



MOMENTUM

Routine Immunization Transformation and Equity

COVID-19 Vaccination Program in Review

Phase 1: November 2021–September 2022

Phase 2: March 2023–September 2023

VIETNAM



MOMENTUM Routine Immunization Transformation and Equity

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Acronyms

CDC	Centers for Disease Control and Prevention
DHC	district health center
GSP	good storage practice
GVN	Government of Vietnam
MOH	Ministry of Health
PHC	Primary health care
NEPI	National Expanded Program on Immunization
NIHE	National Institute of Hygiene and Epidemiology
NIIS	National Immunization Information System
RI	routine immunization
TOT	training of trainer
TWG	technical working group



Results

Reaching Underserved Populations



Identified over **1.6 million unvaccinated or not fully vaccinated people** for COVID-19.



Supported **1,535 mobile vaccination sites** in five hard-to-reach, mountainous provinces.



Identified **13,798 children under 5 years old** who had not completed the primary series of routine immunization (RI).



Identified **1,642 zero-dose children** under 1 year old.



Supported the Government of Vietnam (GVN) to administer **739,172 COVID-19 vaccination doses**.



Supported the GVN to administer **7,084 inactivated poliovirus (IPV) doses, 3,454 Japanese encephalitis (JE) and 958 pentavalent vaccine doses** to children under 5.

Strengthening the Health System



Supported the creation or revision of **1,485 COVID-19 microplans**.



Trained **9,397 health and non-health staff** on COVID-19-vaccination and RI-related topics.



Assisted **supportive supervision visits to 721 vaccination sites**.

Background

Vietnam is a geographically and culturally diverse country in Southeast Asia. The majority of the more than 104 million people in its 63 provinces and cities live in the lowlands, with a recent trend of urbanization toward the two largest cities—Ho Chi Minh and capital Hanoi.^{1,2}

The first COVID-19 case in Vietnam was reported on January 23, 2020. Since then, of the more than 11.6 million cases, 43,206 ended in death.³ The GVN launched its largest national COVID-19 vaccination campaign on July 10, 2021 at public and private health and non-health facilities. By September, the Ministry of Health (MOH) had administered 97 percent of over 34 million doses of vaccines it had received from COVAX, other countries and immunization partners, and through bilateral procurement. Initially, the country prioritized vaccinating high-risk populations including older adults, people with underlying medical conditions, and health workers, and concentrated its limited resources for vaccination efforts in larger cities, industrial zones, major ports, and densely populated areas. The rapid campaign acceleration increased vaccination coverage in Vietnam from less than 1 percent of the population in May 2021 to 70 percent in December 2021. By August 2023, 99 percent of the population had been vaccinated.⁴



1 "Vietnam." United States Census Bureau. Accessed November 7, 2023. <https://www.census.gov/popclock/world/vn>.

2 "An Overview of Population and Development in Vietnam." PRB. Accessed November 7, 2023. <https://www.prb.org/resources/an-overview-of-population-and-development-in-vietnam/>.

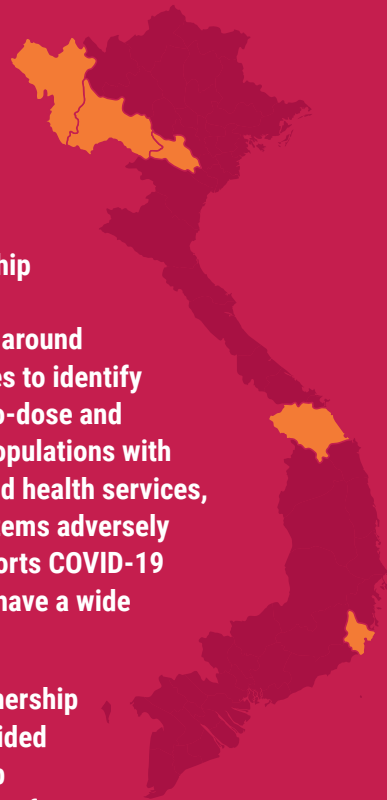
3 "Viet Nam: Who Coronavirus Disease (Covid-19) Dashboard with Vaccination Data." World Health Organization. Accessed November 7, 2023. <https://covid19.who.int/region/wpro/country/vn>.

4 "Scaling up COVID-19 Vaccination Rates in Viet Nam through Vaccine Diplomacy, Efficient Vaccine Rollout and Enhancing Effective Service Delivery." World Health Organization. Accessed November 7, 2023. <https://www.who.int/about/accountability/results/who-results-report-2020-mtr/country-story/2021/vietnam>.

Project Overview

MOMENTUM Routine Immunization Transformation and Equity (the project) applies best practices and explores innovations to increase equitable immunization coverage in U.S. Agency for International Development (USAID)-supported countries. The project is USAID's flagship technical assistance mechanism for immunization, working in 18 countries around the world. It builds countries' capacities to identify and overcome barriers to reaching zero-dose and under-immunized children and older populations with lifesaving vaccines and other integrated health services, including rebuilding immunization systems adversely affected by the pandemic. It also supports COVID-19 vaccine rollouts across countries that have a wide range of circumstances and needs.

