# Koshi Province Routine immunization monitoring update from 2018 to 2023

Routine Immunization Independent monitoring is conducted through SMOs and trained monitors to provide real-time data for evidence-based interventions at appropriate administrative levels. This monitoring also identifies children who have missed routine vaccinations due to any cause and refers them to the nearest center for complete vaccination. This monitoring is a continuous activity in Nepal since 2018. Till Dec 2023, 321, session sites and 398 health facilities in 14 districts were monitored using structured checklists. About 7504 children in 784 high-risk communities were monitored out of which 6862 (91%) were age-appropriately immunized.

Age-appropriate vaccination status (%) among children aged 6 weeks to 59 months in community found during Quick Immunization Assessment(2018-2022)

605 community

5464 children

5023 children

Number of age appropriately unimmunized children

- 1 - 4
- 5 - 24
- 25 - 49
- 50 - 74
- 75 and more

Age appropriately immunized

- less than 60%
- 60% - 79%
- 80% - 89%
- 90 and more

| 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| Y=80% N=20% | Y=89% N=11% | No QIA | Y=90% N=10% | Y=96% N=6% | Y=90% N=10% |

Reason category for not receiving age-appropriate vaccination(2018-2022)

Child Vaccination Card Available(2018-2022)

Mother/caregiver knows vaccines due for next visit & date, day, and place of session(2018-2022)

Child vaccination card status and reason(2018-2022)

| Reason | # | % |
|---|---|---|
| 1 - not received | 18 | 9% |
| 2 - Lost | 170 | 81% |
| 3 - Torn | 15 | 7% |
| 4 - Others | 7 | 3% |
| Total | 210 | 100% |

| Category | Reason | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | # | % | # | % | # | % | # | % | # | % | # | % |
| Service Delivery | 1a. Vaccination site too far | 1 | 1 | 4 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 7 | 1 |
| | 1b. Vaccinator not available | 11 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 13 | 14 | 25 | 4 |
| | 1c.Vaccines not available | 4 | 3 | 7 | 4 | 0 | 0 | 14 | 8 | 6 | 7 | 31 | 5 |
| | 1d.Syringes or other supplies not available | | 0 | | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| | 1e. Immunization session not conducted | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | | 0 | 3 | 1 |
| | 1f. Immunization session conducted but not regularly according to schedule | | 0 | | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| | 1g.Working or busy parents | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | 0 | 1 | 0 |
| | 1h.Not good experience with services ( services, long waiting time, health workers' behaviour, immunization session site location etc.) | | 0 | | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| | 1i. Migration/mobile population ( Example: seasonal migration, ethnic group migration, construction workers etc.) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | 0 | 1 | 0 |
| | 1j.Displaced population (refugee,IDP,flood victims or disaster victims) | | 0 | | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| Knowledge Gap | 2a.Mother does not know total no. of contact for complete immunization | 14 | 10 | 13 | 8 | 0 | 0 | 24 | 13 | 14 | 15 | 65 | 11 |
| | 2b.Mother does not know the age for vaccination of different vaccine | 27 | 19 | 4 | 2 | 0 | 0 | 20 | 11 | 15 | 16 | 66 | 11 |
| | 2c.Mother does not know immunization session site | | 0 | | 0 | 0 | 0 | | 0 | 2 | 2 | 2 | 0 |
| Service Uptake | 3a.Child not at home | 11 | 8 | 33 | 20 | 0 | 0 | 30 | 16 | 5 | 5 | 79 | 14 |
| | 3b.Child sick | 22 | 16 | 53 | 32 | 0 | 0 | 32 | 18 | 20 | 22 | 127 | 22 |
| | 3c.Fear of AEFI ( any AEFI or fever or pain) | 7 | 5 | 18 | 11 | 0 | 0 | 8 | 4 | | 0 | 33 | 6 |
| | 3d.Thinking will go later | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 6 | 7 | 11 | 2 |
| | 3e.Fear of multiple injections | | 0 | | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| | 3f.Past history of AEFI | | 0 | | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| | 3g.No belief in vaccine | 17 | 12 | 11 | 7 | 0 | 0 | 0 | 0 | 1 | 1 | 29 | 5 |
| | 3h.Religious | 3 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | | 0 | 6 | 1 |
| | 3i.Fear of getting infected with COVID-19 at immunization session site | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 4 | 1 | 1 | 8 | 1 |
| | 3j.Undecided ( Can not decide whether vaccine is needed or not) | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | | 0 | 1 | 0 |
| | 3k.Complete refusal to vaccinate | | 0 | | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| Other | 4 - Others | 24 | 17 | 20 | 12 | 0 | 0 | 35 | 19 | 3 | 3 | 82 | 14 |
| | Reason Unknown | | 0 | | 0 | 0 | 0 | | 0 | 5 | 5 | 5 | 1 |
| **Koshi Province** | | **141** | **100** | **167** | **100** | **0** | **0** | **182** | **100** | **92** | **100** | **582** | **100** |

## Routine immunization monitoring update 2023

In 2023, 7 districts (8 visits), 58 health facilities (59 visits), 13 session sites (14 visits) and 170 high risk communities were monitored. About 2040 children aged 6 weeks to 59 months were monitored out of which 1839 (90%) children were found to be age-appropriately vaccinated.

