster survey reference manual.

## MAIN STEPS

- This Survey conducted according to WHO guidelines.
- Identify number of clusters (30 as total).
- Identify number of children (21 per cluster).
- Each cluster includes 3 age categories (7 child in each category):
  (Children 0–11 months, 12–23 months & 24–59 months).
- Survey duration: 4 days.
- The implementer: EWARN and QRC staff.

## SAMPLING

Each sub-district considered as a stratum, and the sample was selected independently from each stratum.
Sub-districts and clusters were randomly selected according to Probability Proportion to Size (PPS), which ascertains that the probability of a sampling unit being selected in the sample is proportional to the population size of the sampling unit. In the second stage, the selection of the required number of children was drawn from each of the selected clusters.

## CLUSTER SELECTION

Number of clusters are selected proportional to size of population, then identified by sub-division of each subdistrict using detailed maps.

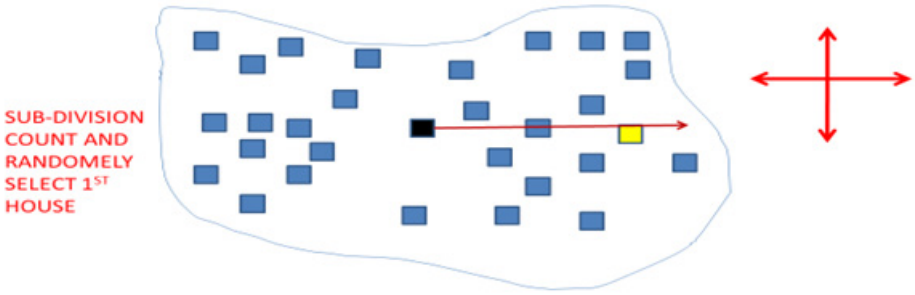
# DATA COLLECTION PROCEDURE
# SELECTION OF FIRST HOUSE IN A CLUSTER

The method for selecting the first house will vary according to the population density (rural versus urban areas) and whether household lists are available.

## IN RURAL AREAS

In case of household lists are not available and there are more than 60 households in a cluster or at least (300 - 350 population), and it is not feasible to number them the first household will be selected by randomly choosing a direction from central location in the cluster, and then counting the households along that directional line to the edge of the cluster area and randomly selecting one of them.

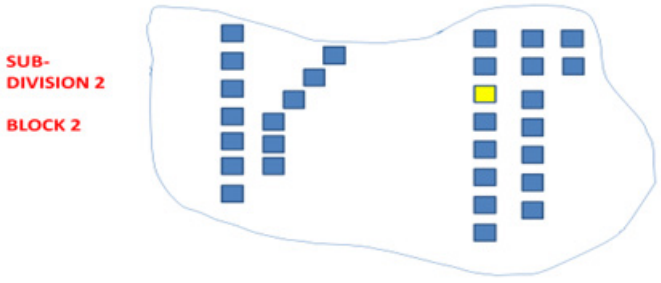
Figure 01: First house selection– Rural area




## IN URBAN AREAS

If subdivisions exist, one subdivision will be selected randomly to indicate the subdivision in which the initial household is located. Consequently, if a household list exists for that subdivision, the first household to visit will be selected by following the procedure described above for rural areas where household lists are available. If these lists are not available, we will follow the method described above for rural areas where household lists are not available. If there are no clear sub-divisions, the urban area will be divided into subunits of approximately equal population (at least 300- 350 pop.) and the above-described procedures will then be followed.

Figure 02: First house selection – urban area



## SELECTING SUBSEQUENT HOUSES

It will depend on whether the houses are single-family dwellings or multi-family dwellings. For single-family dwellings, the second household to visit will be the one which is nearest to the first. For multi-family dwellings one floor will be chosen at random and then the first household to visit will be randomly selected from that floor. The second household to visit will be the door nearest to the first. After visiting all the households on the floor, we will randomly choose a direction (i.e. up or down) and visit all the households on that floor.

We will then continue from floor to floor visiting the next nearest floor which had not been visited previously. After the whole building has been visited, we will go to the nearest door of the nearest building and repeat the process.

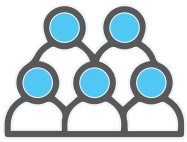
## MACRO-PLANS

Macro-plans are basically cumulative plan of calculation and allocation of resources including targeted population, required logistics, transportation, technical and human resources, and PPEs (Personal Protection Equipment's).

- Tell Abiad and Ras Al-Ain districts were considered as one district (according to population) which includes 4 sub-districts.
- The total number of clusters: 30 cluster, distributed according to the population in each sub-district.
- Number of children that will be surveyed in each age category: 7 children.
- Total number of children that will be surveyed in each category: 7*30=210 children.
- Total number of children that will be surveyed from all categories: 210*3=630 children.

Table 01: Clusters Distribution by sub-districts

| Governorate | District | Sub-District | Population | Cumulative Pop. | Sample interval | Random number | # Clusters | No. Clusters |
|---|---|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 150,000 | 150,000 | 11013 | 11003 | 13 | 1-2-3-4-5-6-7-8-9-10-11-12-13 |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 81,000 | 231,000 | | | 7 | 14-15-16-17-18-19-20 |
| | | Ein Issa | 31,000 | 262,000 | | | 3 | 21-22-23 |
| | | Suluk | 68,400 | 330,400 | | | 7 | 24-25-26-27-28-29-30 |



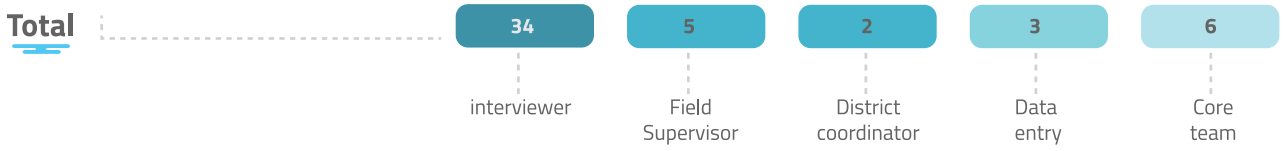
330,400
Population

30
Clusters

# HUMAN RESOURCES

Table 02: Human Resources by Sub-districts

| Governorate | District | Sub-District | interviewer | Field Supervisor | District coordi-nator | Data entry | Core team |
|---|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 14 | 2 | 1 | 3 | 6 |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 8 | 1 | 1 | | |
| | | Ein Issa | 4 | 1 | | | |
| | | Suluk | 8 | 1 | | | |




# STRUCTURE

**Core team:** consist of technical persons from (EWARN, SIG and WHO).

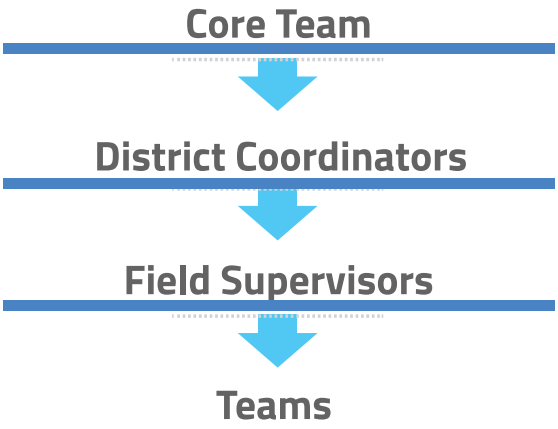
**District supervisors**: 2 district level officers (DLO) from EWARN.

**Field supervisors:** 5 persons from Qatar Red Crescent (QRC).

**Interviewers:** 17 mixed team, each team consist of 2 persons: male / female with medical background from local communities.

**Data entry:** 2 officers at central level and 2 in the field

Figure 03: structure



# TRAINING

1. Preparation of training materials:
    - Lectures for supervisors and interviewers
    - Data collection forms for all categories
    - Filed supervisor checklist
    - District Coordinator checklist
    - list of campaign dates in the region
    - list of important event dates in each subdistrict
    - Vaccination cards: (SIG - NGOs - Damascus)
    - PPEs for all staff
2. Training levels:
    - TOT Master:  for core team.
    - TOT: for district coordinators.
    - Training for data entries.
    - Training for Peripheral level: field supervisors and interviewers.
3. Documentation of training (locations - dates - session numbers - trainees).

## MICRO-PLAN

Micro plans were prepared at subdistrict levels and reviewed by core team.

Micro plans include:

- Maps of each subdistrict and cluster.
- List of communities (in which the clusters will be) and population.
- Human resources: Name and communication for each member.

## COMMUNICATION & ADVOCACY PLAN

Given that the survey process requires entering the houses of the parents of the children and taking information from them, it was necessary to prepare the community for the activities that must be done during the survey and obtain the necessary approvals from the existing local authorities.

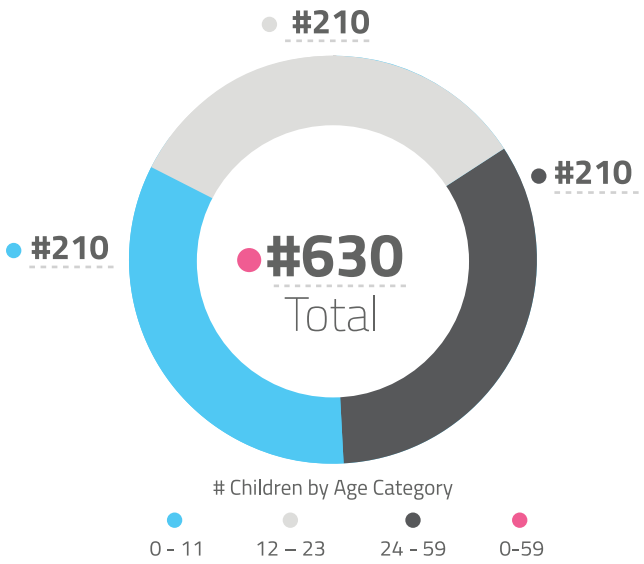
Accordingly, the team in each area should prepare a list of local events in their community (local councils - official departments - courts - police departments - civil defense - community organizations - health facility managers - doctors and health workers - mukhtars - scholars and religious leaders and others) so that we define the effective and influential groups that will play a positive role in facilitating the work and not hindering the teams in their transmission and taking information.

The actors will be screened and then planning to hold several advocacy meetings with them in which a simple definition of the work team, the goal of the work and the work mechanism is presented, with an emphasis on adhering to all ethics and ethical and scientific standards that conform to the local community and WHO instructions.

# RESULTS

Table 03: Number of the children enrolled in the vaccine coverage survey

| Governorate | District | Sub-District | # Children by Age Category | | | Total |
|---|---|---|---|---|---|---|
| | | | 0 - 11 | 12 – 23 | 24 - 59 | 0-59 |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 91 | 91 | 91 | 273 |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 42 | 42 | 42 | 126 |
| | | Suluk | 49 | 49 | 49 | 147 |
| | | Ein Issa | 28 | 28 | 28 | 84 |




# CATEGORY 1

## MOTHERS WHO GAVE BIRTH TO CHILDREN 0-11 MONTH OF AGE

A number of 210 surveyed mothers were shown to give varying number of pregnancies Table (3). Mothers who gave birth to 5 or more pregnancies represent ~ 31.43% followed by those who have three or four pregnancies (~21.90% 17.62% respectively). About third of surveyed mothers are not protected against tetanus. More than 30% of surveyed mothers did not receive any dose of tetanus toxoid, Table (4).

There were unvaccinated mothers in three of four subdistricts with highest number in Ein Issa (18, 64.29%), Suluk (25, 51.02%), Tell Abiad (21, 50%), Table (6).

All mothers in all subdistricts showed very high percentage of un-vaccination against tetanus during last pregnancy (183, 87.14%); a clear indication of deterioration of health care services because of destruction of health infrastructure due to continued armed conflicts, Tables (7).

Among 146 mothers vaccinated against tetanus (47, 12.91%) were given vaccination cards and even lower numbers (23, 6.32 %) keep it, table (9).

The number of ante-natal follow up visits in these areas shows that (88, 45.17%) of mothers did not pay any ante-natal visits during their last pregnancy, that was quite high in Ein Issa where (16, 57.14%) mothers did not follow up on their last pregnancy, followed by Suluk & Tell Abiad (24, 48.98% & 17, 40.48% respectively), while mothers whom have completed 5 visits or more during the last pregnancy represent (29, 9.87%), table (10).

Out of 210 records of surveyed mothers (143, 71.75%) did not visit health centers for other medical reasons during their last pregnancy (indicating low utilization of health care services), while (62, 26%) had 1-3 visits and (5, 2.25%) visited four times or more. Mothers in Ras Al Ain was the highest in no visit, Table (11).

Evaluation of missed opportunities of vaccination MOV was not performed due to low rate of visiting health care centers and high percentage of home deliveries (Out of 210 surveyed mothers (44, ~17%) gave birth at home and (107, ~56%) in a health facility). Home delivery was pre-dominant in Ras Al Ain (32, 35.16%), and delivery in health centers was highest in Ras Al Ain too (39, 42.86%).

Surveyed mothers reported on multiple reasons of un-vaccination, most common reasons were not aware of the importance of the vaccine (33.33%); did not know about vaccination program (20.95 %) and fear of side effects (10.95 %).

Table 04: Distribution of surveyed mothers according to their number of pregnancies.

| Number of pregnancies | No. Mothers | % |
|---|---|---|
| One pregnancy | 32 | 15.24 |
| Two pregnancies | 29 | 13.81 |
| Three pregnancies | 46 | 21.90 |
| Four pregnancies | 37 | 17.62 |
| Five and more pregnancies | 66 | 31.43 |

No. of Pregnancies #210

100%
Total of pregnancies

Table 05: Crude coverage of Tetanus Toxoid (TT)among surveyed mothers of children (0-11 months of age) during their reproductive age.

| Number of TT doses | No. Mothers | % |
|---|---|---|
| Not vaccinated | 64 | 30.48 |
| TT1 | 32 | 15.24 |
| TT2 | 20 | 9.52 |
| TT3 | 22 | 10.48 |
| TT4 | 12 | 5.71 |
| TT5+ | 60 | 28.57 |

**No. of TT doses** **#210**

**100%**
Total of TT doses

Table 06: Crude coverage of TT vaccine among surveyed mothers of children 0-11 months of age by governorate during their reproductive age.

| Governorate | District | Sub-District | Not vaccinated | | TT1 | | TT2 | | TT3 | | TT4 | | TT5+ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 0 | 0% | 0 | 0% | 3 | 3.30% | 20 | 21.98% | 11 | 12.09% | 57 | 62.64% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 21 | 50% | 13 | 30.95% | 8 | 19.05% | 0 | 0% | 0 | 0% | 0 | 0% |
| | | Ein Issa | 25 | 51.02% | 15 | 30.61% | 6 | 12.24% | 0 | 0% | 1 | 2.04% | 2 | 4.08% |
| | | Suluk | 18 | 64.29% | 4 | 14.29% | 3 | 10.71% | 2 | 7.14% | 0 | 0% | 1 | 3.57% |

**Total**

| 41.33% | 18.96% | 11.33% | 7.28% | 3.53% | 17.57% |
|---|---|---|---|---|---|
| #64 | #32 | #20 | #22 | #12 | #60 |
| Not vaccinated | TT1 | TT2 | TT3 | TT4 | TT5+ |

Table 07: Crude coverage of TT vaccine among mothers during their last pregnancy.

| Number of pregnancies | No. Mothers | % |
|---|---|---|
| Not vaccinated | 183 | 87.14% |
| TT1 | 24 | 11.43% |
| TT2 | 3 | 1.43% |
| TT3 | 0 | 0% |

Table 08: Crude coverage TT vaccine among surveyed mothers of children 0-11 months of age by governorate during their last pregnancy.

| Governorate | District | Sub-District | Not vaccinated | | TT1 | | TT2 | | TT3 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 83 | 91.21% | 6 | 6.59% | 2 | 2.20% | 0 | 0% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 34 | 80.95% | 7 | 16.67% | 1 | 2.38% | 0 | 0% |
| | | Suluk | 42 | 85.71% | 7 | 14.29% | 0 | 0% | 0 | 0% |
| | | Ein Issa | 24 | 85.71% | 4 | 14.29% | 0 | 0% | 0 | 0% |

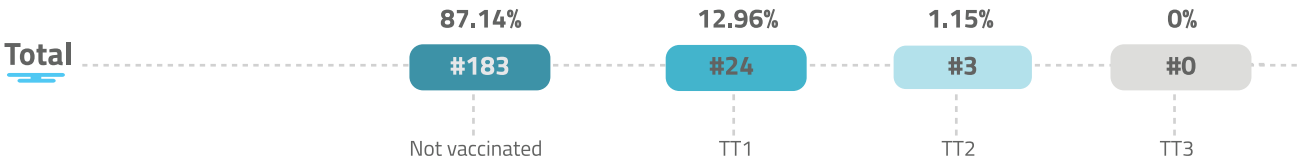



Table 09: Distribution of surveyed mothers of children 0-11 months by receiving of vaccination card (vaccinated mothers).

| Governorate | District | Sub-District | receiving of vaccination card | | availability of vaccination card | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 13 | 14.29% | 7 | 7.69% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 11 | 12.09% | 5 | 5.49% |
| | | Suluk | 17 | 18.68% | 8 | 8.79% |
| | | Ein Issa | 6 | 6.59% | 3 | 3.30% |

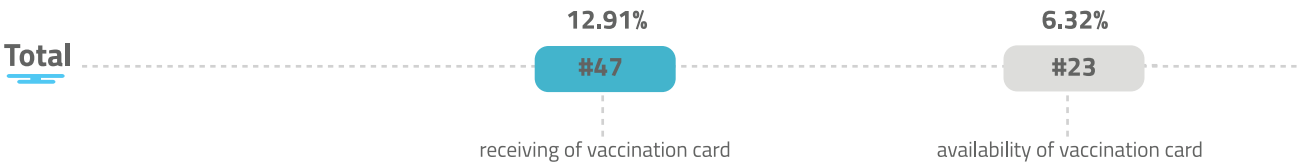


Table 10: Number of follow up visits (ante-natal) during the last pregnancy.