Building on USAID's longstanding partnership with the health sector, the project provided technical support in two phases to help Vietnam's MOH strengthen the capacity of health care workers and vaccinate priority populations in the hard-to-reach, mountainous provinces of Dien Bien, Son La, Hoa Binh, Quang Nam, and Ninh Thuan against COVID-19.



Despite the many early successes of Vietnam's national vaccination campaign, challenges including the ongoing need for clearer and faster dissemination of policies and practices to health workers; gaps in tools to optimize planning and efficiency; and difficulty vaccinating hard-to-reach populations, remained. During Phase 1 (November 2021 to September 2022), the project received funding from USAID through the American Rescue Plan Act (ARPA) to provide technical assistance to the GVN, MOH, and the National Expanded Program on Immunization (NEPI) to identify and implement strategies to reach remote populations above the age of 12 in the five provinces.⁵ The project provided technical support at the subnational levels to:

- Build capacity of health and non-health workforce (e.g., school teachers, village health volunteers, community influencers) on COVID-19 vaccination.
- Develop a provincial model package of interventions based on a situational analysis to identify and vaccinate elderly, disabled, and geographically hard-to-reach populations against COVID-19.

Expanding on the achievements of Phase 1, the project secured funding from the ARPA through Congressional Notification #18 for a Phase 2, March–September 2023, to support COVID-19 vaccination for children ages 5–11 years in eight districts and 59 communes of Hoa Binh and seven districts and 58 communes of Quang Nam. These provinces had a substantial increase in vaccine hesitancy among parents and caregivers due to misinformation; limited resources to maintain vaccination; a lack of integration and performance of digital tools for COVID-19 and RI to support primary health care (PHC); and gaps in RI predating the pandemic. The project:

- Strengthened health and non-health staff skills to overcome hesitancy and promote vaccination of 5–11-year-olds.
- Built health and non-health workforce capacity to integrate COVID-19 vaccination and RI into the PHC system; store vaccines; and manage adverse events following immunization among children ages 5–11.
- Refined the provincial model package of interventions developed in Phase 1.

⁵ World Health Organization (WHO). Vietnam COVID-19 Situation Report #99. Report as of September 13, 2022. <https://www.who.int/vietnam/internal-publications-detail/covid-19-in-viet-nam-situation-report-99>.

Technical Areas of Support

TECHNICAL AREAS



Vaccine Service Delivery



Communication and Demand Generation



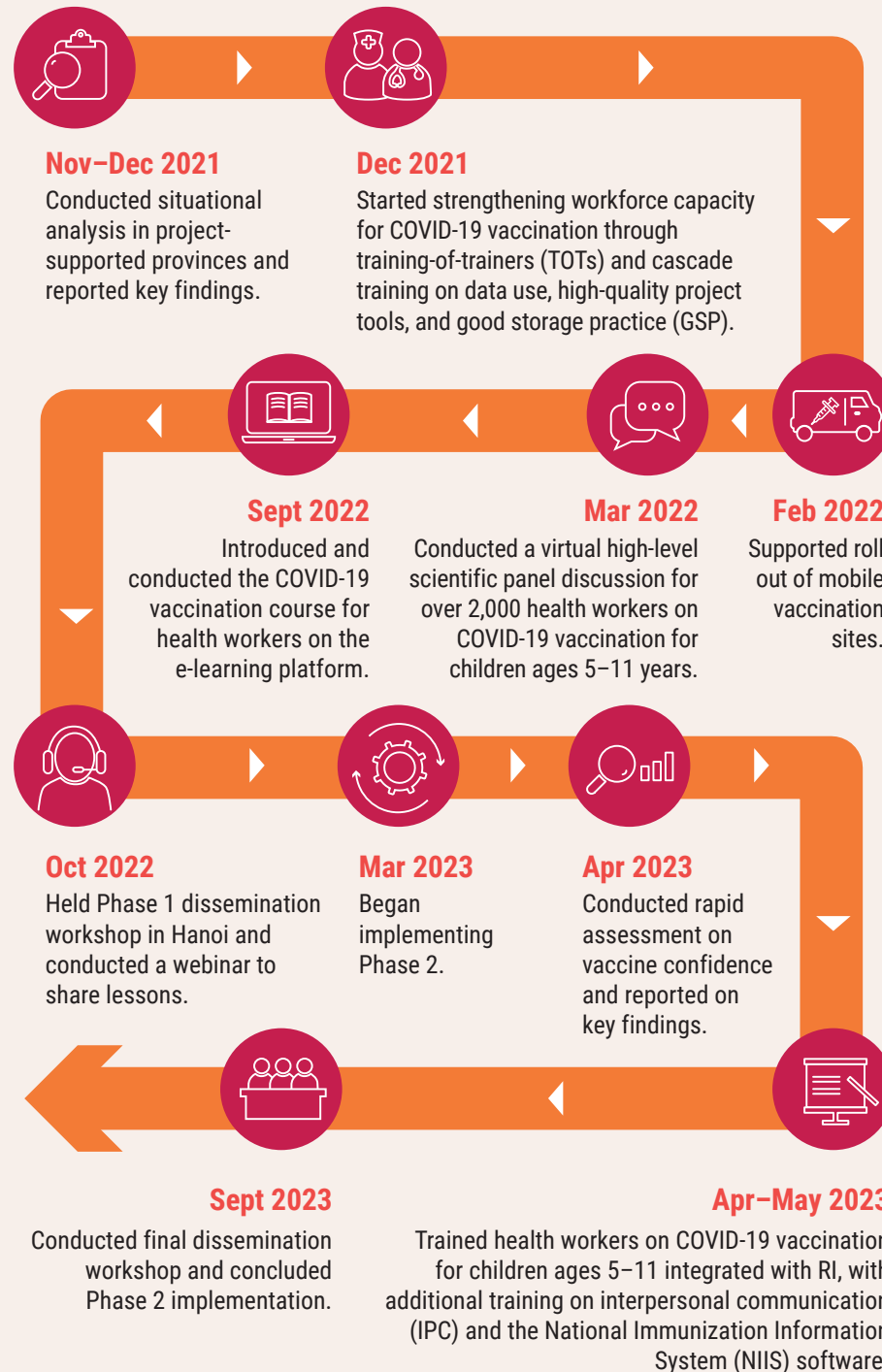
Policies, Microplanning, and Coordination



