Bangladesh Data Dashboard

Access the online data dashboard and download the full report: https://zdlh.gavi.org/semiannual-update



Background

The <u>Bangladesh Learning Hub</u> (October 2022–December 2025) is led by the International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b) with partners Jhpiego and RedOrange Communications.

Grants in Bangladesh

- Equity Accelerator Funding (EAF): currently in design.
- Health System Strengthening (HSS-3) (October 2019-December 2025): targets 16 districts and four City Corporations. The Bangladesh Learning Hub (LH) generates evidence in three of the HSS-3 targeted districts. The LH used triangulation and lot quality assurance sampling (LQAS) to identify high zero-dose (ZD) subdistrict areas.
- Fragility, Emergencies, and Displaced Populations (FED) 2023-2026 for forcibly displaced Myanmar nationals (FDMN).

Zero-Dose (ZD) Children: Children who have not received any dose of diphtheria, tetanus, and pertussis-containing vaccine (DTP1).

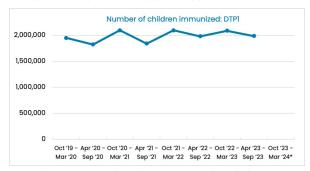
Under-Immunized (UI) Children: Children who have received DTP1 but have not received DTP3.¹

¹ In Bangladesh this is the *Pentavalent* series.

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DTP1 Trends in Bangladesh, 2019-2023

Trends stable over time with declines due to COVID-19



^{*}All data for 2019-2023 were retrieved from the WHO monthly immunization results database. For 2024, the number of children immunised with DTPI in March were not yet available through WHO at the time of this report; ZDLH will adjust these figures with updated data for for the period Oct 2023-March 2024 in the next semiannual update. Additionally, only national level trends are shown here because Bangladesh does not report subnational data to WHO through the electronic Joint Reporting Form (eJRF). National level trends for DTPI coverage in Bangladesh was over 100% for every 6-month time period during 2019-2023, highlighting issues with data quality.

Overview of Vaccination Coverage: Household Survey Data from Baseline Implementation Research Conducted September-December 2023

District	DTP1 Coverage %	Zero- Dose %	Under- Immunized %	Children 4.5-23 months (N)	
Sunamganj (haor/wetland)	96.8%	2.6%	18.7%	2,349	
Gaibandha (char/sandy land surrounded by water)	98.7%	1.0%	6.5%	2,316	
Noakhali (coastal)	96.7%	3.7%	15.0%	2,381	
Rangamati (hilly)	99.6%	0.9%	6.3%	2,107	
Sherpur (plain)	98.8%	1.1%	8.3%	2,367	
DNCC (urban slum)	97.8%	2.2%	16.0%	1,236	
Total	98.1%	1.9%	11.6%	12,756	

Data represents all children in intervention and comparison districts; Data represents children ages 4.5-23 months in study areas; Immunization status determined through combination of immunization card and caregiver's report. 12D: A child is considered as ZD if s/he missed 1st dose of DTP (Pentavalent).

² UI: A child is considered as UI if s/he missed 3rd dose of DTP (Pentavalent)

Note: Weighted percentages are shown in the table

Interventions Tested through Implementation Research to Address Key Barriers

Implementation research is testing cost-effectiveness of interventions tailored to ZD barriers and specific geographic contexts

	Upazila (Sub-District)						
Intervention	Saghata (Gaibandha)	Nalitabari (Sherpur)	Kawkhali (Rangamati)	Hatiya (Noakhali)	Dowarabazar (Sunamganj)	DNCC (Dhaka)	
E-tracker registers children at first vaccine						Х	
E-screening checklist for ZD and UI at multiple service points	х	Х	Х	Х	Х		
E-supervision checklist to monitor sessions				Х			
Modified EPI sessions	Crash program	More days	Crash program	Crash program & more days	Crash program	Evening sessions	
Advocacy w/ community leaders	Х		Х				
Strengthen EPI support groups					Х		
Community engagement						х	
Involvement of existing NGO community workers			X				
Courtyard meetings		х					
Health education through community healthcare providers (CHCP)				Х			
Health education through NGO counsellors						Х	

Baseline implementation research (IR) showed how barriers varied by study area/geographic location:

- Important barriers in hilly and urban areas included cost of vaccination.
- The need for permission to take child for vaccination was a barrier in Haor (wetland), Plain, and Urban areas.

