



The role of community health workers in COVID-19 vaccination

implementation support guide

26 April 2021



World Health
Organization



WHO and UNICEF continue to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO and UNICEF will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

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Abbreviations

AEFI	adverse events following immunization
CHW	community health worker
EIR	electronic immunization registries
EPI	Expanded Programme on Immunization
IFRC	International Federation of Red Cross and Red Crescent Societies
IPC	infection prevention and control
MSH	Management Sciences for Health
NCC	national coordinating committee
NDVP	national deployment and vaccination plan
PPE	personal protective equipment
UNICEF	United Nations Children's Fund
VIRAT	Vaccine Readiness Assessment Tool
WHO	World Health Organization

Executive summary

This guide is intended to support national governments in developing their national deployment and vaccination plans (NDVP) for COVID-19 vaccines by outlining the roles, needs and opportunities for community health workers (CHWs) (International Labour Organization, 2007)¹ to contribute.

This note builds on and is structured to align with the [Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines](#) (1) and the [COVID-19 Vaccine Introduction Readiness Assessment Tool](#) (VIRAT/VRAF 2.0) (2) developed by WHO and UNICEF. This document provides human resources for health options and considerations for national governments in developing robust NDVPs for the introduction of the COVID-19 vaccine(s) that leverage community-based resources.

Half the world's population lacks access to essential health services (3); these and other health inequities, which in turn lead to inequities in health outcomes, is amplifying the challenge of COVID-19 vaccination. Among key issues for the success globally of the vaccination effort hinges on overcoming insufficient and inequitably distributed human resources and infrastructure; inequalities in access based on gender and other social stratifiers; and mistrust in health care systems that have left too many people behind.

Most CHWs are members of the communities within which they work, and are reflective of them; therefore, they are a key link between their communities and health systems. They are well positioned to help overcome access and equity barriers (4). National and subnational governments can unlock this potential by:

- **Identifying CHW contributing roles at each stage** of COVID-19 vaccines rollout.
- **Counting and vaccinating CHWs within initial vaccine allocation** as part of the essential health workforce to optimally support the COVID-19 response and continuity of essential health services.
- **Recognizing and remunerating CHWs** commensurate to tasks undertaken and training. CHWs who are linked to health systems through regular compensation, dedicated supervision and accreditation are best placed to support an effective pandemic response and to prevent the next one.
- **Considering community-based health worker representation** on national coordinating committees (NCC) and subnational planning groups to contribute their community knowledge.
- **Ensuring appropriate training** (5–10) and **ongoing supervision** for CHWs delivering COVID-19 services, particularly for novel roles and tasks.

¹ CHWs provide health education and referrals for a wide range of services, and provide support and assistance to communities, families and individuals with preventive health measures and gaining access to appropriate curative health and social services. They create a bridge between providers of health, social and community services and communities that may have difficulty in accessing these services. Updating the International Standard Classification of Occupations (ISCO). Draft ISCO-08 Group Definitions Occupations in Health. ILO; 2012 (<https://www.ilo.org/public/english/bureau/stat/isco/docs/health.pdf>, accessed 6 March 2021).

1. Introduction

This guide is intended to support national governments developing their national deployment and vaccination plans (NDVPs) for COVID-19 vaccines by outlining the roles, needs and opportunities for community health workers (CHWs)¹ to contribute.

This note builds on and is structured to align with the [Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines](#) (1). By providing CHW-relevant considerations for the [VIRAT Tool](#) (2), this document aims to support national governments in developing robust NDVPs for introducing COVID-19 vaccine(s) that leverage all the community-based deployment, implementation and monitoring tools at their disposal.

1.2 Background resources

For background information on COVID-19, refer to Chapter 1 of the WHO [Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines](#) (1), [SAGE values framework for the allocation and prioritization of COVID-19 vaccination](#) (11), and [WHO SAGE Roadmap for prioritizing uses of COVID-19 vaccines in the context of limited supply](#) (12).

WHO, UNICEF and the International Federation of Red Cross and Red Crescent Societies (IFRC) have also published interim [Guidance on community-based health care in the context of the COVID-19 pandemic](#) (13). In addition, WHO [interim guidance on health workforce policy and management in the context of the COVID-19 pandemic response](#) (4) broadly outlines the potential roles of CHWs during COVID-19, including delivery of essential health services.

As of the beginning of 2021, most vaccine candidates in clinical evaluation require two doses for optimal immunogenicity and efficacy. WHO's [landscape analysis of COVID-19 vaccines in clinical development](#) (14) is updated regularly.