Building Health Worker COVID-19 and RI Capacity



Supportive Supervision and Training



Reaching Underserved and Priority Populations



Vaccine Service Delivery

Vietnam vaccinated 80 percent of the total population by April 2022, but still needed to vaccinate hard-to-reach populations. Population fluctuation and mobility, especially in the mountainous and border areas, made it challenging to determine true vaccination coverage for these populations. From late January to the end of March 2022, the project supported a household survey in Dien Bien and Son La Provinces, where village health workers and staff from COVID-19 community teams visited households to identify people who were unvaccinated or not fully vaccinated to inform planning.

The project adapted RI mobile vaccination strategies and established new sites to expand and reach more people with COVID-19 vaccination. While the majority of mobile vaccination sites were set up in village cultural houses, as they are for RI, the project also set up sites in kindergartens, public schools, and community gathering halls for COVID-19 vaccination. Teachers, farmers, and local store owners were recruited and quickly trained to welcome, verify vaccination subjects, and enter data.

With the addition of Hoa Binh, Quang Nam, and Ninh Thuan provinces in April 2022, the project applied learning from Dien Bien and Son La, trying a slightly different and more cost-effective approach. Given the much larger area and population and limited resources in the three additional provinces, the project used data from the COVID-19 vaccination system and provincial population and housing statistics to identify the remaining unvaccinated population. The project conducted additional household surveys in these three provinces to identify people who were unvaccinated or not fully vaccinated.



The project identified **1,696,284 unvaccinated or not fully vaccinated people** in the five supported provinces in Phase 1.





“My whole village has been vaccinated here. We wouldn’t have come to town as by the time I get there the sky will be dark.”

Field worker from Da Phen 3 village who was vaccinated when she picked up her child after work at the kindergarten mobile vaccination site.



The project identified **7,727 children ages 5–11 unvaccinated or not fully vaccinated** for COVID-19 in Phase 2.

Besides identifying the unvaccinated and under-vaccinated population, these surveys sought to find the reasons for vaccination delays and refusals. Many were due to the geographical and physical challenges in getting to the vaccination sites. The team mapped clusters of villages, identified the appropriate location and time for particular groups to receive vaccination, and communicated the site and time to people in advance of project supported mobile clinics. For example, commune health workers set up mobile sites in agricultural fields and vaccinated laborers at the end of their work day. Health workers and village heads clustered remote and hard-to-reach villages to vaccinate elderly and people with disabilities at the most convenient culture house. When the target population extended to children in March 2022, schools became an important location for mobile vaccination, with teachers as essential advocates. During Phase 1, the project supported the GVN to administer 737,877 COVID-19 vaccination doses at 1,318 mobile sites across the five provinces (Table 1). These activities offer a roadmap for integrating COVID-19 vaccines into RI programming.

In April 2023, project-supported village health collaborators (e.g., village health volunteers and heads, religious leaders, and local authority and civil social organization staff) conducted data review and household visits and identified children who had missed or were behind on COVID-19 vaccination, and who had missed or not received primary series doses for RI.



The project identified **13,798 children under 5 who had not received adequate primary series for RI** and had missed their JE or IPV immunizations during Phase 2.