### District Checklist

Findings

| District | District visited | Total visits | District has updated district micro plan as per nes local administrative structure: Yes (#) | Yes (%) | District update vaccine and logistic control register at the end of immunization sessions for last month: Yes (#) | Yes (%) | Adequate stock of all vaccines , syringes for last 3 months: Yes (#) | Yes (%) |
|---|---|---|---|---|---|---|---|---|
| Bhojpur | - | - | - | - | - | - | - | - |
| Dhankuta | 1 | 1 | 1 | 100 | 1 | 100 | 1 | 100 |
| Ilam | - | - | - | - | - | - | - | - |
| Jhapa | 1 | 1 | 1 | 100 | 1 | 100 | 1 | 100 |
| Khotang | - | - | - | - | - | - | - | - |
| Morang | - | - | - | - | - | - | - | - |
| Okhaldhunga | 1 | 1 | - | - | 1 | 100 | 1 | 100 |
| Panchthar | 1 | 2 | 1 | 100 | - | - | 1 | 100 |
| Sankhuwasabha | 1 | 1 | 1 | 100 | 1 | 100 | 1 | 100 |
| Solukhumbu | 1 | 1 | - | - | 1 | 100 | 1 | 100 |
| Sunsari | - | - | - | - | - | - | - | - |
| Taplejung | - | - | - | - | - | - | - | - |
| Terhathum | 1 | 1 | 1 | 100 | - | - | 1 | 100 |
| Udayapur | - | - | - | - | - | - | - | - |
| Koshi | 7 | 8 | 5 | 71 | 5 | 71 | 7 | 100 |

### Health Facility

10 vaccine substore were visited 10 times,70% adequate supply of vaccine and syringes for last 3 months

| District | No HF visited | Total visits | Health facility got adequately bundled vaccines, diluents, syringes and safety boxes: Yes (#) | Yes (%) | Health facility updated micro-plan as per new local administrative structure (inclusion of HTR population and area from palika ): Yes (#) | Yes (%) | Health facility initiated for 'full immunization' and sustainability plan if already declared fully immunized: Yes (#) | Yes (%) | Health facility conducted all sessions (out reach, fixed and mobile) as planned: Yes (#) | Yes (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| Bhojpur | - | - | - | - | - | - | - | - | - | - |
| Dhankuta | - | - | - | - | - | - | - | - | - | - |
| Ilam | 3 | 3 | 3 | 100 | 2 | 67 | 3 | 100 | 3 | 100 |
| Jhapa | 22 | 23 | 22 | 100 | 18 | 82 | 22 | 100 | 20 | 91 |
| Khotang | 1 | 1 | 1 | 100 | - | - | 1 | 100 | 1 | 100 |
| Morang | 8 | 8 | 3 | 38 | 3 | - | 3 | 38 | 2 | 25 |
| Okhaldhunga | - | - | - | - | - | - | - | - | - | - |
| Panchthar | 3 | 3 | 3 | 100 | 2 | 67 | 1 | 33 | 3 | 100 |
| Sankhuwasabha | - | - | - | - | - | - | - | - | - | - |
| Solukhumbu | 1 | 1 | 1 | 100 | - | - | - | - | 1 | 100 |
| Sunsari | 12 | 12 | 2 | 17 | 0 | 0 | 2 | 17 | 2 | 17 |
| Taplejung | 8 | 8 | 8 | 100 | 2 | 25 | 8 | 100 | 8 | 100 |
| Terhathum | - | - | - | - | - | - | - | - | - | - |
| Udayapur | - | - | - | - | - | - | - | - | - | - |
| Koshi | 58 | 59 | 43 | 74 | 27 | 47 | 40 | 69 | 40 | 69 |