| Governorate | District | Sub-District | No follow-up | | 1 follow-up visit | | 2 follow-up visits | | 3 follow-up visits | | 4 follow-up visits | | 5 and more follow-up visits | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 31 | 34.07% | 7 | 7.69% | 12 | 13.19% | 9 | 9.89% | 10 | 10.99% | 22 | 24.18% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 17 | 40.48% | 7 | 16.67% | 7 | 16.67% | 5 | 11.90% | 3 | 7.14% | 3 | 7.14% |
| | | Suluk | 24 | 48.98% | 2 | 4.08% | 9 | 18.37% | 6 | 12.24% | 4 | 8.16% | 4 | 8.16% |
| | | Ein Issa | 16 | 57.14% | 4 | 14.29% | 3 | 10.71% | 4 | 14.29% | 1 | 3.57% | 0 | 0% |

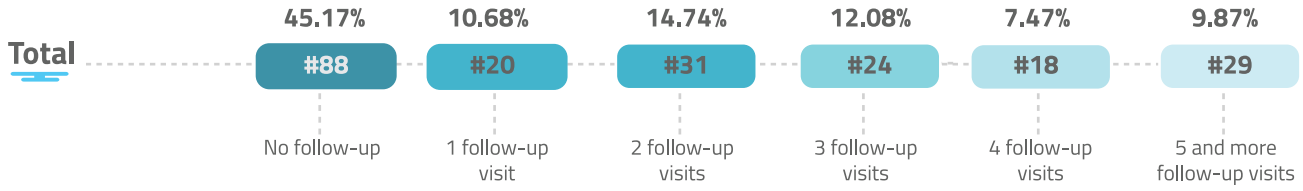



Table 11: Number of visits for other medical reasons during the last pregnancy.

| Governorate | District | Sub-District | Not vaccinated | | No visits | | 1 – 3 visits | | 4 and more | |
|---|---|---|---|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 51 | 56.04% | 38 | 41.76% | 2 | 2.20% | 0 | 0% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 28 | 66.67% | 12 | 28.57% | 2 | 4.76% | 0 | 0% |
| | | Suluk | 42 | 85.71% | 6 | 12.24% | 1 | 2.04% | 0 | 0% |
| | | Ein Issa | 22 | 78.57% | 6 | 21.43% | 0 | 0% | 0 | 0% |

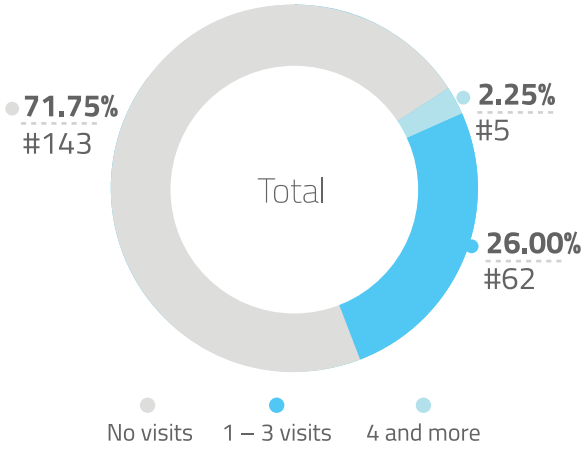


Table 12: Distribution of surveyed mothers according to the place of delivery.

| Governorate | District | Sub-District | At home by midwife | | At home by doctor | | Health care center | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 32 | 35.16% | 1 | 1% | 39 | 42.86% | 20 | 22% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 6 | 14.29% | 1 | 1% | 32 | 76.19% | 4 | 10% |
| | | Suluk | 2 | 4.08% | 0 | 0% | 15 | 30.61% | 32 | 65% |
| | | Ein Issa | 4 | 14.29% | 0 | 0% | 21 | 75% | 3 | 11% |

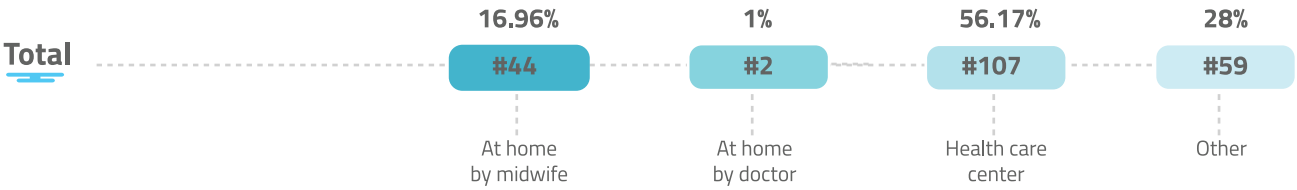
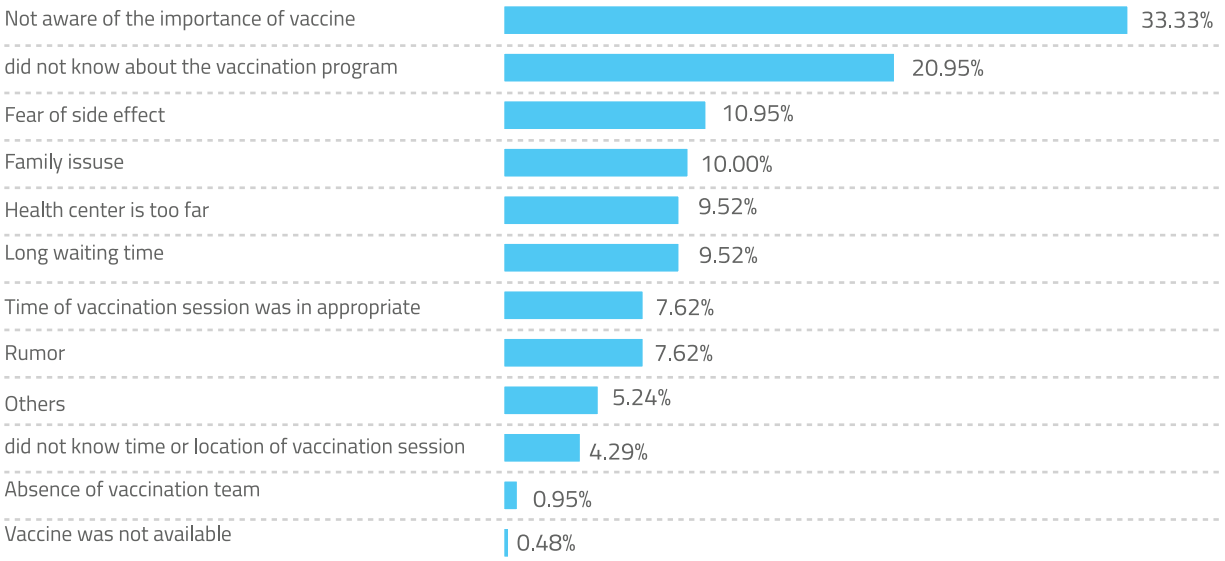



Figure 04: Reasons of un-vaccination.



# CATEGORY 2

## Children (12 – 23mos) age

Table 13: Children (12 – 23mos) age -M&F by Sub District

| Governorate | District | Sub-District | Male | Female |
|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 58 | 33 |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 27 | 15 |
| | | Suluk | 29 | 20 |
| | | Ein Issa | 15 | 13 |

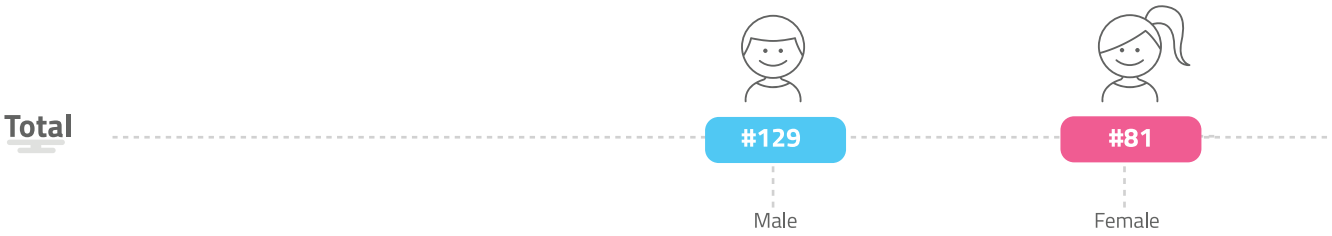
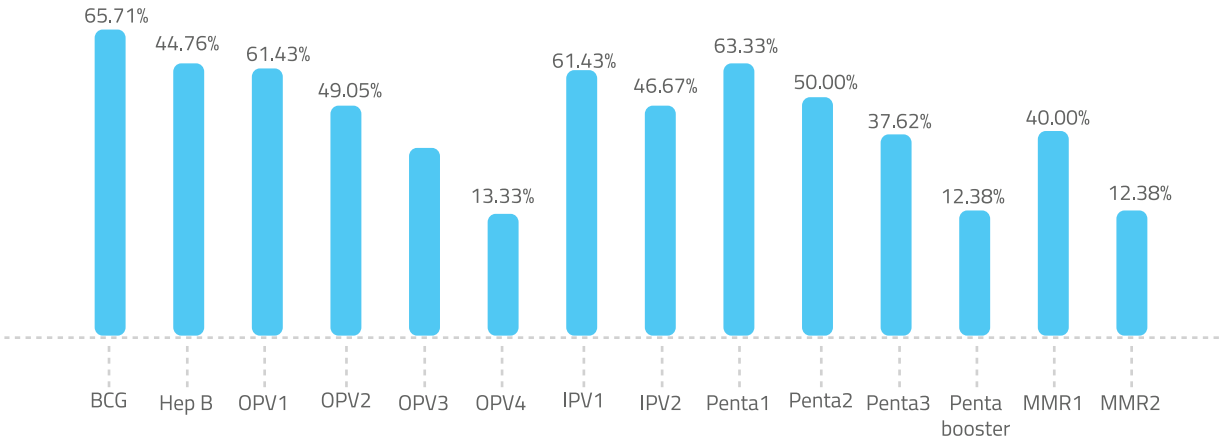



Figure 05: % coverage, children 12-23 month of age.




In this age category, 210 children were included 129 males, 61.42% and 81 females, 38.58%

The crude vaccination coverage of children 12-23 month of age shows overall poor immunization with high drop-out rates of multi-dose vaccines PENTA, OPV, IPV & MMR/MR. For PENTA coverage, PENTA1, PENTA2, PENTA3 (63.33%, 50.00%, 37.62% respectively), for OPV coverage, OPV1, OPV3, OPV4 (61.43%, 37.62%, 13.33% respectively), table (14).

For IPV1, Tell Abiad had higher coverage (76.19%), compared to Suluk (42.86%), Table (18).

Coverage with MMR/MR1 indicates almost the same pattern of all vaccines, where the coverage in Tell Abiad was higher (54.76%), than coverage in Suluk (28.56 %), table (19).

Families reported on reasons of un-vaccination, where most common reason was health center is too far (41.90 %), not aware of importance of vaccine (33.81%), followed by others (30.95 %). Long waiting time and absence of vaccination team were not significant reasons of un-vaccination. Figure (6).

That is understood due to disrupted service in NE Syria because of armed conflict and these areas remained unserved and deprived of vaccination activities for at least 3 years, there are some limited and patchy implementation of EPI centers and SIAs, as only two vaccination centers were reactivated in Tell Abiad and Ras al-Ain covering only about 30 % of the target through fixed sessions, in addition to two OPV campaigns were implemented in 2020.

Table 14: Crude coverage of vaccines among children 12- 23 months.

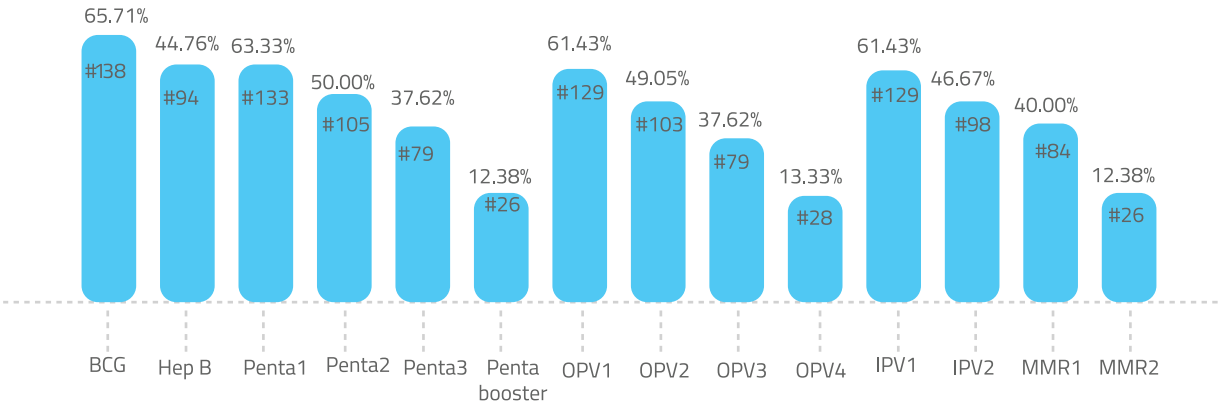



Table 15: Crude coverage of BCG vaccine among children 12- 23 months.

| Governorate | District | Sub-District | Male | Female |
|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 60 | 65.93% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 33 | 78.57% |
| | | Suluk | 27 | 55.10% |
| | | Ein Issa | 18 | 64.29% |


| Governorate | District | Sub-District | #Valid | | #Invalid | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 57 | 62.64% | 34 | 37.36% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 32 | 76.19% | 10 | 23.81% |
| | | Suluk | 24 | 48.98% | 25 | 51.02% |
| | | Ein Issa | 18 | 64.29% | 10 | 35.71% |

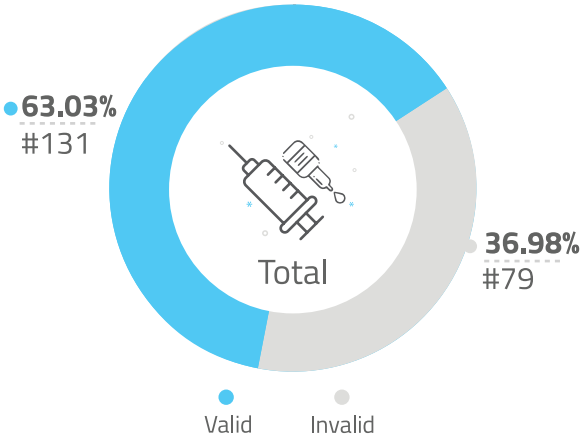
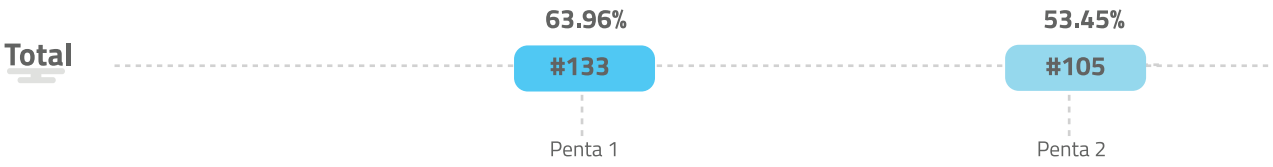
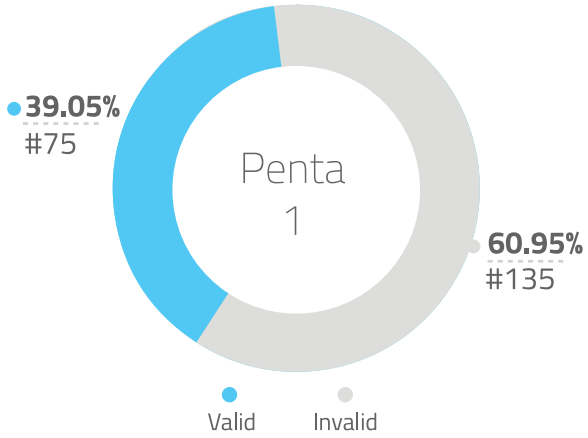


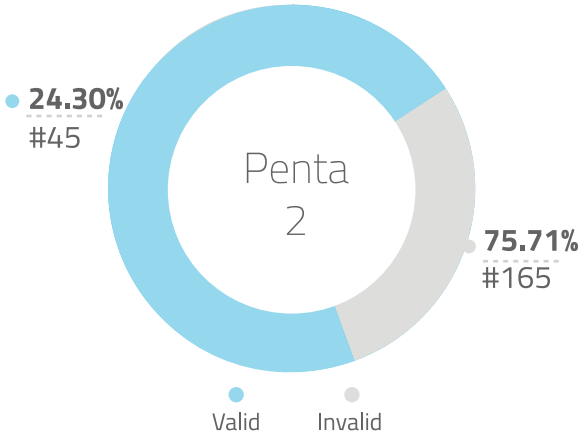
Table 16: Crude coverage of Penta vaccine among children 12- 23 months

| Governorate | District | Sub-District | Penta 1 | | Penta 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 59 | 64.84% | 39 | 42.86% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 32 | 76.19% | 30 | 71.43% |
| | | Suluk | 23 | 46.94% | 19 | 38.78% |
| | | Ein Issa | 19 | 67.86% | 17 | 60.71% |




| Governorate | District | Sub-District | Penta 1 | | | | Penta 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 27 | 29.67% | 64 | 70.33% | 14 | 15.38% | 77 | 84.62% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 21 | 50.00% | 21 | 50.00% | 14 | 33.33% | 28 | 66.67% |
| | | Suluk | 13 | 26.53% | 36 | 73.47% | 8 | 16.33% | 41 | 83.67% |
| | | Ein Issa | 14 | 50.00% | 14 | 50.00% | 9 | 32.14% | 19 | 67.86% |



| Governorate | District | Sub-District | Penta 3 | | Penta booster | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 25 | 27.47% | 4 | 4.40% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 26 | 61.90% | 14 | 33.33% |
| | | Suluk | 14 | 28.57% | 4 | 8.16% |
| | | Ein Issa | 14 | 50.00% | 4 | 14.29% |