Health worker gives COVID-19 vaccination to a child during a mobile vaccination session for children at a community house for Village 3, Tra Bui commune, Bac Tra My district, Quang Nam province.

According to WHO and UNICEF, RI rates for a DTP1 vaccine fell by 9 percent from 2020 to 2021 in Vietnam.⁶ In 2021, WHO flagged Vietnam as eighteenth of the top 20 countries in the world with the largest number of zero-dose children for RI, with the COVID-19 pandemic largely contributing to those rates.⁷ In March 2023, the GVN and MOH experienced several challenges, including vaccine hesitancy among parents and caregivers; low vaccination rates for children ages 5–11; and multiple COVID-19

vaccine stockouts and expirations. These were exacerbated by people’s fear of seeking health services during a pandemic; having to travel to multiple vaccination campaigns; and low investment in RI vaccination from local authorities.⁸

To overcome these challenges, the project collaborated with provincial Centers for Disease Control and Prevention (CDC) and district health centers (DHC) to continue the Phase 1 strategy. The project held mobile vaccination sessions alongside local events and mass gatherings and facilitated group communication sessions on COVID-19 vaccination. These efforts gave parents clear guidance on monitoring their children after vaccination, and availed health care staff to mitigate clinical concerns. Shortly into Phase 2, Vietnam experienced a stockout of COVID-19 vaccines due to the MOH changing their policies as COVID-19 was no longer being considered a public health emergency on a global level. During this time, the project, regional NEPI, and provincial CDCs closely monitored the situation and advocated for the allocation of COVID-19 vaccines to the project provinces, and focused efforts on conducting fixed and mobile

Table 1. Project-supported COVID-19 mobile vaccination sites in Phases 1 and 2

Province	No. mobile vaccination sites supported	COVID-19 doses administered
 Dien Bien	371	91,625
 Son La	666	548,591
 Hoa Binh	228	42,604
 Quang Nam	291	33,269
 Ninh Thuan	82	23,083
Total	1,638	739,172

6 “Diphtheria Tetanus Toxoid and Pertussis (DTP) Vaccination Coverage.” World Health Organization. Accessed November 7, 2023. <https://immunizationdata.who.int/pages/coverage/dtp.html?CODE=VNM&ANTI-GEN=&YEAR=>

7 The State of the World’s Children 2023.” UNICEF, April 1, 2023. <https://www.unicef.org/reports/state-worlds-children-2023#SOWC>.



8 Patel, Kripalini, Bhagyashree Nayak, Salaj Rana, Parthiban Krishnan, Babasaheb Vishwanath Tandale, Surajit Basak, Abhik Sinha, et al. “Enablers and Barriers towards Ensuring Routine Immunization Services during the COVID-19 Pandemic: Findings from a Qualitative Study across Five Different States in India.” *Transactions of the Royal Society of Tropical Medicine and Hygiene*, September 10, 2022. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8903434/>.



vaccination RI catch-up campaigns for JE and IPV vaccines that were in stock (Table 2). In late July 2023, the country received new inventory of the pentavalent⁹ vaccine that was previously out of stock nationwide.

The project supported the administration of all three vaccines at mobile sites until September 2023 (Table 1). While the number of mobile COVID-19 vaccination sites established and doses administered illustrate the project's success, its immunization system strengthening efforts will have longer-term benefits for RI.

Table 2. Number of RI doses administered to children ages 5-11 with project support during Phase 2

Province	RI Integration		
	IPV doses administered	JE doses administered	Pentavalent doses administered
 Hoa Binh	3,628	2,593	711
 Quang Nam	3,456	861	247
Total	7,084	3,454	958



Communications and Demand Generation

In Phase 1, after the MOH issued guidance on starting COVID-19 vaccination for children ages 5–11, the MOH and NEPI staff noticed hesitancy among health care workers to vaccinate children. To address these concerns, the project conducted a virtual high-level scientific panel discussion on COVID-19 vaccination for children ages 5–11 for health workers across the country in March 2022. The panel included national immunization experts, policy makers, clinical doctors, and implementing partners who discussed concerns on vaccine safety and efficacy and answered questions and responded to concerns from over 2,000 participants. In Phase 1, health workers also noticed parents' hesitancy to vaccinate their children for COVID-19, so in Phase 2, the project conducted an assessment on RI and COVID-19 acceptance and uptake for parents and caregivers

⁹ Protects against diphtheria, pertussis, tetanus, hepatitis B, and Haemophilus influenzae type b.

with children under 12 years of age. The assessment found that with the decrease of severe COVID-19 cases, many survivors of mild-symptom COVID-19 believed themselves immune. Some caregivers also heard that vaccines could cause memory loss, hinder learning, and cause infertility among children and adolescents. Although RI acceptance didn't seem to be affected or reduced, these caregivers perceived that COVID-19 vaccination risks outweighed its benefits, and the lack of COVID-19 communication campaigns focused on caregivers exacerbated these beliefs.