### Session Site

Findings

| District | Health facilities visited | No. of sessons visit | Name list of children (expected and missed for earlier session) for this session available: Yes (#) | Yes (%) | Supply of vaccine doses , syringes, diluent and safety boxes matches with session targets: Yes (#) | Yes (% ) | Vaccinator notes date & time of re-constitution for BCG, MR and JE vaccines: Yes (# ) | Yes ( % ) | FCHV knows the ages for vaccination with different vaccines as per immunization schedule: Yes (#) | Yes (%) | Mothers/guardians are informed about next dose visits: Yes (#) | Yes (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Bhojpur | - | - | - | - | - | - | - | - | - | - | - | - |
| Dhankuta | 1 | 1 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | 100 | 1 | 100 |
| Ilam | - | - | - | - | - | - | - | - | - | - | - | - |
| Jhapa | 3 | 4 | 4 | 100 | 4 | 100 | - | - | 3 | 75 | 4 | 100 |
| Khotang | - | - | - | - | - | - | - | - | - | - | - | - |
| Morang | 3 | 3 | - | - | 3 | 100 | 2 | 67 | - | - | 1 | 33 |
| Okhaldhunga | - | - | - | - | - | - | - | - | - | - | - | - |
| Panchthar | - | - | - | - | - | - | - | - | - | - | - | - |
| Sankhuwasabh | - | - | - | - | - | - | - | - | - | - | - | - |
| Solukhumbu | - | - | - | - | - | - | - | - | - | - | - | - |
| Sunsari | 6 | 6 | 1 | 17 | 6 | 100 | 5 | 83 | 1 | 17 | 4 | 67 |
| Taplejung | - | - | - | - | - | - | - | - | - | - | - | - |
| Terhathum | - | - | - | - | - | - | - | - | - | - | - | - |
| Udayapur | - | - | - | - | - | - | - | - | - | - | - | - |
| Koshi | 13 | 14 | 6 | 43 | 14 | 100 | 8 | 57 | 5 | 36 | 10 | 71 |

Age-appropriate vaccination status (%) among children aged 6 weeks to 59 months in the community found during Quick Immunization Assessment, Jan to Dec 2023

| District | Total Communities | Total Children | Yes (N) | Yes (% ) |
|---|---|---|---|---|
| Bhojpur | - | - | - | - |
| Dhankuta | - | - | - | - |
| Ilam | 4 | 40 | 34.00 | 85 |
| Jhapa | 34 | 393 | 375.00 | 95 |
| Khotang | - | - | - | - |
| Morang | 78 | 986 | 906.00 | 92 |
| Okhaldhunga | - | - | - | - |
| Panchthar | 6 | 64 | 61.00 | 95 |
| Sankhuwasabha | - | - | - | - |
| Solukhumbu | - | - | - | - |
| Sunsari | 36 | 452 | 358.00 | 79 |
| Taplejung | 8 | 59 | 59.00 | 100 |
| Terhathum | - | - | - | - |
| Udayapur | 4 | 46 | 46.00 | 100 |
| **Province 1** | **170** | **2040** | **1839** | **90** |

- Less than 70%
- 70 % - 79 %
- 80 % - 89 %
- 90 % and more
- No community level monitoring

Data consist of quick immunization monitoring done in measles outbreak districts too

Quick immunization assessment is conducted in each community in 5-10 eligible children or more. Therefore, the age-appropriate vaccination % given in the map only reflects the % among the children assessed in the communities and not the whole palika or municipality.

### Status of immunization card

### For not receiving age-appropriate vaccinations

| Reason Category | Reason | Prov1 # | Prov1 % |
|---|---|---|---|
| Service Delivery | 1a. Vaccination site too far | 5 | 2 |
| | 1b. Vaccinator not available | 1 | 0 |
| | 1c.Vaccines not available | 1 | 0 |
| | 1d.Syringes or other supplies not available | 3 | 1 |
| | 1e. Immunization session not conducted | 0 | 0 |
| | 1f. Immunization session conducted but not regularly according to schedule | 0 | 0 |
| | 1g.Working or busy parents | 8 | 4 |
| | 1h.Not good experience with services ( services, long waiting time, health workers' behaviour, immunization session site location etc.) | 1 | 0 |
| | 1i. Migration/mobile population ( Example: seasonal migration, ethnic group migration, construction workers etc.) | 0 | 0 |
| | 1i. Migration-mobile population ( Example: seasonal migration, ethnic group migration, construction workers etc.) | 0 | 0 |
| | 1j.Displaced population (refugee,IDP,flood victims or disaster victims) | 2 | 1 |
| Knowledge Gap | 2a.Mother does not know total no. of contact for complete immunization | 28 | 14 |
| | 2b. Mother does not know the age for vaccination of different vaccine | 29 | 14 |
| | 2c. Mother does not know immunization session site | 3 | 1 |
| Service Uptake | 3a. Child not at home | 31 | 15 |
| | 3b. Child sick | 60 | 30 |
| | 3c. Fear of AEFI ( any AEFI or fever or pain) | 3 | 1 |
| | 3d. Thinking will go later | 5 | 2 |
| | 3e. Fear of multiple injections | 0 | 0 |
| | 3f. Past history of AEFI | 0 | 0 |
| | 3g. No belief in vaccine | 0 | 0 |
| | 3h.Religious | 1 | 0 |
| | 3i.Fear of getting infected with COVID-19 at immunization session site | 4 | 2 |
| | 3j. Undecided ( Can not decide whether vaccine is needed or not) | 0 | 0 |
| | 3k.Complete refusal to vaccinate | 2 | 1 |
| Others | Other | 2 | 1 |
| | Reason unknown | 12 | 6 |
| Total | | 201 | 100 |

Independent monitors conducting Rapid convenient monitoring in different communities