**Total**

| 41.99% | 15.05% |
|---|---|
| #79 | #26 |
| Penta 3 | Penta booster |

| Governorate | District | Sub-District | Penta 3 | | | |
|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 6 | 6.59% | 85 | 93.41% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 11 | 26.19% | 31 | 73.81% |
| | | Suluk | 7 | 14.29% | 42 | 85.71% |
| | | Ein Issa | 8 | 28.57% | 20 | 71.43% |

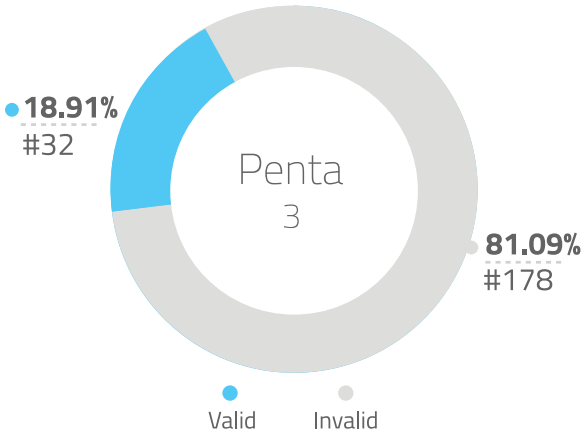
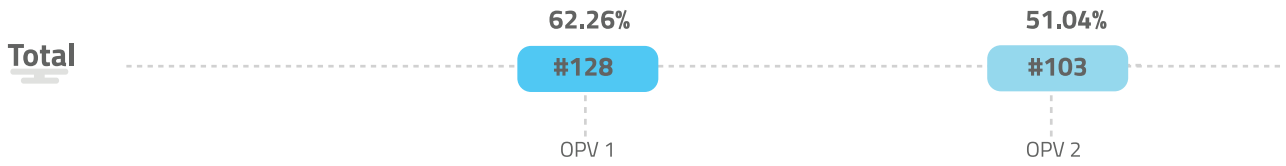
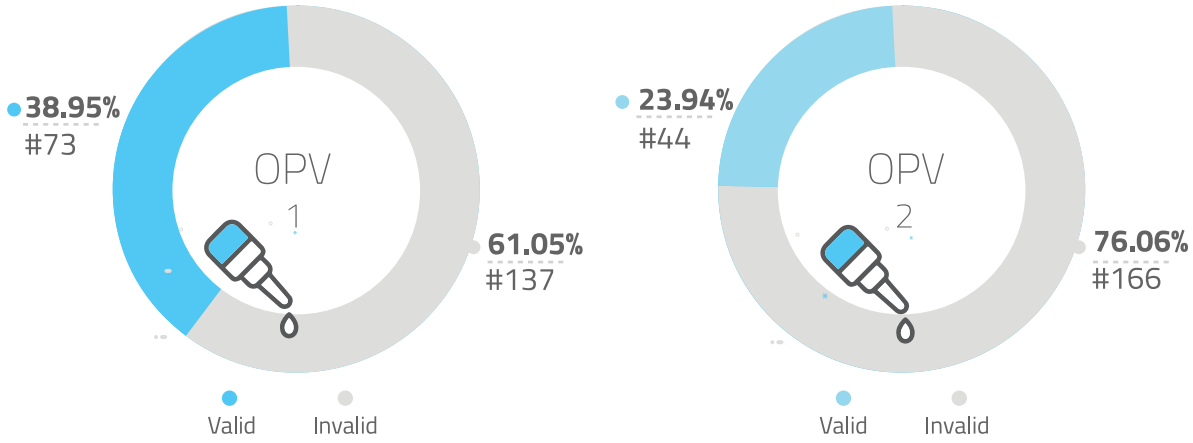


Table 17: Crude coverage of OPV doses among children 12- 23 months

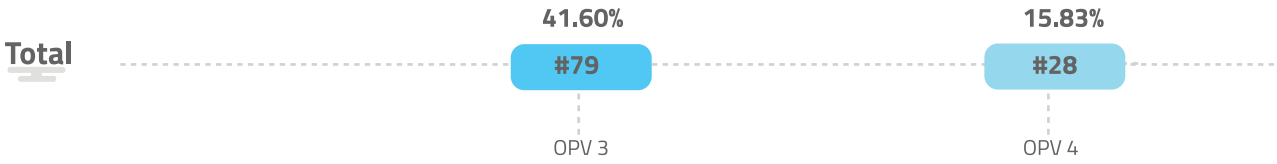
| Governorate | District | Sub-District | OPV 1 | | OPV 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 55 | 60.44% | 40 | 43.96% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 31 | 73.81% | 30 | 71.43% |
| | | Suluk | 23 | 46.94% | 19 | 38.78% |
| | | Ein Issa | 19 | 67.86% | 14 | 50.00% |




| Governorate | District | Sub-District | OPV 1 | | | | OPV 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 24 | 26.37% | 67 | 73.63% | 13 | 14.29% | 78 | 85.71% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 19 | 45.24% | 23 | 54.76% | 13 | 30.95% | 29 | 69.05% |
| | | Suluk | 15 | 30.61% | 34 | 69.39% | 9 | 18.37% | 40 | 81.63% |
| | | Ein Issa | 15 | 53.57% | 13 | 46.43% | 9 | 32.14% | 19 | 67.86% |



| Governorate | District | Sub-District | OPV 3 | | OPV 4 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 25 | 27.47% | 5 | 5.49% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 26 | 61.90% | 14 | 33.33% |
| | | Suluk | 15 | 30.61% | 5 | 10.20% |
| | | Ein Issa | 13 | 46.43% | 4 | 14.29% |




| Governorate | District | Sub-District | OPV 3 | | | |
|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 6 | 6.59% | 85 | 93.41% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 9 | 21.43% | 33 | 78.57% |
| | | Suluk | 7 | 14.29% | 42 | 85.71% |
| | | Ein Issa | 9 | 32.14% | 19 | 67.86% |

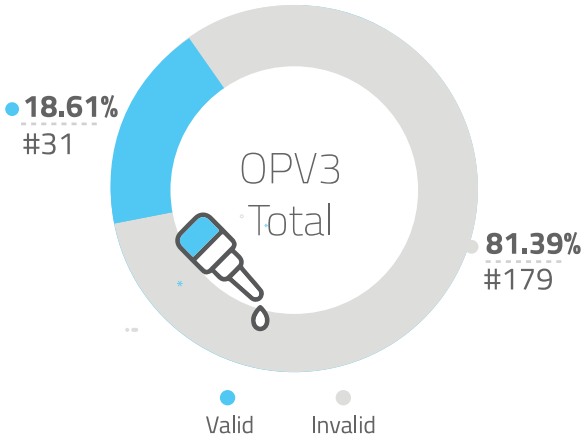
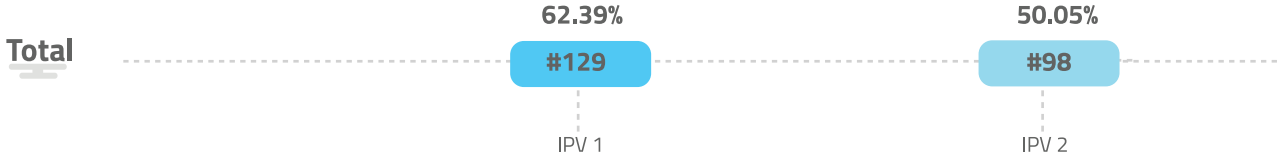



Table 18: Crude IPV coverage among children 12-23 month of age

| Governorate | District | Sub-District | IPV 1 | | IPV 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 57 | 62.64% | 35 | 38.46% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 32 | 76.19% | 30 | 71.43% |
| | | Suluk | 21 | 42.86% | 18 | 36.73% |
| | | Ein Issa | 19 | 67.86% | 15 | 53.57% |



| Governorate | District | Sub-District | IPV 1 | | | | IPV 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 26 | 28.57% | 65 | 71.43% | 12 | 13.19% | 79 | 86.81% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 20 | 47.62% | 22 | 52.38% | 14 | 33.33% | 28 | 66.67% |
| | | Suluk | 12 | 24.49% | 37 | 75.51% | 7 | 14.29% | 42 | 85.71% |
| | | Ein Issa | 14 | 50.00% | 14 | 50.00% | 9 | 32.14% | 19 | 67.86% |

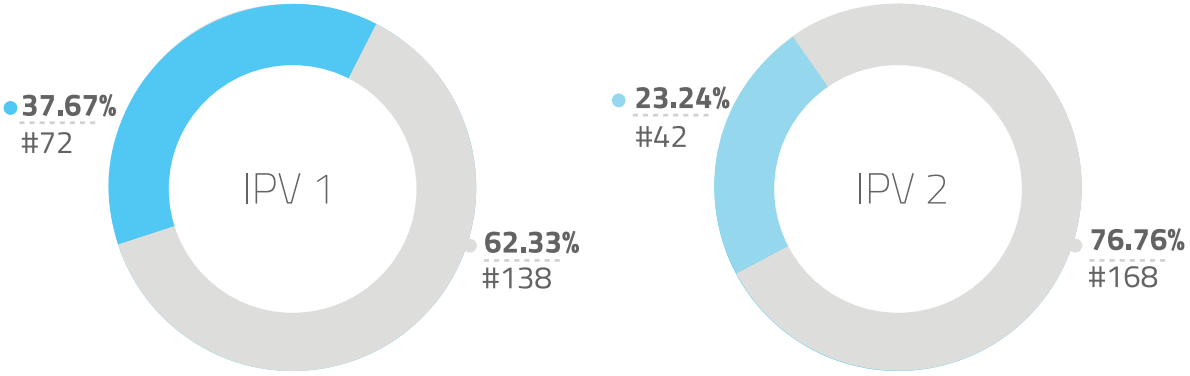
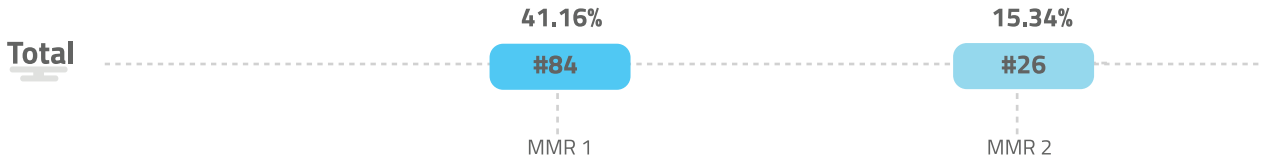



Table 19: Crude coverage of MMR among children 12- 23 months

| Governorate | District | Sub-District | MMR 1 | | MMR 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 35 | 38.46% | 4 | 4.40% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 23 | 54.76% | 13 | 30.95% |
| | | Suluk | 14 | 28.57% | 4 | 8.16% |
| | | Ein Issa | 12 | 42.86% | 5 | 17.86% |



| Governorate | District | Sub-District | MMR1 | | | |
|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 26 | 28.57% | 65 | 71.43% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 17 | 40.48% | 25 | 59.52% |
| | | Suluk | 13 | 26.53% | 36 | 73.47% |
| | | Ein Issa | 8 | 28.57% | 20 | 71.43% |

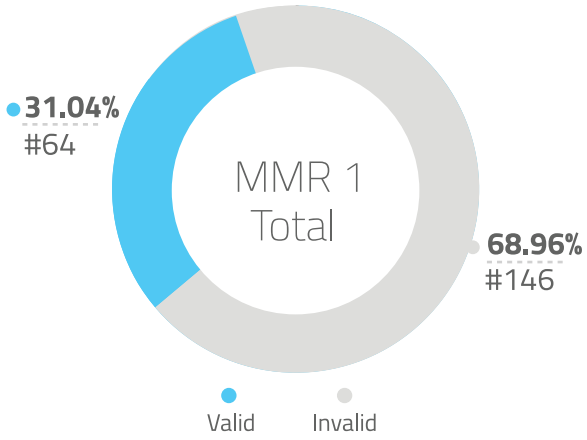
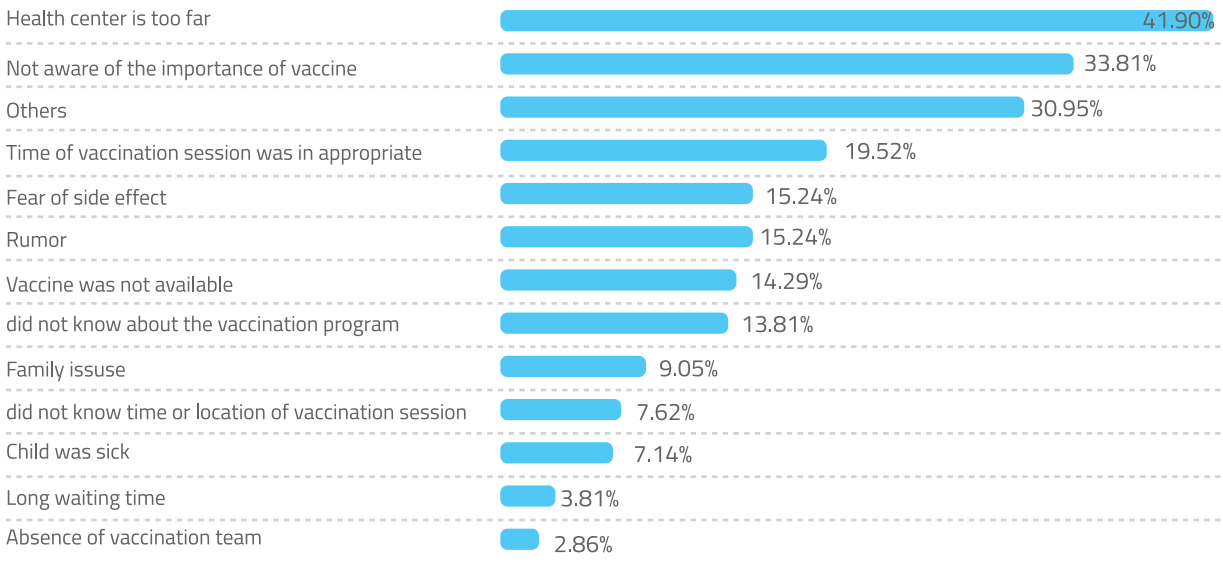



Figure 06: Reasons of un-vaccination

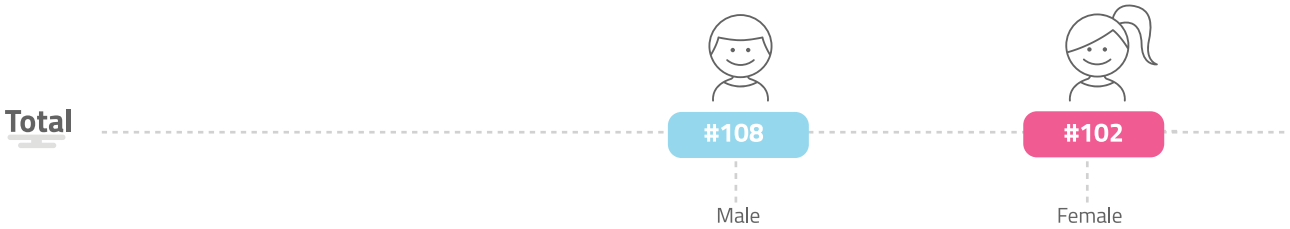


# CATEGORY 3

## Children (24 – 59mos) age

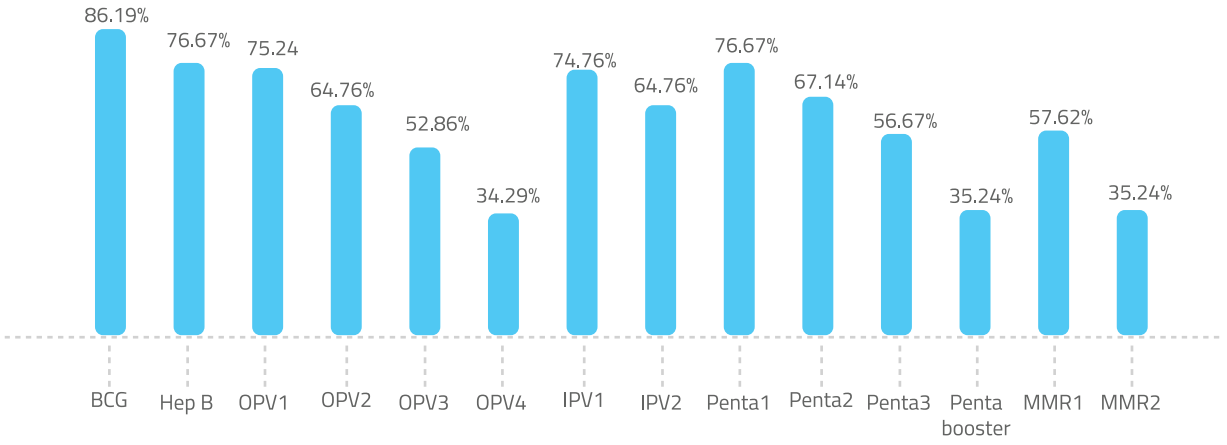
Table 20: Children (12 – 23mos) age - M&F by Sub District

| Governorate | District | Sub-District | Male | Female |
|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 52 | 39 |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 19 | 23 |
| | | Suluk | 21 | 28 |
| | | Ein Issa | 16 | 12 |




This age category has been added to the survey based on the observations that many children in Northern Syria receive their essential vaccines at later ages. Those children are supposedly remaining susceptible to vaccine preventable diseases and outbreaks which took place in 2017 & 2018 (cVDPV2; measles; pertussis). So, the intention is to study vaccine coverage of this age group who can catch up on their early vaccine doses at older ages through newly established EPI and planned SIAs. However, this report will include a new section on children who have received vaccine doses at proper age of vaccination (valid or due doses) or given later in life as over-due doses. A total of 210 child of category3 (108 males, 51.42% & 102 females,48.57%) were included in the survey to collect information on history of vaccinations in these districts.