To overcome these challenges, the project:

- Gave health workers updated vaccine information and guidelines.
- Provided teachers and village leaders with communication materials to provide accurate information and counter misinformation.
- Trained health and non-health staff to advocate for COVID-19 vaccine acceptance with parents and caregivers.

The project also mapped resources and materials available from the MOH, WHO, and UNICEF on COVID-19 vaccination for children ages 5–11 years and RI for children under 5 years old. The project shared these resources in a direct communication virtual training series during routine provincial and district review meetings for 1,685 health care workers, school teachers, community leaders, and influencers.

The communication training series gave participants interpersonal communication skills, including active listening, verbal and non-verbal communication, showing empathy, and welcoming feedback. The training provided consolidated, tailored messages to different priority populations and countered misinformation through MOH, WHO, and UNICEF materials. Participants also received resources for communication messaging and job aids for mobile vaccination campaigns.



During Phase 2, the project trained **1,685 health and non-health staff on communication** with parents and caregivers of children ages 5–11 years about COVID-19 and RI vaccination.

Strategizing to Improve Community Health Systems

Policies, Microplanning, and Coordination

Vaccinating all eligible people against COVID-19 was urgent, but immunization staff struggled to adapt to ever-changing vaccine supply availability and policies, a high workload, and financial constraints. Local vaccine delivery and implementation had to be quick and may have lacked the detail and data for precise and adequate planning.

In Phase 1, the project worked with teams in Dien Bien and Son La to develop and introduce a standard toolkit for consistent, detailed microplanning that uses high-quality supply and consumption data. The toolkit included:

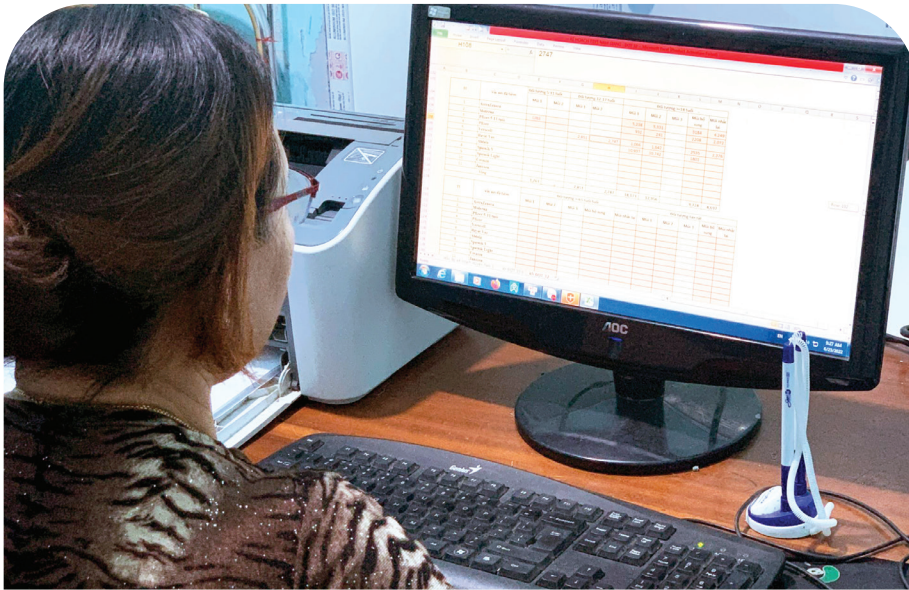
- Guidelines on microplanning based on WHO guidelines for COVID-19 vaccination issued in late 2021 and NEPI/MOH directives.
- Templates for each vaccine arrival phase.
- A detailed pre-formatted and modifiable Excel template to calculate the vaccine and supply availability, cold chain capacity, health and non-health sector human resource availability, and priority populations.

The project tested the tool at the district level and the provincial level Department of Health (DOH) and agreed to apply the microplanning guidelines in plans for each vaccine arrival at all levels. As guidelines on COVID-19 vaccination doses were updated, the provincial CDC issued official letters to districts and communes to relay the guidelines. The project would then support districts and communes to update their microplans accordingly. In addition, the project developed a Google form that incorporated daily aggregate reporting data elements such as the number and type of vaccine doses administered and number of people vaccinated by age group and gender, as required by the government. Reporting data from the Google form were then fed into the commune microplanning tool, completing the data feedback loop.



Reporting data from the Google form were fed into the commune microplanning tool, completing the data feedback loop.





“It is so much easier now for me to put all 11 commune plans into the district plan. The numbers are the actual totals calculated, rather than estimated or guessed. I also feel confident that numbers from each of the plans are calculated consistently.”

Ms. Thuy, a Nam Giang district immunization staff member.