1.3 Document updates and constraints

The earliest use authorization of COVID-19 vaccines was granted at the end of 2020, with additional vaccines anticipated in early 2021. Vaccines are expected to ship soon after authorization, though initial quantities will be limited (1).

Given the rapid evolution of COVID-19 vaccine development, this guidance is based on information available as of March 2021 and will be updated as new information becomes available. Vaccine requirements (including cold chain and handling), funding institutions and country-level health system characteristics will have a significant impact on the most effective strategies that countries can employ to rollout COVID-19 vaccines. Where possible, relevant considerations for different potential scenarios are described.

The document was developed following a review of immunization, human resources for health, CHW and COVID-19 specific guidance and evidence, including key documents regarding COVID-19 vaccines, infection prevention and control (IPC), community engagement and health workforce. An interorganizational group composed of WHO and UNICEF focal points and civil society experts in

¹ As defined by ILO International Standard Classification of Occupations (ISCO), CHWs are a distinct occupational group (ISCO 3253).

community health provided expert opinion where explicit guidance either lacks granularity or is linked to evolving knowledge of this novel global deployment of the largest ever immunization campaign.

This document will be added to the [WHO Country Readiness and Deployment portal](#) (15), which houses guidance, tools and training to support COVID-19 vaccines deployment. The portal includes a [COVID-19 Vaccine Introduction and Deployment Costing Tool](#) (16).

In this document we share *potential* roles of CHWs during the rollout of COVID-19 vaccines. Alongside the overall package of training and capacity materials provided by the Country Readiness and Delivery team, this note provides options for countries to incorporate and leverage community-based resources in their NDVPs.

1.4 Target audience

This document is intended to be used by ministries of health, with support from WHO and UNICEF country offices.

2. Key community health worker roles in the COVID-19 vaccines rollout

Community-based health workers routinely play critical roles in new vaccine introduction, including in planning, identification of target groups, community engagement and mobilization, service delivery, and in tracking and follow-up.

Alongside other community-based providers, CHWs are key interlocutors, with their knowledge of “last mile” health service delivery, experience supporting vaccine acceptance and uptake, and shared lived experience that fosters trust and credibility within communities. Clearly defining and costing the inputs of CHWs within the NDVP will assist governments and implementation planners at all levels in addressing the scale, speed, and complexity involved in COVID-19 vaccine rollout.

Section 3.1 (Policy and regulatory preparedness) includes critical considerations for situations in which national governments decide to consider the implications of providing temporary clearance for CHWs to administer a specific COVID-19 vaccine. Other service providers must be sensitized on the role of CHWs to facilitate effective work within interdisciplinary teams.

2.1 Planning and coordination

- Include CHW representatives on national and subnational planning committees.
- Include CHWs as part of the first wave of vaccinations of the essential health workforce.
- Clearly define and cost the role of community-based health workers in vaccine rollout.

WHO recommends that national coordinating committees (NCC), responsible for planning, coordination and oversight of COVID-19 vaccine rollout, “be presided over by senior-level ministry of health officials, and have a multisectoral representation composed of senior-level officials from relevant ministries (e.g. social welfare, pension service, women’s affairs/gender, communications, finance, transport etc.), external partners, representatives from private sector providers and civil society organizations, with decision-making authority” (1). Health workers, including CHWs, should also be represented on NCCs, both through respective community health directorates or equivalent and/or civil society representation.

Given their knowledge of the communities in which they serve, CHW representation on NCCs, and regional and local decision-making bodies can add value (17). CHWs are well-placed to conduct surveys, focus groups and community meetings to gather in advance preferences on vaccine strategy and sites to maximize uptake, and promptly address misinformation to reduce reluctance.

They are well placed to participate in micro-planning with other health workers and stakeholders to develop and execute strategies to reach people outside of clinical settings (particularly those who are mobile, “hard to find”, or may have difficulty travelling to a fixed site) and identify older adults or other target groups in the community. Their contributions can inform subnational, facility-led and local action micro-planning processes for COVID-19 vaccine distribution.

2.2 Identification of target populations

COVID-19 vaccination of adults can establish or build on existing adult immunization programmes. The most vulnerable populations are the most difficult to immunize due to a lack of contact with the health system; CHWs may already be in touch with and can help identify these “hidden” populations, including those with co-morbidities (18). Early COVID-19 contact tracing evidence indicates that CHWs’ landscape

knowledge is “invaluable” to overcoming tracing failures and significantly shortened travel to vaccination times, ultimately leading to more successful outcomes (19).