Figure 07: % coverage, children 24-59 month of age




The crude vaccination coverage of children 24-59 month of age shows overall low to moderate levels of immunization with high drop-out rates of multi-dose vaccines PENTA, OPV, IPV & MMR/MR. For crude PENTA coverage: PENTA1, PENTA2, PENTA3 (76.67%, 67.14%, 56.67% respectively). with only 24.30 % valid doses for PENTA 3 Table (23). Crude coverage with BCG shows good coverage with BCG (86.19%) possibly due to availability of vaccines through scattered governmental EPI services and occasional SIAs in addition to NGOs/INGOs that played roll in administering vaccines to deprived children in host communities as well as in camps e.g., MSF especially in Ras Al Ain and Tell Abiad subdistricts three years ago. Table (24). For crude OPV coverage, OPV1, OPV3, OPV4 (75.24%, 52.86%, 34.29% respectively), Tell Abiad and Ras Al Ain subdistricts were highest for OPV3 (69.05%, 57.14 % respectively), Suluk showed the lowest coverage for same OPV3 dose (36.73%).

The crude coverage of IPV1 in this age group was 74.76% with higher coverage in Ras Al Ain (86.81%). In IPV2 again Ras Al Ain shows high coverage (78.02 %) compared to Suluk (40.82). Table (25). Coverage with MMR/MR1, indicates higher levels in Ras Al Ain and Tell Abiad (68.13%, 61.90% respectively). while coverage with MMR/MR2 were higher in Tell Abiad and Ras Al Ain subdistricts (50.00%, 36.26% respectively).

Families reported on reasons of un-vaccination, where most common reasons were almost the same as in category2. Most common reason was health care is too far (33.81%), followed by not aware of importance of vaccine (27.14%), then others (26.19%).

Table 21: Crude coverage of routine vaccines among children 24-59 months

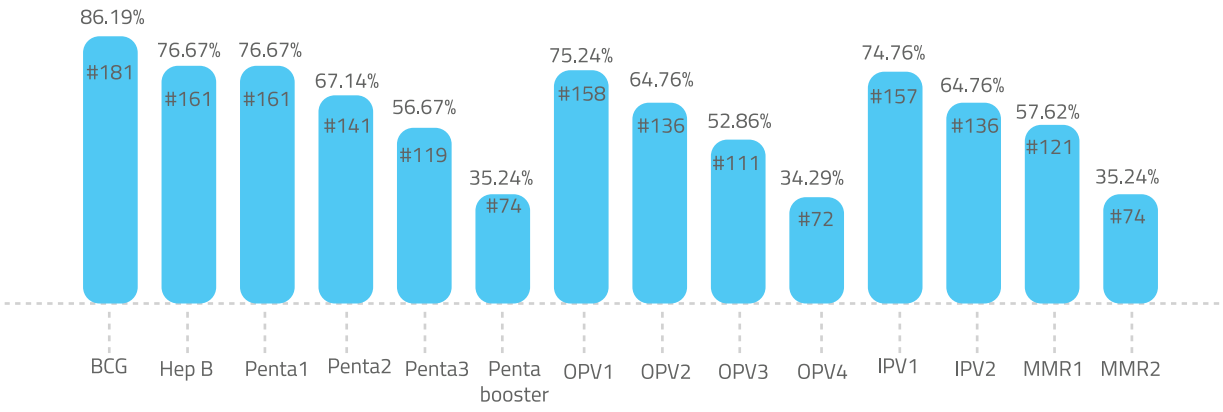
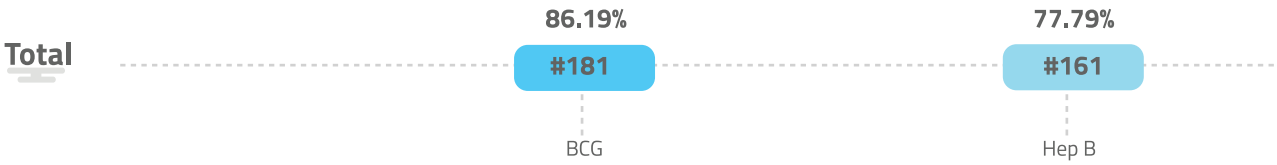
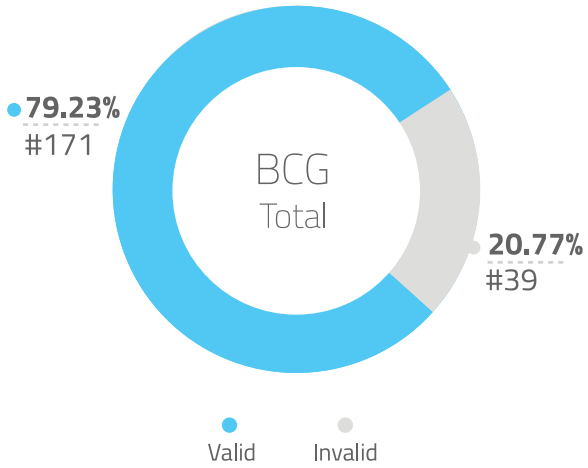



Table 22: Crude coverage of BCG and Hep B vaccines among children 24-59 months

| Governorate | District | Sub-District | BCG | | Hep B | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 82 | 90.11% | 66 | 72.53% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 40 | 95.24% | 37 | 88.10% |
| | | Suluk | 37 | 75.51% | 37 | 75.51% |
| | | Ein Issa | 22 | 78.57% | 21 | 75.00% |



| Governorate | District | Sub-District | BCG | | | | Hep B | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 79 | 86.81% | 12 | 13.19% | 61 | 67.03% | 30 | 32.97% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 39 | 92.86% | 3 | 7.14% | 37 | 88.10% | 5 | 11.90% |
| | | Suluk | 34 | 69.39% | 15 | 30.61% | 31 | 63.27% | 18 | 36.73% |
| | | Ein Issa | 19 | 67.86% | 9 | 32.14% | 19 | 67.86% | 9 | 32.14% |



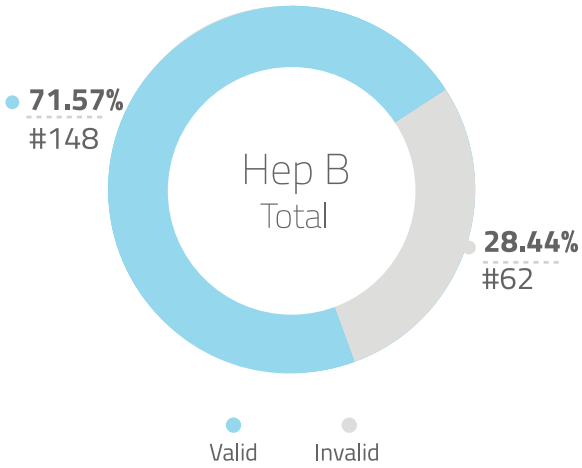
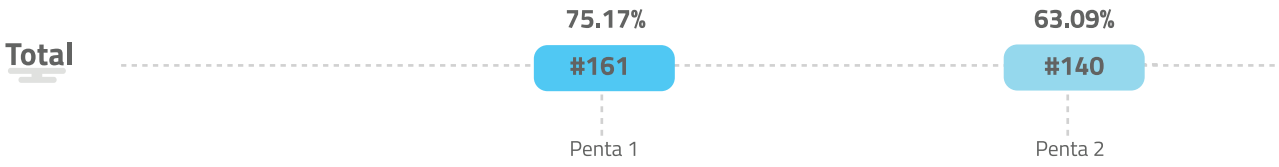
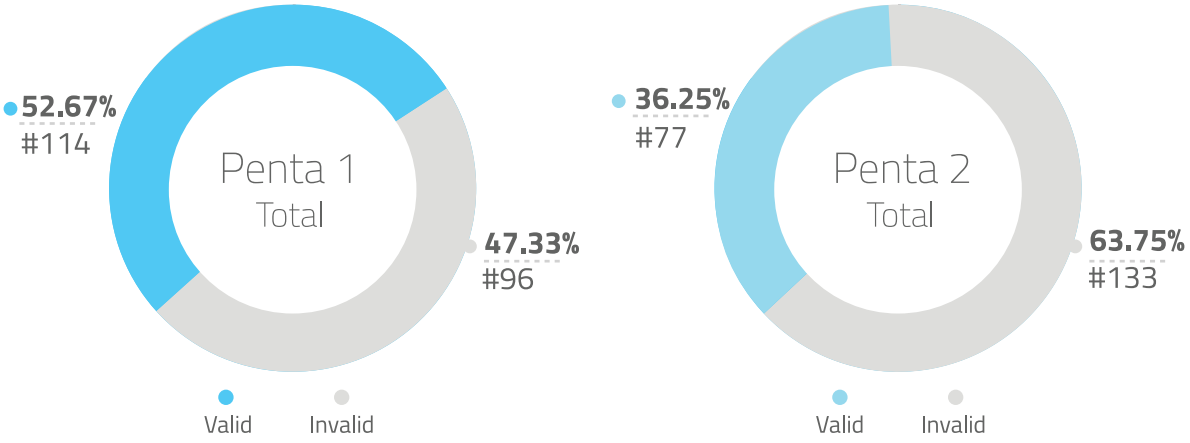



Table 23: Crude coverage of Penta vaccine among children 24-59 months

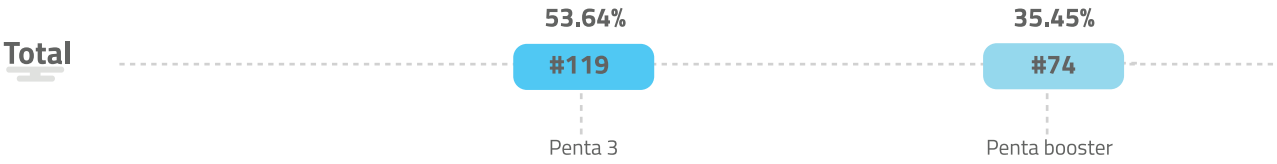
| Governorate | District | Sub-District | Penta 1 | | Penta 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 78 | 85.71% | 71 | 78.02% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 35 | 83.33% | 31 | 73.81% |
| | | Suluk | 26 | 53.06% | 23 | 46.94% |
| | | Ein Issa | 22 | 78.57% | 15 | 53.57% |




| Governorate | District | Sub-District | Penta 1 | | | | Penta 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 56 | 61.54% | 35 | 38.46% | 36 | 39.56% | 55 | 60.44% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 23 | 54.76% | 19 | 45.24% | 19 | 45.24% | 23 | 54.76% |
| | | Suluk | 20 | 40.82% | 29 | 59.18% | 12 | 24.49% | 37 | 75.51% |
| | | Ein Issa | 15 | 53.57% | 13 | 46.43% | 10 | 35.71% | 18 | 64.29% |



| Governorate | District | Sub-District | Penta 3 | | Penta booster | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 60 | 65.93% | 32 | 35.16% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 29 | 69.05% | 21 | 50.00% |
| | | Suluk | 18 | 36.73% | 12 | 24.49% |
| | | Ein Issa | 12 | 42.86% | 9 | 32.14% |




| Governorate | District | Sub-District | Penta 3 | | | |
|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 23 | 25.27% | 68 | 74.73% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 12 | 28.57% | 30 | 71.43% |
| | | Suluk | 9 | 18.37% | 40 | 81.63% |
| | | Ein Issa | 7 | 25.00% | 21 | 75.00% |

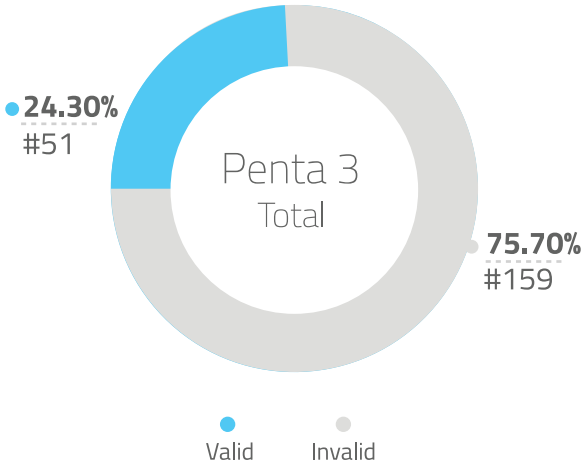
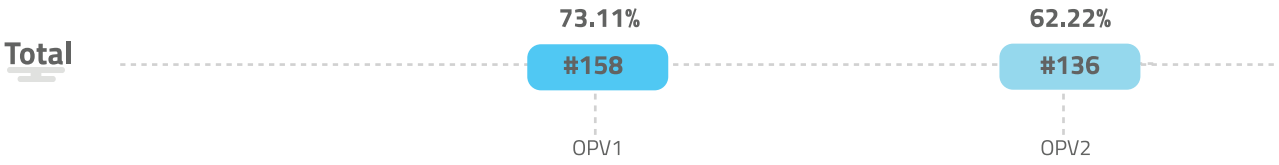
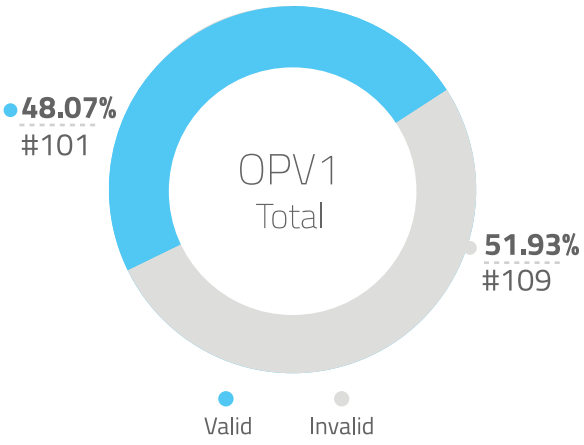


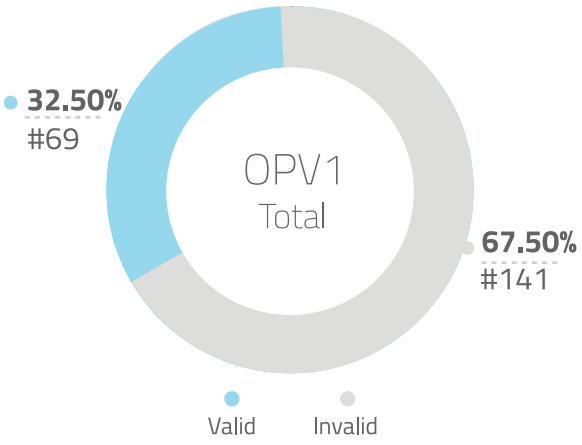
Table 24: Crude coverage of OPV1-OPV4 doses among children 24- 59 months

| Governorate | District | Sub-District | OPV 1 | | OPV 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 77 | 84.62% | 66 | 72.53% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 35 | 83.33% | 31 | 73.81% |
| | | Suluk | 26 | 53.06% | 24 | 48.98% |
| | | Ein Issa | 20 | 71.43% | 15 | 53.57% |

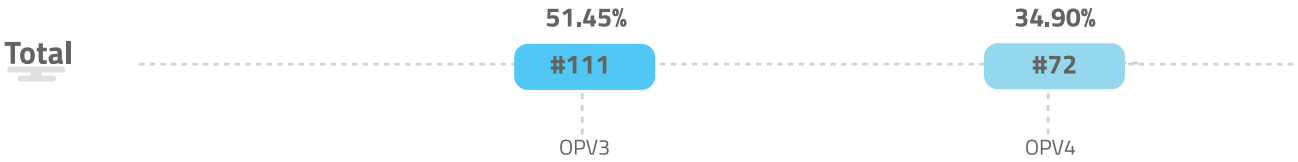



| Governorate | District | Sub-District | OPV 1 | | | | OPV 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 47 | 51.65% | 44 | 48.35% | 31 | 34.07% | 60 | 65.93% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 22 | 52.38% | 20 | 47.62% | 18 | 42.86% | 24 | 57.14% |
| | | Suluk | 17 | 34.69% | 32 | 65.31% | 12 | 24.49% | 37 | 75.51% |
| | | Ein Issa | 15 | 53.57% | 13 | 46.43% | 8 | 28.57% | 20 | 71.43% |



| Governorate | District | Sub-District | OPV 3 | | OPV 4 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 52 | 57.14% | 30 | 32.97% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 29 | 69.05% | 21 | 50.00% |
| | | Suluk | 18 | 36.73% | 12 | 24.49% |
| | | Ein Issa | 12 | 42.86% | 9 | 32.14% |




| Governorate | District | Sub-District | OPV 3 | | | |
|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 18 | 19.78% | 73 | 80.22% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 11 | 26.19% | 31 | 73.81% |
| | | Suluk | 8 | 16.33% | 41 | 83.67% |
| | | Ein Issa | 6 | 21.43% | 22 | 78.57% |