While the COVID-19 response committee was led by the chair of the local People’s Committee, the project recognized the important role of the health sector and held 237 health sector review meetings at the district and provincial levels to guide coordinated, multi-sectoral actions in response to the changes in priority groups, vaccine availability, and COVID-19 policies and vaccination timelines. At the meetings, the project clarified MOH guidance on COVID-19 vaccination for 5–11-year-old children to ensure health care workers at the facility level understood and could apply it in various situations.



During Phase 1, 1,485 facilities used the project-created microplanning tool to develop vaccine arrival and immunization plans.

Clarifications included points on the type of vaccine for children, appropriate dosage, use of specialized syringes, time between doses or infections, parental consent, and adverse events following immunization. The project also discussed strategies to reach children in and out of school, including through summer activities and engaging teachers in advocacy and support.

During review meetings, members also identified challenges with data quality for clients’ unique identification numbers, cold chain supply management, GSP requirements and certification, uptake in the 5–11-year-age group, and booster doses for adults. Members mentioned working with other sectors such as police, education, and the People’s Committee for leadership as ways to overcome some of the challenges, and acknowledged this would require multi-sectoral coordination. The review meetings were also a chance to reinforce use of the new microplanning tools throughout the provinces. After Phase 1, the MOH and Ministry of Public Security worked together to coordinate data cleaning and organization to make sure that everyone could access COVID-19 vaccination.

During Phase 2, the project also focused efforts on assisting Hoa Binh and Quang Nam provinces in strengthening RI vaccination and reaching children under 5 with missed RI vaccinations. The project worked with the MOH and NEPI to strengthen implementation of the National Immunization Information System (NIIS), a software launched by the GVN nationwide for RI vaccine planning, delivery, and follow-up. Although the software was implemented in 2017, there was hesitancy from health staff who were reluctant to switch from the paper-based system due to their limited computer skills. The project included NIIS software implementation in the series of trainings they conducted with health workers; conducted supportive supervision visits to follow-up on progress; and conducted review meetings to evaluate overall implementation. When the COVID-19 vaccine was introduced in 2021, the MOH created a new system to track COVID-19 vaccination, but due to the rapid design and implementation it was not functioning at capacity, creating a challenge for effective planning and tracking of COVID-19



vaccination. The use of the project-supported COVID-19 tracking tools created in Phase 1 temporarily alleviated this issue. Although the MOH has required all facilities to update COVID-19 data in this system, data quality is still a concern because the COVID-19 system does not show the full vaccination landscape. Reporting forms are not yet responsive to the vaccination system, and facilities still use other tools to report aggregate data daily.

In Phase 2, the project continued supporting microplanning in Hoa Binh and Quang Nam and provided technical assistance to develop detailed plans to adjust resources focused on 5–11-year-olds. The project's microplanning tool was adjusted to include children's doses and appropriate syringes, first and second booster doses for those eligible, and time required between doses. While waiting for re-supply of COVID-19 vaccines, the project conducted trainings, supportive supervision visits, and hands-on-guidance and review meetings on vaccine rollout campaigns and using the NIIS platform.

The project trained 70 health workers on standard procedures for implementing NIIS, reducing the burden of monthly reporting and ensuring good reporting quality.

Also during Phase 2, 63 provincial and district briefings were held to ensure that vaccination activities were implemented safely and effectively. Monthly briefings and supportive supervision were implemented in all project communes and districts. Quarterly provincial-level briefings were conducted with the participation of NEPI, Pasteur Institute in Nha Trang, project staff, immunization leaders, provincial CDC, and DHC staff. Monthly briefings at the districts were implemented to monitor vaccination progress, present results, discuss problems and solutions for the next period and according to next month's implementation plan, and provide updated information.

After the tools were implemented in the project-supported communes and districts, the project used them at provincial review meetings for districts. Provincial staff conducted their own supportive supervision trips outside project-supported places to provide hands-on guidance on these tools. They are now used in all communes and districts in Hoa Binh and Quang Nam provinces, making it easier to plan and organize vaccination, communication, and statistical reporting.

The NEPI teams recognized the benefits of the project-introduced microplanning tool and have suggested national scale-up to support RI campaigns. Two project-supported provinces have adapted the Google forms for supportive supervision of JE vaccination, while another province used adapted tools for RI. Thanks to training by the project, health care workers at facility and management levels have increased confidence in and ability to use Google forms and microplanning tools.



Strengthening the Health Workforce



Building Health Worker COVID-19 and RI Capacity

The health workforce was stretched thin throughout the pandemic, not only due to the tremendous amount of work in response but also because many health care workers contracted COVID-19. As a result, the vaccination workforce was continually changing and rotating among departments. The national COVID-19 vaccination campaign also continuously changed its priority group focus, guidelines, policies on authorized vaccines, and safety measures. Trainings, refresher trainings, and up-to-date and readily available materials were critical to ensuring sufficient human resource capacity.