Barriers and risk factors also varied by the child's immunization status (ZD vs. UI):

- Most common reason for non-vaccination among ZD children was illness of the child (38.8%), followed by fear of side effects (32.9%). For UI it was illness of the child (48.8%) and caregiver report of being "very busy" (23.5%).
- Caregivers of ZD children were more likely to mention lack of permission from the family (13%), compared to 4.1% of caregivers of UI children.
- Female children were significantly more likely to be ZD than male children, and children of male caregivers significantly more likely to be ZD than children of female caregivers.*
- * Significant results for p<0.05

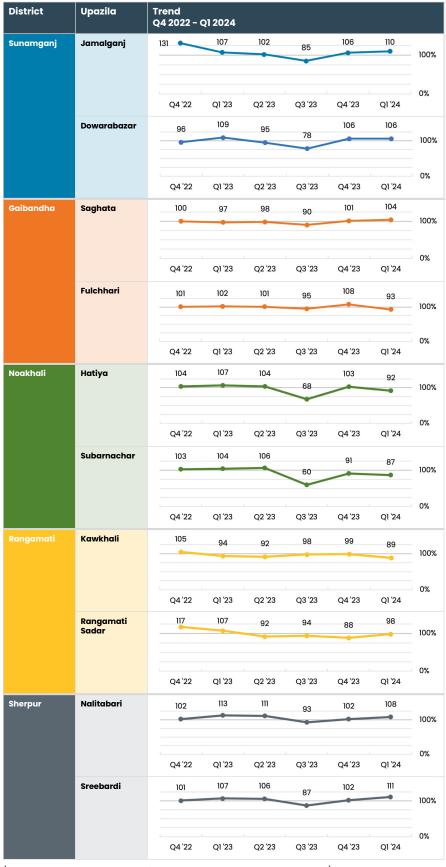








Study Upazilas (Sub-Districts) in Bangladesh: Trends in DTP1 Coverage from Q4 2022 to Q1 2024



(Source: Bangladesh DHIS2 reported in Bangladesh CLH Quarterly Progress Report)

This figure displays subnational data on DTP1 coverage from the Bangladesh DHIS2 over an 18-month period, Q4 2022 to Q1 2024. Trends in DTP1 coverage across the eight upazilas included in the Learning Hub study show a noticeable drop in Q3 2023, except in Rangamati district where the data appear relatively stable. With the exception of the two upazilas in Rangamati, coverage rates exceeded 100% across most reporting periods (Q3 2023 notwithstanding) suggesting there are likely persistent issues with the quality of reported data in most of the study areas. In the most recent quarter (Q1 2024) reported data appear to have stabilized in the study upazilas in three districts (Rangamati, Gaibandha, and Noakhali), which aligns with results from the recent Learning Hub coverage survey in the same districts (see figure on page 1).

Key Insights, Decisions and Use of Learning Hub Results

- Results from the LH rapid situation assessment and baseline IR has informed collaboration with government counterparts to refine and design intervention packages addressing specific contextual barriers and focusing on ZD children. For example:
 - Introduction of evening EPI sessions to better serve urban working mothers by offering more flexible vaccination times, based on the perceived success of this approach documented in the urban sample of the IR.
 - Increased number of EPI fixed sessions through longer hours and evening sessions to address high numbers of target children.
 Fixed sessions are now held more frequently, following decisions made in sub-national committee meetings.
 - Increased availability of fixed services means the government can reduce crash (outreach) programs and focus their use on areas where there are still gaps.
 - Engaging family planning department staff to use the e-screening checklist has shown potential for addressing the shortage of health assistants and improving identification efforts for ZD.
- ZD and UI included as an agenda item in monthly upazila and district-level meetings in all LH study areas. Sub-national EPI committee has mandated that all identified children receive vaccinations without delay.
- Recent secondary analyses of DHIS2 data comparing 2022 and 2023 trends identified new pockets of ZD and UI. New analyses suggest that vaccine supply plays key role in shifting prevalence of ZD; LH has presented the issue to the MOH and EPI.
- In response to findings from the LH data landscape, ZD data improvement plan includes establishing ZD task forces at district and national levels and strategies to improve data quality for improved use of DHIS2 for ZD monitoring and tracking.