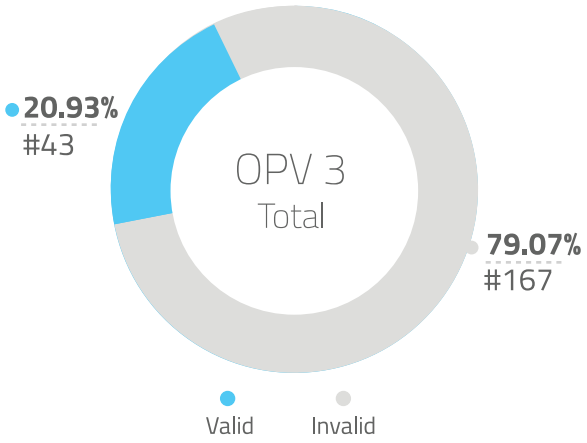
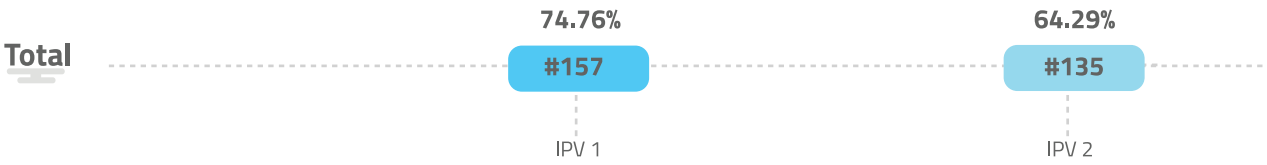
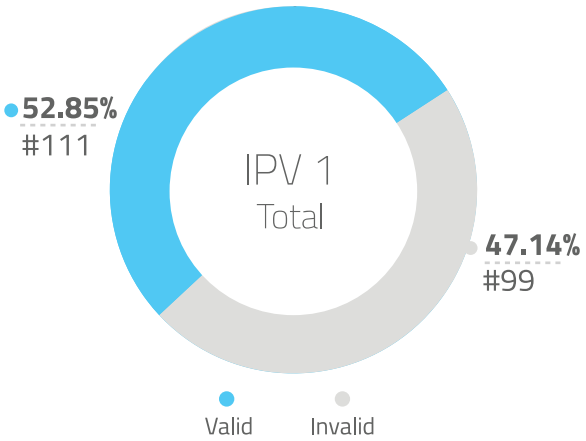


Table 25: Crude IPV coverage among children 24-59 month of age

| Governorate | District | Sub-District | IPV 1 | | IPV 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 79 | 86.81% | 71 | 78.02% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 34 | 80.95% | 31 | 73.81% |
| | | Suluk | 24 | 48.98% | 20 | 40.82% |
| | | Ein Issa | 20 | 71.43% | 13 | 46.43% |




| Governorate | District | Sub-District | IPV 1 | | | | IPV 2 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 55 | 60.44% | 36 | 39.56% | 34 | 37.36% | 57 | 62.64% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 23 | 54.76% | 19 | 45.24% | 19 | 45.24% | 23 | 54.76% |
| | | Suluk | 19 | 38.78% | 30 | 61.22% | 12 | 24.49% | 37 | 75.51% |
| | | Ein Issa | 14 | 50.00% | 14 | 50.00% | 9 | 32.14% | 19 | 67.86% |
| **TOTAL** | | | **111** | **52.85%** | **99** | **47.14%** | **74** | **34.81%** | **136** | **65.19%** |



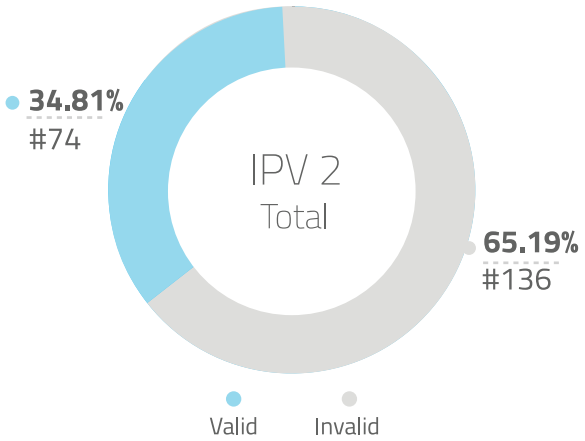
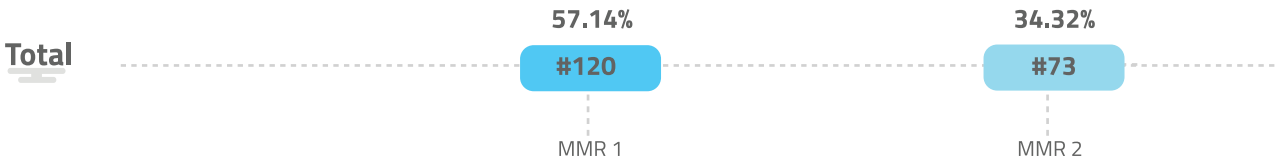



Table 26: Crude coverage of MMR among children 24- 59 months

| Governorate | District | Sub-District | MMR 1 | | MMR 2 | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 62 | 68.13% | 33 | 36.26% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 26 | 61.90% | 21 | 50.00% |
| | | Suluk | 19 | 38.78% | 11 | 22.45% |
| | | Ein Issa | 13 | 46.43% | 8 | 28.57% |




| Governorate | District | Sub-District | MMR1 | | | |
|---|---|---|---|---|---|---|
| | | | #Valid | % | #Invalid | % |
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 32 | 35.16% | 59 | 64.84% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 11 | 26.19% | 31 | 73.81% |
| | | Suluk | 14 | 28.57% | 35 | 71.43% |
| | | Ein Issa | 7 | 25.00% | 21 | 75.00% |

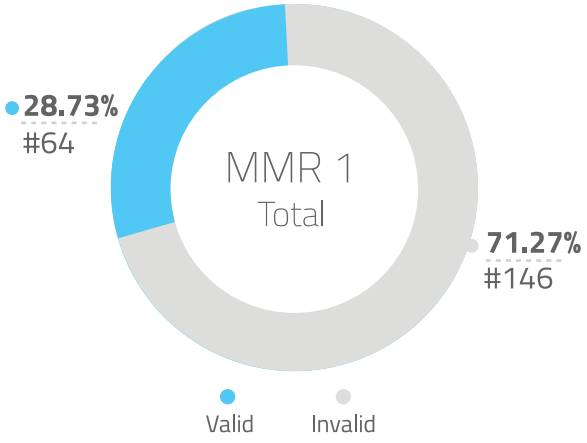


Figure 08: Reasons of un-vaccination

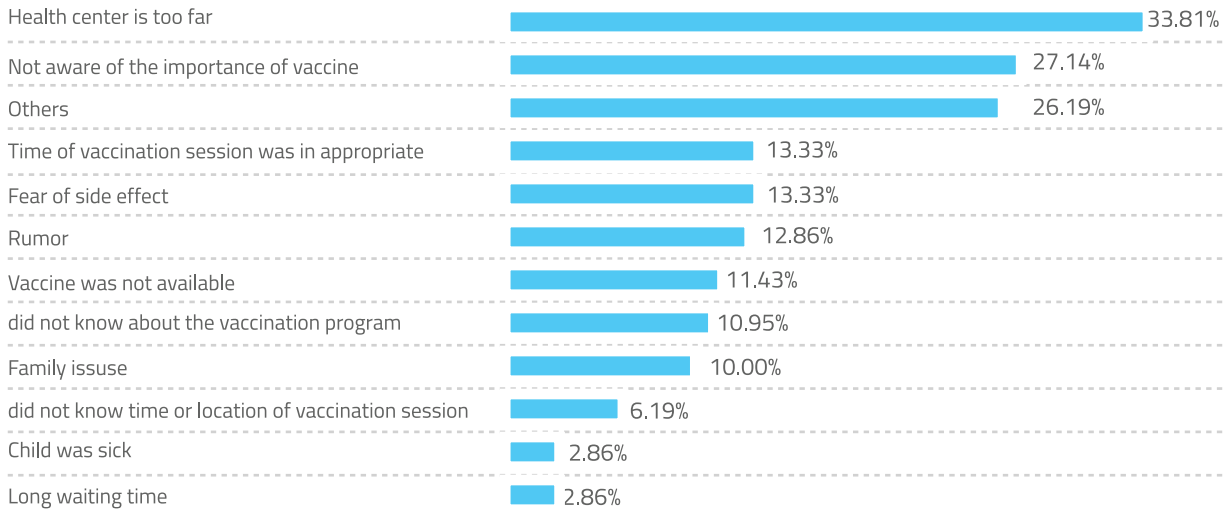
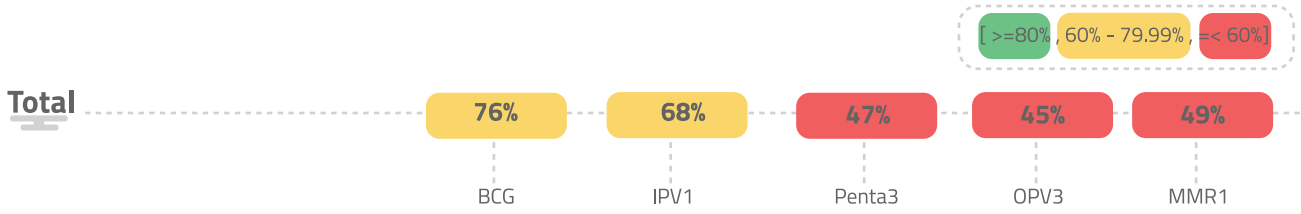


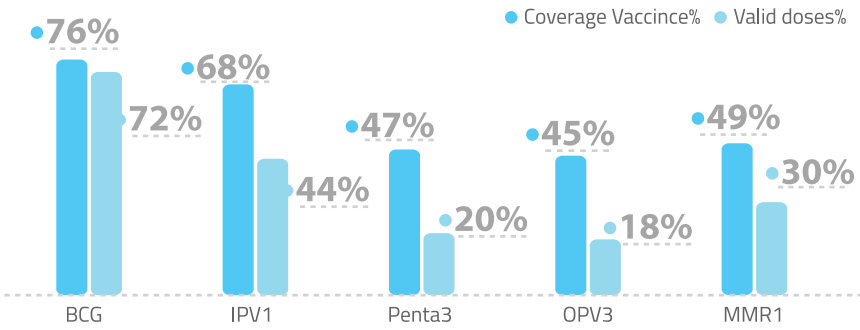

Table 27: Vaccine coverage at subdistrict level (BCG, IPV1, Penta3, OPV3, MR1) for children 12-59 month of age.

| District | Subdistrict | BCG | IPV1 | Penta3 | OPV3 | MMR1 |
|---|---|---|---|---|---|---|
| Ras Al Ain | Ras Al Ain | 78% | 75% | 47% | 42% | 53% |
| Tell Abiad | Tell Abiad | 87% | 79% | 65% | 65% | 58% |
| | Suluk | 65% | 46% | 33% | 34% | 34% |
| | Ein Issa | 71% | 70% | 46% | 45% | 45% |




## Valid doses

Figure 09: Coverage Vaccine VS Valid doses % for children 12-59 Month



**Due versus overdue vaccine doses (dose validity)**

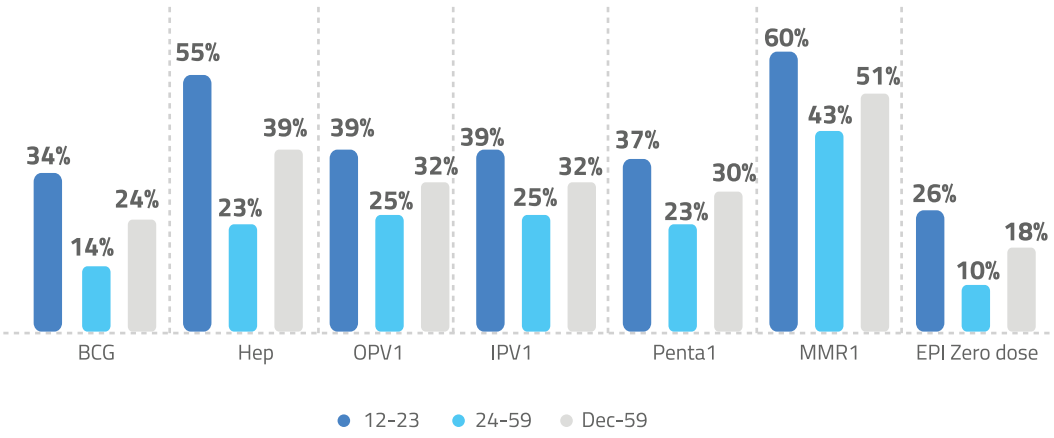
One of the objectives of this survey is to study whether Syrian children in Tell Abiad and Ras Al Ain have received their vaccine doses at proper age of vaccination for timely protection against vaccine preventable diseases/outbreaks. This thought is supported by the occurrence of many outbreaks e.g., measles outbreak in these areas; measles, mumps, and pertussis diseases where investigation reports always indicate that lack of vaccination is the most important risk factor. An operational definition of valid dose (dose given at due time and age of children) was suggested to fit the purpose of this analysis where "a valid dose of a specific vaccine is the dose that is given at proper age of vaccination as per the national schedule of vaccination and be still valid until one day before the next dose of same vaccine is due. For measles, MMR/MR1 will be valid until one day before MMR/MR2 is due. Analysis of coverage data in U5 children in these areas were expected to reflect low coverage with most vaccines (47 % for Penta 3, 45% for OPV, 49 % for MMR1). fig.9 shows clearly that vaccines were seldom given to Syrian children in these areas at proper age of vaccination as per national immunization schedule , yet some doses are given at later ages for children U5 ( 44% for IPV1 , 20% for Penta3 , 18% for OPV3 ,30% for MMR1), only for BCG the percentage was good (72 %) ,and this is because that BCG dose are considered due up to one year of age in the Syrian vaccination schedule . This situation predisposed to outbreak occurrence like measles and increased the morbidity and mortality by VPDs especially mumps and pertussis based on surveillance data during the period 2017 – 2021, table31. SIG and partners have been struggling to vaccinate the children and seize every opportunity to vaccinate these vulnerable children, however the risk of development of outbreaks and resurgence of polio is still there, indicating the need for the relentless efforts that should be placed at all administrative levels in these areas to boost immunity of Syrian children.

## Zero dose

Table 28: Zero dose

| | BCG | Hep | OPV1 | IPV1 | Penta1 | MMR1 | EPI Zero Dose |
|---|---|---|---|---|---|---|---|
| **12-23** | 34% | 55% | 39% | 39% | 37% | 60% | 26% |
| **24-59** | 14% | 23% | 25% | 25% | 23% | 43% | 10% |
| **12-59** | 24% | 39% | 32% | 32% | 30% | 51% | 18% |

Figure 10: Zero dose



One of the important indicators of the availability of vaccination services in the community is the number of children with zero-dose, (zero-dose prevalence refers to children who failed to receive any routine vaccination). For operational purposes, Gavi defines zero-dose as children who have not received the first dose of diphtheria – tetanus – pertussis containing vaccine (DTPcv1) as a proxy measure.

This analysis shows that the zero dose rates are high with all basic vaccines, especially in the age group 12-23 months (34% for BCG, 39% for OPV1 and IPV1, 37% for Penta1, 60% for MMR1), and the zero-dose percentage for all antigens was 26% in the same age group, and that mean more than a quarter of the children in the program real target did not receive any doses which is very high in Ras Al Ain (29 %), and this is due to the interruption of vaccination services in these areas during that period.

On the other hand, we find that for the age group (24 – 59 moth), the zero-dose children percentage (10 % as total) are somewhat lower compared to the age group (12 – 23), and this is because, as we mentioned earlier, some patchy vaccination services were available in these areas three years ago, tables 28 ,29.

These data give us a clear understanding of how many zero-dose children and missed communities there are, who and where they are, and why they have not been reached. Ultimately, this is to arrive at an understanding of which barriers need to be prioritized and addressed.

Focusing on zero-dose children is particularly important because those who are reached with the first vaccine are highly likely to also receive remaining vaccines.