In Phase 1, the project established a technical working group (TWG) with Vietnam's NEPI. The TWG reviewed all training materials on COVID-19 vaccine deployment that had been disbursed throughout the country and regions. As the pandemic situation and vaccination targets changed quickly, many policies and strategies did too, but training materials were not updated accordingly. Furthermore, previous training materials and sessions lacked practical and up-to-date instructions, making it difficult for lower-level staff to conduct relevant and timely trainings. Online trainings were conducted for health workers to inform and integrate the new guidance into their practices.

In November 2021, the TWG conducted a desk review of the latest guidelines from WHO and other countries/regions with similar NEPI structures—most notably the Pan American Health Organization, whose guidelines provide detail down to commune-level subdivisions. The TWG integrated these updated guidelines and policies and revised the MOH and NEPI training materials.

The members of the TWG designed assessments for each module to help evaluate learning progress, and conducted a two-day TOTs that included hands-on practice time for provincial and district-level staff for presentation and training skills so they can conduct cascade trainings for commune-level staff.

During Phase 1, TOTs were conducted for CDC, provincial hospital, DHC and private hospital staff, and representatives from the non-health sector such as the provincial people committee, Department of Education and Training, and Department of Information and Communication. Trainers included experts from NEPI, National Children Hospital, and project officers. Following these, each province rolled out a plan for cascade training to 3,316 commune-level staff. These were held online with two staff from each commune and conducted by provincial CDCs and district health center staff with technical support from the NEPI and the project.



The collage displays various project outputs: a Vietnamese training manual with numbered steps (1-5) for COVID-19 vaccine training; a spreadsheet with columns for 'Họ và tên', 'Số điện thoại', and 'Địa chỉ'; a Google Form titled 'BM3_BẢNG KIỂM GIÁM SÁT HỖ TRỢ CHUNG (Form 1)'; and a YouTube video player showing a tutorial for vaccine storage equipment.



During Phase 1, the project trained **7,712 health workers and volunteers** on COVID-19 vaccine-related topics. Of these, **5,229** were trained remotely and/or in-person and **2,483** were trained on the project's e-learning platform.

After Phase 1, Hoa Binh and Quang Nam provinces still lagged behind national COVID-19 vaccination targets; did not have access to the vaccination software for reporting; and lacked equipment and trained staff on how to use the NIIS. The project conducted data quality and use trainings with staff to institutionalize the NIIS and established a technical team of NEPI, and Pasteur Institute in Nha Trang to revise and update the training materials in accordance with new MOH policies and guidelines.

During Phase 2, the project focused on training to improve the capacity of ealth and non-health staff (PHCs, teachers, village heads) in COVID-19 and RI knowledge and practices. The project provided technical guidance on vaccine organization and investigations and reviews of vaccination subjects to ensure that unvaccinated and incompletely vaccinated children were not missed. The project conducted communication guidance training on COVID-19 vaccination for children ages 5–11 and integrated communication guidance for COVID-19 and RI activities. The project also developed five cold chain maintenance instructional videos on using refrigerators and troubleshooting common problems. To ensure resources were used appropriately, the project trained health workers on the integration of COVID-19 vaccines into PHC



The project held a TOT on the updated materials in Hoa Binh and Quang Nam during Phase 2 for **88 trainers who cascaded this training to 1,291 trainees**.

Following the training and TOTs in the first few months of Phase 1, the project conducted review meetings and supportive supervision visits and gathered feedback from immunization staff. The project learned immunization, pharmaceutical, and vaccine storage staff were uneasy operating and maintaining cold chain equipment to ensure vaccine quality and safety. In response, the project developed and updated materials for GSP training by adapting updated MOH/NEPI and WHO guidelines. As travel and social gathering restrictions eased, the project organized in-person refresher training sessions on project tools and data use and quality.

The project used an e-learning platform developed as part of a previous project to give immunization staff and health care workers quick, equitable access to the most up-to-date knowledge and practices throughout the country. The project, in coordination with the NEPI, modified, converted, and uploaded an updated module on COVID-19 vaccination to the e-learning platform. At the end of Phase 1, the project handed the e-learning platform to NEPI.



activities. This included how to use monitoring and reporting systems, coordinate with supply chain and logistics systems, and work with community governments to promote both COVID-19 vaccines and RI.



During Phase 2, the project trained a total of **3,064 health and non-health staff** on COVID-19 and RI integration related topics.



Supportive Supervision

Supportive supervision was essential to reinforce and evaluate how well facility-level health care workers were using their knowledge and skills. These visits helped determine if the strategies introduced remained appropriate and relevant for localities with varying resources and conditions. The project aligned these visits with the provincial supportive supervision and the communes' COVID-19 vaccination schedules to observe immunization sessions, particularly at mobile vaccination sites. The project also developed tools through Google forms to help supervisors go through the checklist for the supportive supervision visits at immunization sessions and health facilities. The tools were tested as printed versions and on smartphones/personal computers to ensure usability.