Table 29: Zero dose Tell Abiad

| | BCG | Hep | OPV1 | IPV1 | Penta1 | MMR1 | EPI Zero Dose |
|---|---|---|---|---|---|---|---|
| **12-23** | 34% | 50% | 39% | 39% | 38% | 59% | 29% |
| **24-59** | 17% | 20% | 32% | 34% | 30% | 51% | 13% |
| **12-59** | 26% | 35% | 35% | 37% | 34% | 55% | 21% |

Table 30: Zero dose Ras Al-Ain

| | BCG | Hep | OPV1 | IPV1 | Penta1 | MMR1 | EPI Zero Dose |
|---|---|---|---|---|---|---|---|
| **12-23** | 34% | 63% | 40% | 37% | 35% | 62% | 23% |
| **24-59** | 10% | 27% | 15% | 13% | 14% | 32% | 8% |
| **12-59** | 22% | 45% | 27% | 25% | 25% | 47% | 15% |

Table 31: Numbers of Measles, Mumps and Pertussis Cases

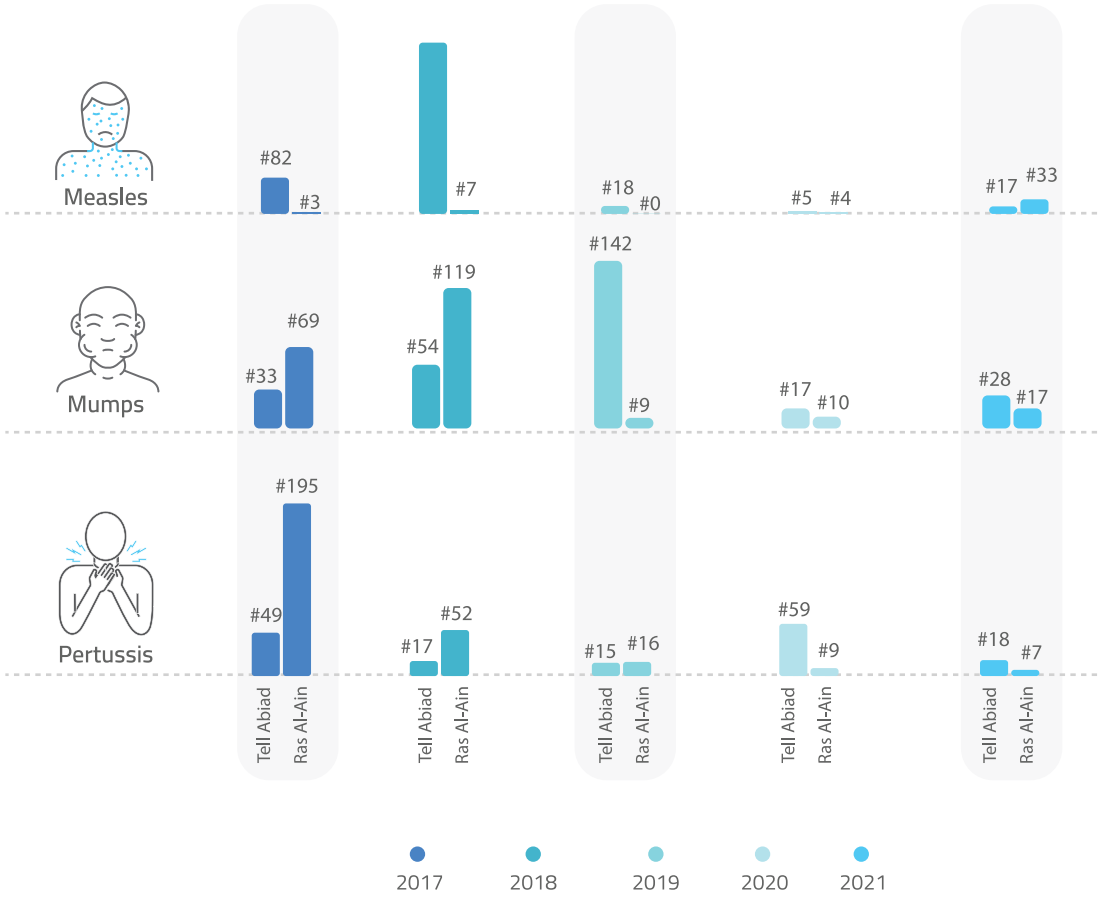



Table 32: Campaigns conducting in NES.

| Round | Governorate | District | Subdistrict | Target | Vaccinated U 1Y | Vaccinated [1Y-5Y] | Total Vaccinated | Coverage % |
|---|---|---|---|---|---|---|---|---|
| 1_2020 | Al-Hasakeh | Ras Al Ain | Ras Al Ain | 20,000 | 3,758 | 13,068 | 16,826 | 84% |
| | Ar-Raqqa | Tell Abiad | Tell Abiad | 9,942 | 2,160 | 8,128 | 10,288 | 103% |
| | | | Suluk | 8,782 | 3,144 | 10,299 | 13,443 | 153% |
| | | | Ein Issa | 4,019 | 921 | 3,779 | 4,700 | 117% |
| 1_2021 | Al-Hasakeh | Ras Al Ain | Ras Al Ain | 16,826 | 3,594 | 14,600 | 18,194 | 108% |
| | Ar-Raqqa | Tell Abiad | Tell Abiad | 10,302 | 2,059 | 8,307 | 10,366 | 101% |
| | | | Suluk | 13,448 | 2,971 | 12,256 | 15,227 | 113% |
| | | | Ein Issa | 4,681 | 799 | 3,872 | 4,671 | 100% |

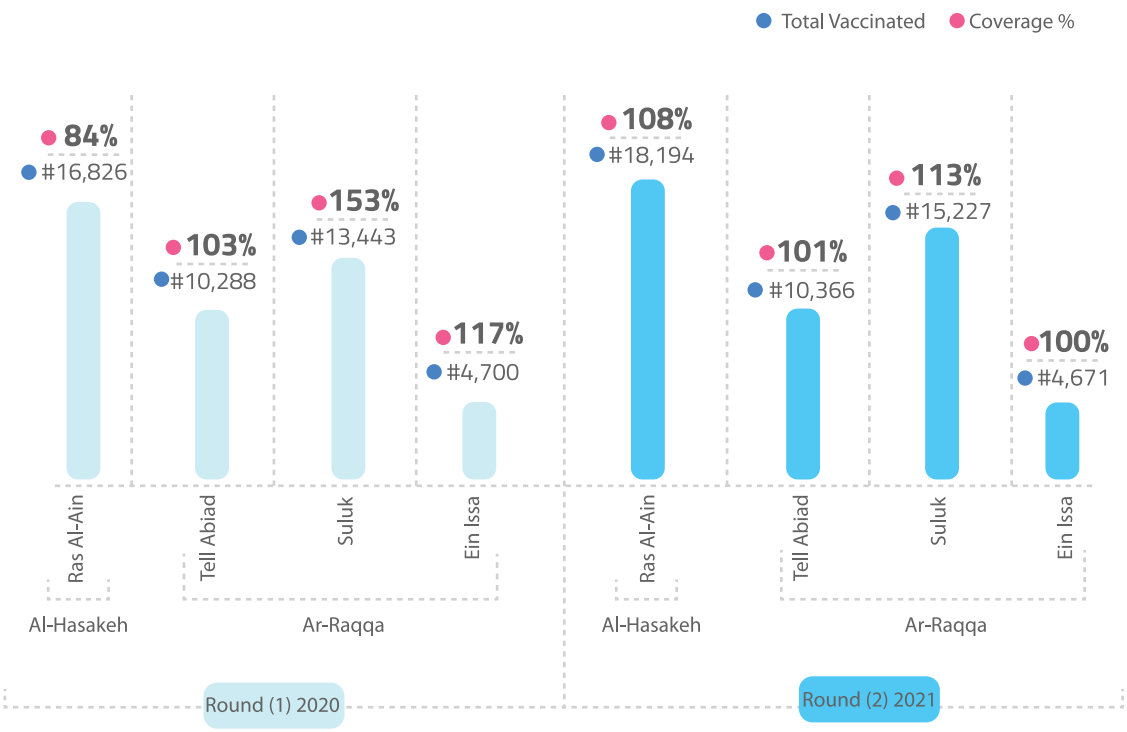

Total Vaccinated
Coverage %
84%
#16,826
103%
#10,288
153%
#13,443
117%
#4,700
108%
#18,194
101%
#10,366
113%
#15,227
100%
#4,671
Ras Al-Ain
Tell Abiad
Suluk
Ein Issa
Ras Al-Ain
Tell Abiad
Suluk
Ein Issa
Al-Hasakeh
Ar-Raqqa
Al-Hasakeh
Ar-Raqqa
Round (1) 2020
Round (2) 2021

Table 33: Number of doses given in campaigns age group (12-23 Month).

| Governorate | District | Sub-District | Polio | | MR/ MCV | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 90 | 99% | 5 | 5% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 42 | 100% | 0 | 0% |
| | | Suluk | 49 | 100% | 0 | 0% |
| | | Ein Issa | 28 | 100% | 0 | 0% |
| Total | | | 100% #210 Polio | | 2% #5 MR/ MCV | |

Table 34: Number of doses given in campaigns age group (24-59 Month).

| Governorate | District | Sub-District | Polio | | MR/ MCV | |
|---|---|---|---|---|---|---|
| Al-Hasakeh | Ras Al Ain | Ras Al Ain | 91 | 100% | 19 | 21% |
| Ar-Raqqa | Tell Abiad | Tell Abiad | 42 | 86% | 0 | 0% |
| | | Suluk | 49 | 100% | 0 | 0% |
| | | Ein Issa | 28 | 100% | 0 | 0% |
| Total | | | 97% #203 Polio | | 9% #19 MR/ MCV | |

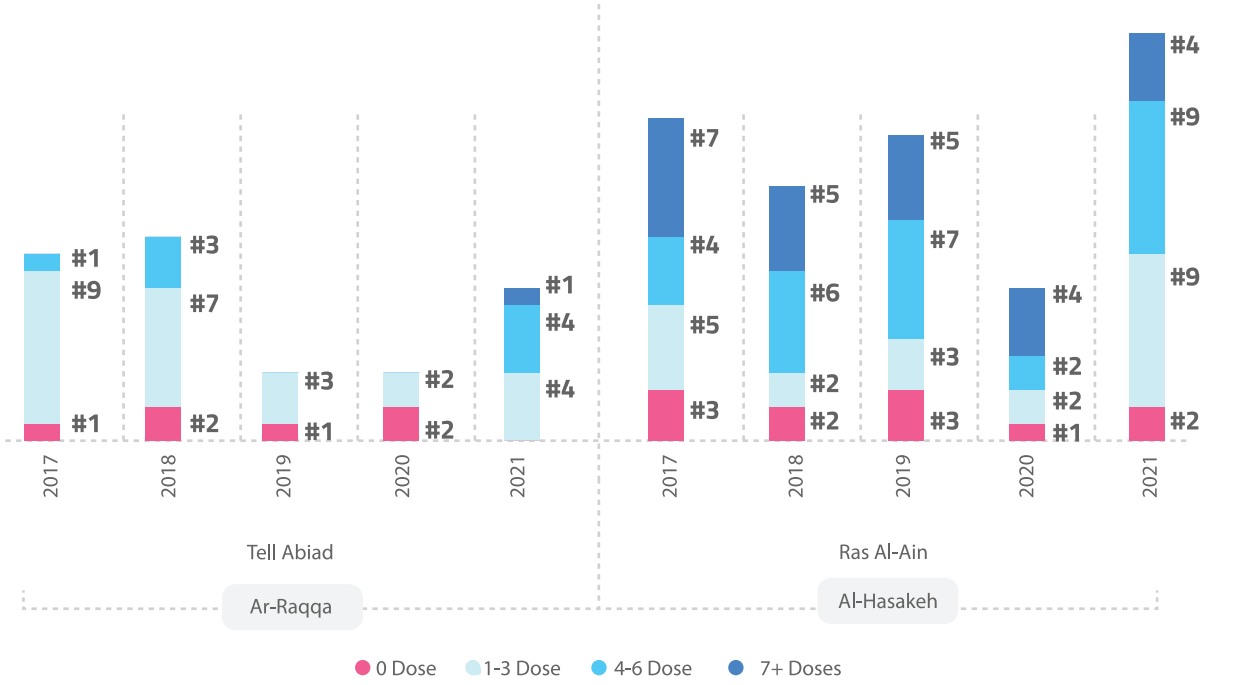
**Tables 33 & 34** show OPV and MR/ MCV coverage during SIAs ,which was 97% for OPV on district level and that mean most children under five years of age received at least one dose of OPV during polio campaigns, But on the other hand, analyzing the AFP surveillance data provided by EWARN for children U5 years during the last five years, reflects the real picture of the immunization status of children which depend on the number of OPV doses per child U5 years where the percentage of zero dose in Tell Abiad district was very high 25 % and 50 % in 2019 and 2020 respectively, and about 45% of children received equal or less than three doses in 2021. There is only 10% of children who received 7 OPV doses or more which is very low during all the period from 2017 to 2021. In Ras AL Ain district the situation is relatively better than Tell Abiad where the percentage of zero doses ranging from less than 10% in 2021 to less than 20% in 2019, and about 17 % who received 7+ doses in 2021 (fig.11).

There was 53% of OPV zero dose and 37% in Ras Al Ain and Tell Abiad respectively during the implementation of the first OPV campaign in 2021, and these percentages supports the surveillance data.

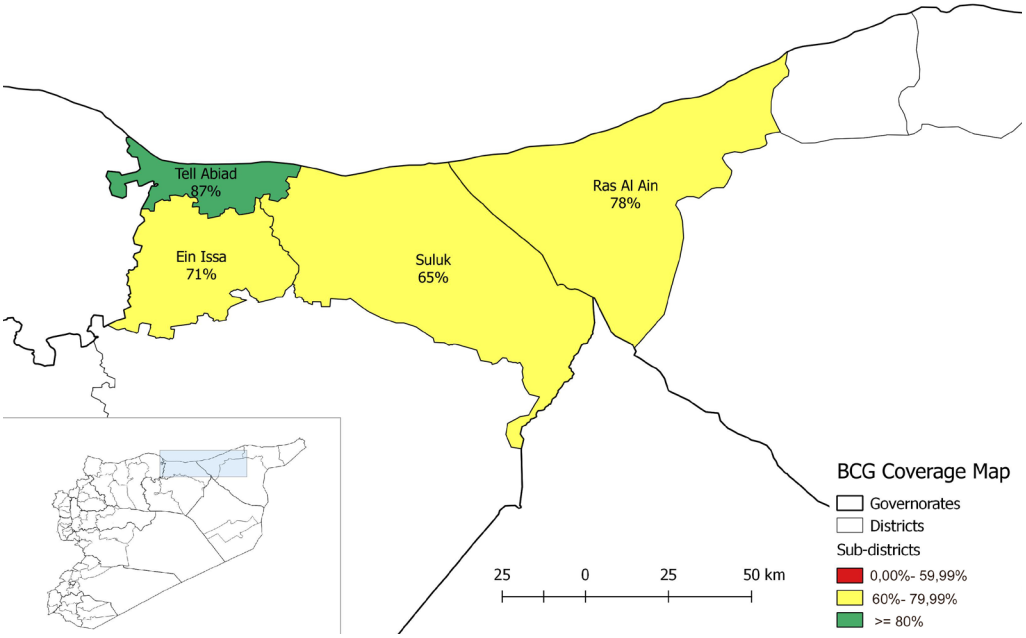
Regarding the measles doses provided during the campaigns, the situation is frustrating, as we find that out of 413 children included in the survey, no one receive any measles doses (0%) in Tell Abiad district, and only (24, 5.8 %) child receive measles doses in Ras Al Ain and this is because that last measles campaign in these areas was in 2016.

In general, and although the surveillance data consider all the OPV doses taken, whether in campaigns or in EPI centers, we find that the number of OPV doses required to immunize children is not enough, which makes them at constant risk of a recurrence of the polio outbreaks and same concerns for the measles especially after the current measles outbreak in these areas.
This justifies the urgent need to implement a lot of mono and multi-antigen campaigns to catch the children who drop out of the vaccination program, to boosting herd immunity and to support routine immunization program.

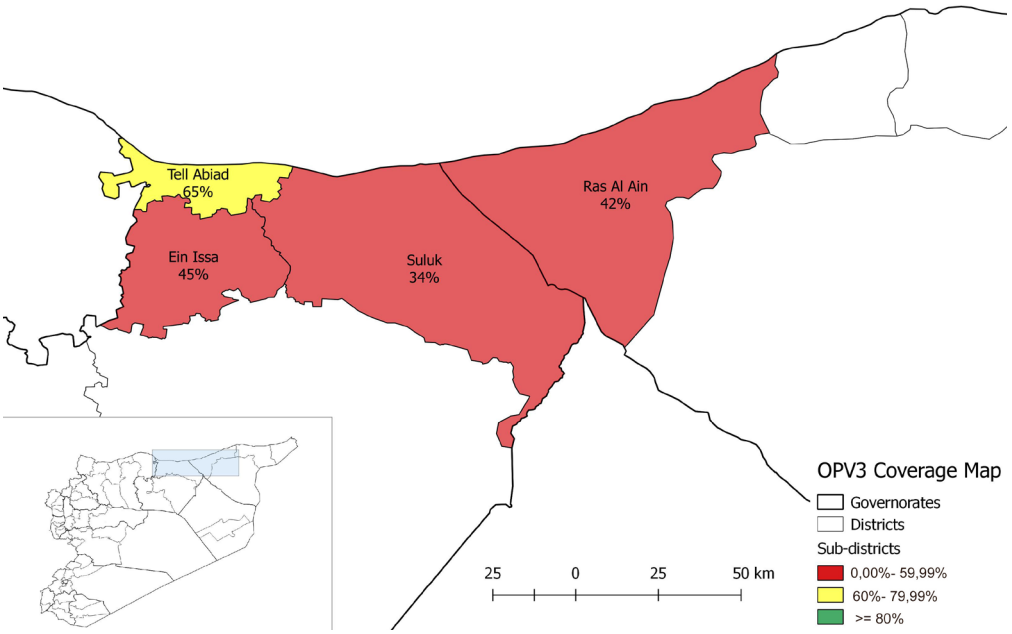
Figure 11: Median OPV doses by years



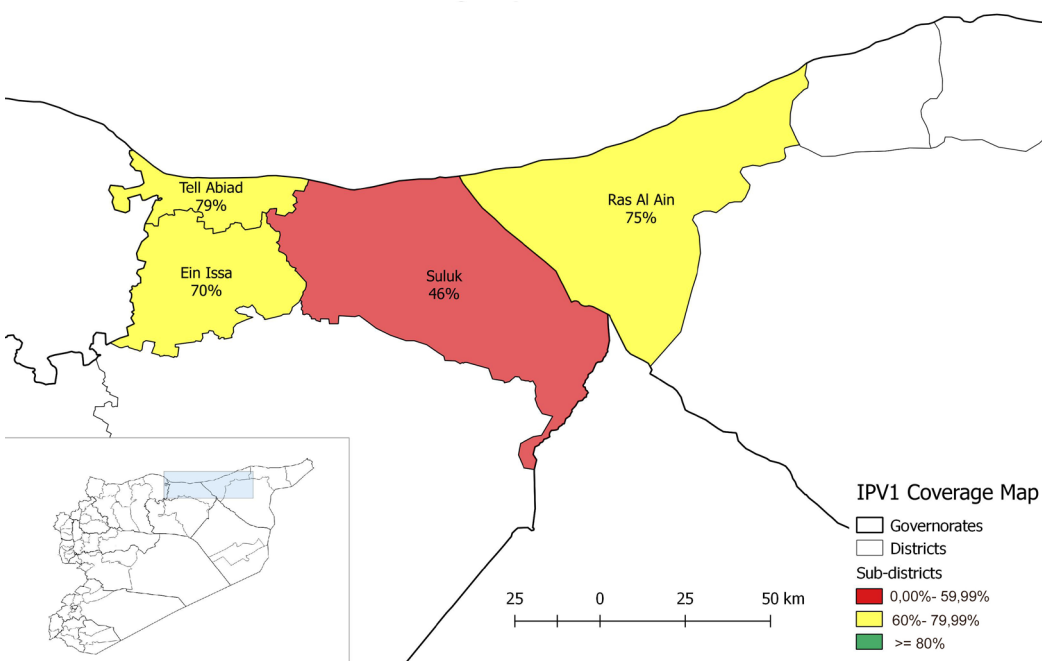
Map 02: BCG Mapping of coverages by vaccine and districts.



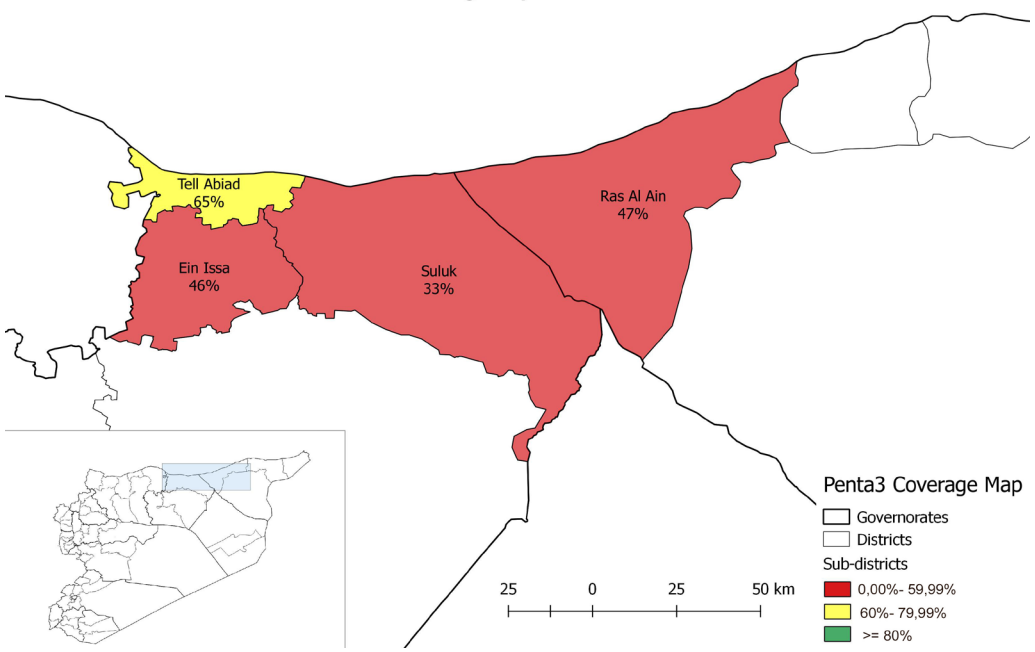

Map 03: OPV3 Mapping of coverages by vaccine and districts.



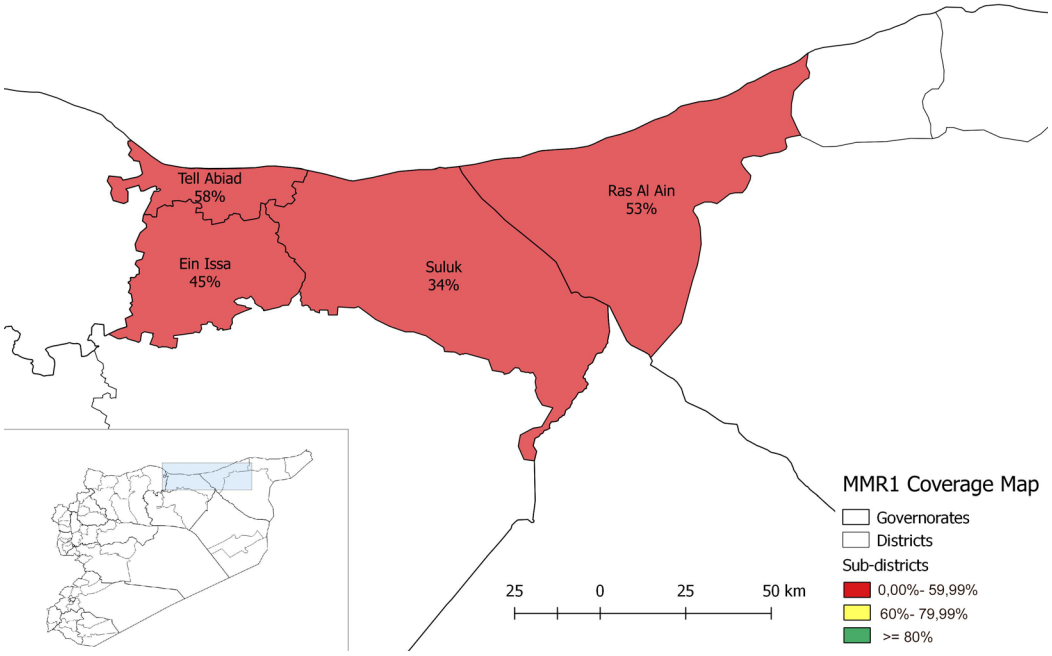
Map 04: IPV1 Mapping of coverages by vaccine and districts.



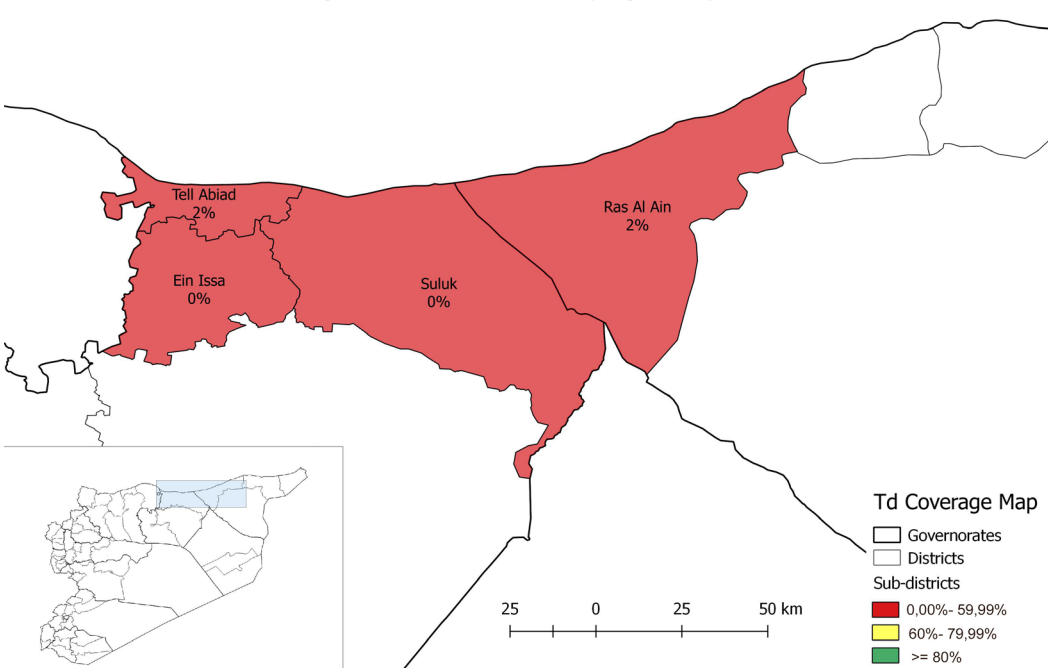

Map 05: Penta3 Mapping of coverages by vaccine and districts



Map 06: MMR1 Mapping of coverages by vaccine and districts.




Map 07: Td Mapping of doses in the last pregnant by district



# TPM RESULTS

Table 35: Results of team performance (TPM)

| | Indicator | Tell Abiad | Ras Al Ain |
|---|---|---|---|
| 1 | Does the team consist of two persons (male and female)? | 100% | 100% |
| 2 | Does the team has the forms? | 100% | 100% |
| 3 | Does the team has (vaccination cards - list of important events - schedule of campaigns implemented)? | 100% | 100% |
| 4 | Does the team has (masks - disinfectant)? | 100% | 88% |
| 5 | Does the team has clear map for the community? | 92% | 100% |
| 6 | Is the team implementing the cluster within the specified community in the plan? | 92% | 100% |
| 7 | Does the team know the medical facilities in its work area? | 100% | 100% |
| 8 | Does the team start VCS from a main square in the community? | 100% | 100% |
| 9 | Does the team select the street which will be visited randomly? | 100% | 100% |
| 10 | Does the team know how to select the first house in each sample? | 100% | 100% |
| 11 | Does the team know how to replicate the houses in the sample? | 100% | 100% |
| 12 | Does the team introduce himself in a correct way to the parents? | 100% | 100% |
| 13 | Does the team commit to the social distance and rest of the protection procedures? | 100% | 100% |
| 14 | Does the team ask about age and commit to the age groups accurately? | 100% | 100% |
| 15 | Does the team ask about vaccination cards? | 100% | 100% |
| 16 | Does the team register all the required data accurately after making sure of the correct answer? | 100% | 100% |
| 17 | In the case of a verbal answer, does the team benefit from the attachments to determine the date? | 100% | 100% |
| 18 | Does the team commit to the required working hours for daily work? | 100% | 100% |
| 19 | Does the supervisor visit his teams? | 100% | 38% |
| 20 | Does he fill out the supervision form while visiting the teams? | 100% | 38% |
| 21 | Does the supervisor conduct the morning and evening meeting with his teams? | 100% | 100% |
| 22 | Does the team commit to attending morning and evening meetings with supervisors? | 100% | 100% |

# RECOMMENDATION

**Based on the results of data analysis, stakeholders and decision makers must work on:**

- Re-establish EPI that is equitable in line with reaching every community (REC) approach (this is important as it copes with goals of GIVS & GVAP), to achieve at least 80% coverage for children targeted with immunization services with all antigens. And this requires, according to the target in Tell Abid & Ras Al Ain, at least 5 centers (a center in each sub-district) that provide services through fixed and outreach sessions. **(Achieving equity between local children and camp children is an attractive point as addressed by all global objectives).**
- Evidence of the effectiveness, efficiency and sustainability of EPI is overwhelming and time-tested therefore, the re-establishment of the EPI in NES is of utmost priority to protect children in from VPDs and to contribute to the re-establishment of primary health care system as a whole.
- Implementation of more OPV campaigns, as only two campaigns (supported by EWARN) have been implemented in these districts in 2020, in addition to the OPV3, IPV1 low coverage (45%, 68% respectively), and this is not sufficient to protect children from the risk of polio outbreaks, especially after the large spread of the disease and the emergence of new polio outbreaks in the world in the context of **Covid -19** pandemic.
- Supporting the implementation of measles vaccination campaigns to control and elimination the disease, especially after the EWARN announcement of measles outbreak, (MMR1 coverage 49%) as well as multi-antigens campaigns to vaccinate defaulter children who dropped out of the program to accelerated Implementation of Routine Immunization program.
- Activating the reproductive health and family care programs in health institutions and take advantage of missed opportunities to raise awareness of about importance of vaccination against tetanus to decrease incidence of tetanus to program target.
- Strengthening of EPI program to be able to address the problem of under-vaccination and planning, implementing response activities to occurrence of Vaccine-Preventable Diseases (VPDs) and outbreaks.
- Reaching zero-dose children and addressing social, cultural, political or gender-related barriers to under-immunization to improve equity (leaving no one behind with immunization) in immunization coverage.
- Look for some innovative ways to vaccinate children living in conflict areas, or inaccessible in coordination with local authorities and all partners.
- Link and coordinate with the community to overcome difficulties and facilitate service provision and work to support and enhanced social mobilization and community participation activities in order to **raise awareness** about the immunization program and importance of vaccination to increase the demand for vaccination services, follow-up of dropouts and addressing the causes of non-vaccination.
- **It is recommended** to start more effective advocacy meetings with UNICEF and other partners, especially for areas in need such as NES **(UNICEF has been providing vaccines to EPI program in northwest Syria since 2017).**
- Building capacities including mid-level training as per WHO training material.
- Strengthening of coordination mechanisms among all partners for better delivery of immunization service.
- Mobilizing resources, options for financing, costing, and budgeting, and using resources efficiently and effectively to ensure sustainability in EPI.
- Strengthening of surveillance system of vaccine-preventable diseases to enhance rapid detection, response and control of vaccine preventable diseases.

# CONCLUSION

- The overall conclusion is that vaccine coverage of children U5 in Tell Abiad and Ras Al Ain districts is mostly low , especially in 12-23 months children(65,71% for BCG, 37.63 % for OPV3,37.62 % for PENTA3, 61.43 % for IPV1,40.00% for MMR1/MR1) and this is due to suspended vaccination activities in these areas for the last three years (except limited vaccination services through two EPI centers and two OPV campaign).For the children 24-59 months the coverage is somewhat better than the children U2 years (86.19% for BCG; 74.76% for IPV1; 57.62% for MMR1/MR1). Adequate coverage in districts might mask low coverage in some sub-districts. Children in 24 – 59 months receive most of doses through SIAs and some limited patchy routine immunization services. very few children receive their doses at proper age of vaccination (coverage with valid doses ranges from 18.61% in OPV3 and 18.91 % in PENTA3 to 37.67% in IPV1). This shows clearly that most of children in 12 – 23 months are more susceptible for long time which might explain the outbreaks may be happen or that happened in these areas like measles outbreak 2021.

- SIG/ACU is thriving at increasing vaccine coverage in all accessible areas through SIAs and has developed the initiative of re-establishment of routine immunization program. but SIAs and RI is challenged mainly by vaccine availability, vaccine transport, as well as timely transfer of funds. Most of women in childbearing age are not protected against tetanus so are their newborns. Many women missed the opportunity of vaccination during their visits to health centers for other medical reasons, it was difficult to probe into the problem of MOV (Missed Opportunity of Vaccination). The findings support the idea that more support should be directed to boost immunity of Syrian children in Tell Abiad and Ras Al Ain districts. ACU exerts huge efforts to increase both number and frequency of SIAs and further spread routine immunization services, however this report's findings give - for the first time in this area authenticated data to prove the dire need to place more efforts and funds to improve scope of vaccination and extend it further in other in-accessible areas to provide protection to Syrian children.

# ANNEX

Annex 01: Vaccine Coverage Survey – Data collection form – Children 0 – 11 months of age.

| مسح التغطية التلقيحية | | | | | | | |
|---|---|---|---|---|---|---|---|
| لقاح الكزاز المقدم للنساء / الأطفال 0 - 11 شهر (من الولادة حتى تحت السنة) | | | | | | | |
| 1) رقم العنقود | | 2) التاريخ | | | | | |
| 3) المدى العمري | من: | | إلى: | | | | |
| 4) عدد المنازل التى تمت زيارتها | | 3 | | | | | |
| 5) المركز الصحي (رعاية الحوامل) | | | | | | | |
| 6) رقم الطفل في العنقود | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) اسم الطفل الثلاثي | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 8) تاريخ الميلاد | | | | | | | |
| 9) اسم الأم | | | | | | | |
| 10) عدد مرات الحمل | | | | | | | |
| 11) عدد جرعات لقاح الكزاز المأخوذة | | | | | | | |
| 12) عدد جرعات لقاح الكزاز المأخوذة في آخر حمل | | | | | | | |
| 13) بطاقة التلقيح | 0 - الأم لم تتسلم بطاقة 1- تسلمتها لكنها أضاعتها 2- البطاقة موجودة | | | | | | |
| | تاريخ آخر جرعة | | | | | | |
| 14) أين تم التلقيح بآخر جرعة من لقاح الكزاز | | | | | | | |
| 15) عدد الزيارات للمرافق الصحية في الحمل الأخير لمتابعة الحمل | | | | | | | |
| 16) عدد الزيارات للمرافق الصحية في الحمل الأخير لأسباب غير متعلقة بالحمل | | | | | | | |
| 17 ) أين تمت ولادة الطفل ؟ 1 - مركز طبي 2- في المنزل عبر طبيب/ة 3- في المنزل عبر قابلة 4 - أخرى | | | | | | | |
| 18) أسباب عدم التلقيح (من 1 و حتى 12) حسب المرفق، يمكن كتابة أكثر من رقم | | | | | | | |
| 19) اسم جامعة البيانات و توقيعها | | | | | | | |
| 20) اسم جامع البيانات وتوقيعه | | | | | | | |
| 21) اسم المشرف و توقيعه | | | | | | | |
| 22) اسم المنسق وتوقيعه | | | | | | | |

| | |
|---|---|
| 1 | عدم المعرفة بأهمية اللقاح |
| 2 | عدم المعرفة ببرنامج التلقيح |
| 3 | عدم المعرفة بالمكان أو التوقيت |
| 4 | الخوف من الآثار الجانبية |
| 5 | الإشاعات |
| 6 | وقت غير مناسب |
| 7 | غياب فريق اللقاح |
| 8 | اللقاح غير متوفر |
| 9 | الانتظار فترة طويلة |
| ## | مركز التلقيح بعيد |
| ## | مشاكل عائلية |
| ## | أخرى |

Annex 02: Vaccine Coverage Survey – Data collection form – Children 12 -23 month of age.

| | |
|---|---|
| 1 | عدم المعرفة بأهمية اللقاح |
| 2 | عدم المعرفة ببرنامج التلقيح |
| 3 | عدم المعرفة بالمكان أو التوقيت |
| 4 | الخوف من الآثار الجانبية |
| 5 | الإشاعات |
| 6 | وقت غير مناسب |
| 7 | غياب فريق اللقاح |
| 8 | اللقاح غير متوفر |
| 9 | الانتظار فترة طويلة |
| 10 | مركز التلقيح بعيد |
| 11 | مشاكل عائلية |
| 12 | الطفل مريض |
| 13 | أخرى |