During supportive supervision visits in Phase 1, project staff noticed that although health workers could operate the vaccine-specialized refrigerator, they often lacked the knowledge and understanding on routine maintenance and troubleshooting. To address this, the project developed tutorial videos on cold chain management in Phase 2 which were shared during supportive supervision visits, while also helping medical staff improve their skills and detect problems and come up with appropriate adjustment and support plans in each facility.

In Phase 1, the project conducted supportive supervision visits at 649 facilities across the five provinces. The visits typically included:



Hands-on coaching on the microplanning tool and the Google form for daily data reporting.



Data cross-checks to ensure quality and mitigate duplication and problems with citizen identification numbers.



Cold chain management review, including inspection of vaccine storage capacity, temperature monitoring, and practices to ensure compliance with international and MOH guidelines.



Commune-organized mobile vaccination site observation, including set-up following the four-step procedure from the vaccination guidelines, and coordination with local authorities, community leaders, and other sectors to ensure safe and effective immunization.

Lessons Learned



Strong commitment from multi-sectoral coordinated parties and an adaptive leadership approach were essential for the evolving COVID-19 vaccination situation.

- Timely planning and coordination of assistance is essential to conducting project activities. For example, the project supported microplanning assistance prior to vaccine arrival to ensure provinces could report data accurately and scheduled supportive supervision visits concurrently with vaccine arrival to observe and support immunization staff.
- As of May 2023, the COVID-19 pandemic is no longer a declared global public health emergency, and public perception has changed and public health authorities should work to avoid vaccine complacency or skepticism that may arise from this reclassification, and emphasize the importance of booster doses.



Learning and dissemination are key to vaccination response.

- While consolidating situation analysis findings, the project shared experiences and approaches among provinces to overcome common challenges.
- Regular supportive supervision of health workers at multiple levels, data reviews, and monthly meetings allowed the project to identify barriers, share lessons, and promote collaboration between communes and districts. Weekly internal project meetings facilitated progress assessment and identification of successful practices and strategies.
- Insights from the project's continuous learning process informed adaptations of the project's implementation approach, support to the GVN, and decision-making within provincial programs to promote equitable COVID-19 vaccination coverage.
- The COVID-19 pandemic was a rapidly evolving situation. There should be a system in place to give health and non-health personnel the latest information and trainings in a timely fashion.





When resources are constrained, simple digital tools are critical for making rapid data-driven decisions.

- The use of the Google form and microplanning tools improved the quality and timeliness of data for COVID-19 vaccination planning and reduced the burden on health care workers.
- Investing in a standardized tool with high levels of buy-in from all levels of the health system improves efficiency and coordination.
- Digital solutions are only effective when tailored to local contexts and based on user needs.
- The simplicity of project-generated tools are important for quick uptake and sustainability by health workers, supplemented by initial trainings and ongoing mentorship.



Stockouts threaten widespread vaccination coverage and coordinated strategies are required to use available stock.

- Secure an adequate and stable supply of vaccines to ensure continuous coverage. Strengthening partnerships with vaccine manufacturers and international organizations can mitigate shortages and ensure a steady supply.
- Implement an effective inventory management system to monitor vaccine stocks, predict demand, and avoid shortages. Regular communication and coordination between vaccination centers and relevant authorities are crucial for timely stock replenishment.



Integrating COVID-19 vaccines with PHC and RI services is crucial to reaching marginalized populations and optimizing their limited resources.

- Adapting and enhancing communication and targeted awareness campaigns can emphasize the benefits of COVID-19 vaccination and RI.
- Continuous training and capacity building for health and non-health staff to deliver COVID-19 vaccinations during RI and PHC services post-pandemic is essential.
- Strong collaboration and partnerships between GVN, implementing partners, health agencies and staff, and community organization to promote the scale-up of COVID-19 vaccination and RI integration is critical to the sustainability of these efforts.

A Way Forward

Despite the project's time-limited engagement in Vietnam, it reached underserved and priority populations with COVID-19 vaccines and provided a model that the NEPI can adapt and apply for other provinces. The project's intervention package has been shared nationally and with other countries in the region that have similar contexts.

Additionally, many of the project's contributions—including strengthened health worker capacity through training and supportive supervision, communication trainings, the development and scale of the digital tools beyond project-supported districts, and relationship-building and coordination across administrative levels—will

continue to benefit RI. The project-supported contributions improved immunization service delivery and resource forecasting expertise at local levels while building trust in coordination systems that may be used for other vaccine campaigns and health interventions.

Readers can find additional information about MOMENTUM Routine Immunization Transformation and Equity's work in Vietnam at: <https://usaidmomentum.org/where-we-work/vietnam/>



“We already used the microplanning tools for our JE vaccine catch-up campaign, just needed to update the target population and the vaccine, but the rest on cold chain capacity, human resources, volunteers, timeline, supply calculation remain the same. We can really use this for any future campaign.”

Dien Bien CDC health care worker prepares a COVID-19 vaccination dose.



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