## مسح تغطية التلقيحية
### الشريحة العمرية 12 - 23 شهر (من سنة حتى أقل من سنتين)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1) رقم العنقود | | 2) التاريخ | | | | | | |
| 3) المدى العمري | من: | | إلى: | | | | | |
| 4) عدد المنازل التي تمت زيارتها | | | | | | | | |
| 5) المركز الصحي الذي يتم فيه التلقيح عادة | | | | | | | | |
| 6) رقم الطفل في العنقود | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) اسم الطفل الثلاثي | | | | | | | | |
| 8) تاريخ الميلاد | | | | | | | | |
| 9) الجنس ( 1/ذكر، 2/أنثى ) | | | | | | | | |
| 10) ترتيب الطفل في الأسرة | | | | | | | | |
| الأسئلة من 11 وحتى 25 : 0 -غير ملقح ، 1 - ملقح حسب الإجابة الشفهية 2- ملقح حسب بطاقة سيج 3- ملقح حسب بطاقة دمشق | | | | | | | | |
| 11) السل | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 12) التهاب الكبد | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 13) شلل أطفال فموي 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 14) شلل أطفال فموي 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 15) شلل أطفال فموي 3 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 16) شلل أطفال فموي 4 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 17) شلل أطفال عضلي 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 18) شلل أطفال عضلي 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 19) خماسي 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 20) خماسي 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 21) خماسي 3 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 22) خماسي داعم | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 23) الحصبة 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 24) الحصبة 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 25) المكورات الرئوية | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 26) حملات/ شلل أطفال فموي | عدد الجرعات | | | | | | | |
| | تاريخ آخر جرعة | | | | | | | |
| 27) حملات/ حصبة | عدد الجرعات | | | | | | | |
| | تاريخ آخر جرعة | | | | | | | |
| 28) لقاحات أخرى | الاسم | | | | | | | |
| | عدد الجرعات | | | | | | | |
| | تاريخ آخر جرعة | | | | | | | |
| 29) أسباب عدم التلقيح (من 1 وحتى 13) حسب المرفق، يمكن كتابة أكثر من رقم | | | | | | | | |
| 30) اسم جامعة البيانات وتوقيعها | | | | | | | | |
| 31) اسم جامع البيانات وتوقيعه | | | | | | | | |
| 32) اسم المشرف الميداني و توقيعه | | | | | | | | |
| 33) اسم منسق المنطقة وتوقيعه | | | | | | | | |

Annex 03: Vaccine Coverage Survey – Data collection form – Children 24 -59 month of age.

| | |
|---|---|
| 1 | عدم المعرفة بأهمية اللقاح |
| 2 | عدم المعرفة ببرنامج التلقيح |
| 3 | عدم المعرفة بالمكان أو التوقيت |
| 4 | الخوف من الآثار الجانبية |
| 5 | الإشاعات |
| 6 | وقت غير مناسب |
| 7 | غياب فريق اللقاح |
| 8 | اللقاح غير متوفر |
| 9 | الانتظار فترة طويلة |
| 10 | مركز التلقيح بعيد |
| 11 | مشاكل عائلية |
| 12 | الطفل مريض |
| 13 | أخرى |

## مسح تغطية لقيحة

الشريحة العمرية 24 - 59 شهر (من سنتين حتى أقل من خمس سنوات)

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1) رقم العنقود | | 2) التاريخ | | | | | | |
| 3) المدى العمري | من: | | إلى: | | | | | |
| 4)عدد المنازل التي تمت زيارتها | | | | | | | | |
| 5) المركز الصحي الذي يتم فيه التلقيح عادة | | | | | | | | |
| 6) رقم الطفل في العنقود | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7) اسم الطفل الثلاثي | | | | | | | | |
| 8) تاريخ الميلاد | | | | | | | | |
| 9) الجنس ( 1/ ذكر ، 2/ أنثى ) | | | | | | | | |
| 10) ترتيب الطفل في الأسرة | | | | | | | | |
| الأسئلة من 11 و حتى 25 : 0 -غير ملقح ، 1 - ملقح حسب الإجابة الشفهية 2- ملقح حسب بطاقة سيج 3- ملقح حسب بطاقة دمشق | | | | | | | | |
| 11) السل | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 12) التهاب الكبد | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 13) شلل أطفال فموي 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 14) شلل أطفال فموي 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 15) شلل أطفال فموي 3 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 16) شلل أطفال فموي 4 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 17) شلل أطفال عضلي 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 18) شلل أطفال عضلي 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 19) خماسي 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 20) خماسي 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 21) خماسي 3 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 22) خماسي داعم | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 23) الحصبة 1 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 24) الحصبة 2 | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 25) المكورات الرئوية | التلقيح (0 - 1 - 2 - 3) | | | | | | | |
| | التاريخ | | | | | | | |
| 26) حملات/ شلل أطفال فموي | عدد الجرعات | | | | | | | |
| | تاريخ آخر جرعة | | | | | | | |
| 27) حملات/ حصبة | عدد الجرعات | | | | | | | |
| | تاريخ آخر جرعة | | | | | | | |
| 28) لقاحات أخرى | الاسم | | | | | | | |
| | عدد الجرعات | | | | | | | |
| | تاريخ آخر جرعة | | | | | | | |
| 29) أسباب عدم التلقيح (من 1 و حتى 13) حسب المرفق، يمكن كتابة أكثر من رقم | | | | | | | | |
| 30) اسم جامعة البيانات وتوقيعها | | | | | | | | |
| 31) اسم جامع البيانات وتوقيعه | | | | | | | | |
| 32) اسم المشرف الميداني و توقيعه | | | | | | | | |
| 33) اسم منسق المنطقة وتوقيعه | | | | | | | | |

## Annex 04: Supervision checklist for district Coordinator

**مسح التغطية باللقاح / استمارة منسق المنطقة**

**الناحية**

| الرقم | المحور | المؤشر | الفريق رقم : نعم / لا | الفريق رقم: نعم / لا | الفريق رقم: نعم / لا |
|---|---|---|---|---|---|
| 1 | تحضير العمل | هل التزم المشرف بعقد الاجتماع الصباحي بوجود عضوي الفريق | | | |
| 2 | | هل لدى أعضاء الفريق المعرفة التامة بالتجمع السكني الذي سيتم المسح فيه | | | |
| 3 | | هل يحدد المشرف لفريقه الشريحة العمرية وبملأ المجموعة الأولى من أسئلة كل استمارة | | | |
| 4 | | هل يعرف الفريق كيفية اختيار المنزل الأول في كل عينة وكيفية تكرار المنازل في العينة الواحدة | | | |
| 5 | المعرفة بالبروتوكول | هل يقوم المشرف بزيارة الفريق أثناء العمل | | | |
| 6 | | هل يعرف المشرف قادة المجتمع المحلي في مكان اختيار العنقود | | | |
| 7 | | هل يتم السؤال بطريقة بسيطة يفهمها الأهل والتأكيد على كل الأسئلة | | | |
| 8 | | هل لدى المشرف والفريق الأدوات المطلوبة للعمل اليومي (استمارات - أقلام - تقويم ..احتياطية ) | | | |
| 9 | ممارسات التسجيل | هل يقوم بإجراء المسح بالطريقة الصحيحة حسب البروتوكول (باختيار 7 اطفال من كل شريحة عمرية) | | | |
| 10 | | هل يقوم الفريق بتسجيل كل البيانات المطلوبة بدقة بعد التأكد من الاجابة الصحيحة | | | |
| 11 | الالتزام بالعمل | هل يلتزم الفريق بساعات العمل المطلوبة للعمل اليومي | | | |
| 12 | | هل يلتزم الفريق بمراجعة الاستمارات مع المشرف في الميدان ثم حضور الاجتماع المسائي | | | |
| 13 | تأكيد البيانات | هل يعرف الفريق مراكز اللقاح الروتيني في منطقة العمل الخاص به | | | |
| 14 | | هل لدى الفريق خطة للتأكد من الإجابات الشفهية ويعرف مسؤول التلقيح في منطقته | | | |
| 15 | الزيارة | هل يقوم المشرف الميداني بالإشراف على فرقه وتسجيل مشاهدات الإشراف | | | |
| 16 | تقرير | هل يقوم المشرف الميداني بتقديم تقرير يومي لمنسق المنطقة يتضمن كل جوانب سير العمل اليومي مع تقييم أداء الفرق | | | |

**اسم المشرف :**

## Annex 05: Supervision checklist for team performance

### مسح التغطية باللقاح / استمارة الإشراف على الفرق

الناحية التاريخ

| الرقم | المحور | المؤشر | الفريق رقم : نعم / لا | الفريق رقم: نعم | الفريق رقم : نعم |
|---|---|---|---|---|---|
| 1 | الخرائط والمسارات | هل أعضاء الفريق لديهم معرفة تامة بالمنطقة التي سيتم إجراء المسح فيها | | | |
| 2 | | هل يعرف الفريق التجمعات السكانية التي سيتم أخذ العناقيد منها | | | |
| 3 | | هل لدى الفريق خريطة توضح بدقة تلك التجمعات التي سيتم أخذ العناقيد منها | | | |
| 4 | المعرفة بالبروتوكول | هل يعرف الفريق كيفية اختيار المنزل الأول في كل عينة وكيفية تكرار المنازل في العينة الواحدة | | | |
| 5 | | هل يقوم بزيارة المنازل المحددة حسب الخطة | | | |
| 6 | | هل يقدم الفريق نفسه بطريقة صحيحة ومريحة للأهل | | | |
| 7 | ممارسات التسجيل | هل لدى الفريق الأدوات المطلوبة للعمل اليومي (استمارات - برنامج الإدخال على الموبايل) | | | |
| 8 | | هل يقوم بإجراء المسح بالطريقة الصحيحة حسب البروتوكول (باختيار 7 اطفال من كل شريحة عمرية) | | | |
| 9 | | هل يقوم الفريق بتسجيل كل البيانات المطلوبة بدقة بعد التأكد من الاجابة الصحيحة | | | |
| 10 | الالتزام بالعمل | هل يلتزم الفريق بساعات العمل المطلوبة للعمل اليومي | | | |
| 11 | | هل يلتزم الفريق بحضور الاجتماعات الصباحية والمسائية مع المشرفين | | | |
| 12 | إجراءات الوقاية | هل يلتزم الفريق بارتداء الكمامة الطبية طيلة ساعات العمل | | | |
| 13 | | هل يلتزم الفريق بتعقيم الأيدي بالمعقم الكحولي عند الضرورة (أي ملامسة لبطاقة التلقيح أو الأسطح أو المستفيدين) | | | |
| 14 | | هل يلتزم الفريق باجراءات التباعد الجسدي فيما بينهم و مع المستفيدين | | | |

اسم المشرف : التوقيع :

## Annex 06: History list of campaigns implemented – Al Hasakeh & Ar-Raqqa.

| Year | Governorate | Ar-Raqqa | Al-Hasakeh |
|---|---|---|---|
| 2014 | Campaign | Tell Abiad | Ras Al Ain |
| | Polio 1 | January | January |
| | Polio 2 | February | February |
| | Polio 3 | March | March |
| | Polio 4 | April | April |
| | Polio 5 | May | May |
| | Polio 6 | June | June |
| | Polio 7 | August | August |
| 2015 | Polio 8 | February | March |
| | Polio 9 | April | x |
| | Polio 10 | June | x |
| | Polio 11 | September | September |
| | Polio 12 | October | October |
| 2016 | Polio 13 | April | x |
| | MR | March | x |
| | AIRI 1 | July | x |
| | AIRI 2 | August | October |
| | AIRI 3 | x | x |
| 2017 | Polio Feb | x | x |
| | AIRI_1 | x | x |
| | April_Cam. | x | x |
| | AIRI_2 | x | x |
| | Nov_Cam | x | x |
| | Dec_cam | x | x |
| 2018 | Mar_Polio | x | x |
| | May_Polio | x | x |
| | Sep_Polio | x | x |
| | Dec_Polio | x | x |
| 2019 | Polio_Jan | x | x |
| | Polio_July | x | x |
| | Polio_Dec | x | x |
| 2020 | Polio_Oct | October | October |
| 2021 | Polio_Jan | December | December |
| | Polio_Mar | x | x |
| | Polio_Jun | x | x |
| | Nov_Cam | x | x |
| | Dec_cam | x | x |

## Annex 07: National vaccination schedule. Syria

| Visit | Age of child | Type of vaccine |
|---|---|---|
| 1 | At birth | (BCG)+(Hep B 0) |
| 2 | Stat of 3rd month | (IPV1 +OPV1 +Penta1) |
| 3 | Stat of 5rd month | (IPV2 + OPV2 + Penta2) |
| 4 | Stat of 7d month | (Penta3 + OPV3) |
| 5 | Stat of 13rd month | (MMR1 + 1VITA) |
| 6 | Stat of 19rd month | Penta booster + MMR2 + OPV4 + 2A VIT |
| | **Vaccination at school** | |
| 1 | 6 years of age | Meningococcal vaccine AC + Td + OPV5 |
| 2 | 11 years of age | Td |

## Annex 08: TPM Supervision checklist

الهلال الأحمر القطري
Qatar Red Crescent

**مسح التغطية باللقاح / استمارة المراقب المحايد**

المحافظة: المنطقة : الناحية: التجمع السكني:
اسم المراقب: تاريخ الاستبيان:

| الرقم | المؤشر | اسم الحي: | | اسم الحي: | | اسم الحي: | |
|---|---|---|---|---|---|---|---|
| | | رمز الفريق: | | رمز الفريق: | | رمز الفريق: | |
| | | نعم | لا | نعم | لا | نعم | لا |
| 1 | هل يتكون الفريق من عنصرين (ذكروأنثى)؟ | | | | | | |
| 2 | هل يحمل الفريق الاستمارات الثلاثة والقلم؟ | | | | | | |
| 3 | هل يحمل الفريق جميع المرفقات (بطاقات التلقيح - قائمة الأحداث المهمة - جدول الحملات المنفذة)؟ | | | | | | |
| 4 | هل لدى الفريق معدات الوقاية (كمامات - مطهر)؟ | | | | | | |
| 5 | هل يحمل الفريق خريطة واضحة للتجمع؟ | | | | | | |
| 6 | هل الفريق ينفذ العنقود ضمن التجمع السكني المحدد في الخطة ؟ | | | | | | |
| 7 | هل يعرف الفريق النقاط الطبية في منطقة عمله (مراكز التلقيح الروتيني - مستوصفات أو مراكز تقدم خدمات رعاية الأمومة والطفل - أماكن التوليد الطبيعي والمشافي)؟ | | | | | | |
| 8 | هل يبدأ الفريق المسح من ساحة رئيسية في التجمع؟ | | | | | | |
| 9 | هل يختار الفريق الشارع الذي ستتم زيارة المنازل فيه بطريقة عشوائية؟ | | | | | | |
| 10 | هل يعرف الفريق كيفية اختيار المنزل الأول في كل عينة (طريقة عشوائية / طريقة السحب من الأرقام)؟ | | | | | | |
| 11 | هل يعرف الفريق كيفية تكرار المنازل في العينة (جهة السير مع عقارب الساعة)؟ | | | | | | |
| 12 | هل يقدم الفريق نفسه بطريقة صحيحة ومريحة للأهل؟ | | | | | | |
| 13 | هل يلتزم الفريق بإجراءات التباعد الجسدي وبقية إجراءات الوقاية؟ | | | | | | |
| 14 | هل يسأل الفريق عن العمر بشكل دقيق ويلتزم بالفئات العمرية؟ | | | | | | |
| 15 | هل يسأل الفريق عن بطاقات التلقيح ؟ | | | | | | |
| 16 | هل يقوم الفريق بتسجيل كل البيانات المطلوبة بدقة بعد التأكد من الإجابة الصحيحة؟ | | | | | | |
| 17 | في حالة الإجابة الشفهية هل يستفيد الفرق من المرفقات لتحديد التاريخ؟ | | | | | | |
| 18 | هل يتلزم الفريق بساعات العمل المطلوبة للعمل اليومي؟ | | | | | | |
| 19 | هل يقوم المشرف بزيارة فرقه؟ | | | | | | |
| 20 | هل يقوم بتعبئة استمارة الإشراف أثناء زيارة الفرق؟ | | | | | | |
| 21 | هل يقوم المشرف بإجراء الاجتماع الصباحي والمسائي مع فرقه؟ | | | | | | |
| 22 | هل يلتزم الفريق بحضور الاجتماعات الصباحية والمسائية مع المشرفين؟ | | | | | | |

## Annex 09:

- Dr. M. Salem Immunization program manager ACU – Technical committee member SIG
- Dr. Ammar Al Ani Immunization program coordinator ACU – Technical committee member SIG
- Dr. Anas Al Ftaeh Immunization program coordinator ACU – Technical committee member SIG
- Dr. Turki Dahir Immunization program coordinator ACU – Technical committee member SIG
- Dr. Wael Fadel Immunization program coordinator ACU – Technical committee member SIG
- Eng. Hiba Alwan Immunization program data coordinator ACU – Technical committee member SIG
- Eng. Jamal Jaadan data management officer ACU-EWARN

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Assistance Coordination Unit (ACU)

# VACCINE
# COVERAGE SURVEY
## EWARN
## NORTHEAST SYRIA
July 2021

وحدة تنسيق الدعم
ASSISTANCE COORDIANTION UNIT

EWARN
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ALERT AND
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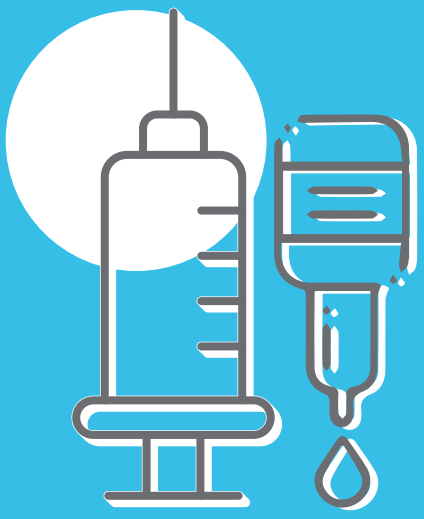
JULY 2021

# VACCINE COVERAGE SURVEY EWARN NORTHEAST SYRIA

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