With adequate training, CHWs also can conduct outreach and data capture, ideally using existing platforms and tools (20), with the introduction of the COVID-19 vaccine serving as a catalyst to strengthen existing mechanisms, including potentially expanding the use of digital systems:

- **Forecasting:** In some cases, inventory forecasting is constrained by the fact that the Expanded Programme on Immunization (EPI) uses population estimates from outdated censuses; top-off levels are often not well-aligned with actual populations. CHW household registration and mapping supports better forecasting and denominator figures.
- **Tracking:** Identify and locate target populations, ensuring the identification of “hidden and at-risk populations”. Electronic immunization registries (EIR) can identify coverage gaps. CHWs can follow-up with patients who are under-vaccinated (21). Regardless of whether community EIRs exist, CHWs can work closely with the appropriate health facilities to follow-up on defaulters and close coverage gaps.
- **Identification:** Multi-dose vaccine distribution requires identity verification and longitudinal follow-up. In many cases, CHWs are trusted interlocutors who can help to identify people in the community they serve to ensure individuals are in the target group and that they do not receive fewer or more than the required number of doses.

A [shared data schema](#) for vaccine delivery is currently under development.

2.3 Vaccine acceptance and uptake

CHWs are essential to engagement activities with community leaders and decision-makers, driving community-level change by working within social dynamics and institutional and social structures.

The effectiveness of immunization programmes, including COVID-19 vaccines delivery, relies on population uptake and acceptance of vaccines, achieved through a range of strategies (22). It also requires trust, which many CHWs have built in their communities. Global evidence shows that CHWs play an important role in vaccine promotion and acceptance: whether through community dialogue and engagement, education, trust-building, myth-busting, on- and offline social listening, or facilitating community entry (23).

There are concerted global efforts to spread misinformation (incorrect information unintentionally spread) and disinformation (incorrect information created and shared with the intent to cause harm) about potential COVID-19 vaccines (24). The infodemic and mistrust in the COVID-19 vaccination effort are global phenomena that affect countries to varying degrees (25–30), requiring a multi-layered infodemic management, risk, social and behaviour change communications and community engagement efforts. This includes stakeholder coordination and alignment with journalists and media, along with social listening to inform contextually appropriate information dissemination strategies and messages.

Multi-tiered dissemination and two-way dialogue strategies may comprise a variety of media contextualized by audience, monitored and adapted over time to identify concerns, reasons for mistrust and misinformation so these can be effectively targeted and addressed. Community engagement and social mobilization will be instrumental to address contextually specific community needs around the world.

A comprehensive approach to vaccine education, engagement and informed consent requires skilled interpersonal communications by trusted sources of health information. Trained and appropriately supported, CHWs can uncover and understand individual and community perceptions, beliefs and barriers and address these with evidence-based and contextually appropriate solutions (“myth-busting”) (31).

2.4 Community mobilization for service delivery

Given cost, the possibility of receiving ultra-cold chain vaccines and other logistical considerations, countries may opt to use fixed site settings for vaccine rollout. In countries with limited health care

infrastructure, without refrigeration, and significant rural/remote settings, maintaining effective cold chain may not be feasible. CHWs can mobilize target populations and accompany them to immunization centres (32).

If vaccine outreach does happen, CHWs also may arrange transport, lodging and nourishment for vaccinators and identify outreach locations that are likely to reach populations while allowing for appropriate distancing and IPC measures (17). As members of communities, CHWs are well placed to conduct identity verification and scheduling.

Insufficient evidence is available regarding the use of trained, supervised CHWs to administer COVID-19 vaccines, including at fixed sites where health professionals can address adverse events. The issue is under review, and the authors will continuously review experiences from countries where this role is being assigned to CHWs.

2.5 Vaccine rollout tracking and follow-up

CHWs can help overcome challenges to achieving high coverage of novel populations by conducting patient registration (33), tracking vaccine delivery and timing between doses, monitoring for adverse events following immunization (AEFI) and directing people experiencing AEFI to health facilities (34, 35). Controlled trials indicate that CHWs play a critical role identifying, following up and linking defaulters to immunization services (35, 36).

Activity	Community health worker roles
Planning and coordination	■ Contribute their knowledge of “last mile” health service delivery, promoting vaccine acceptance and uptake, and community mobilization expertise, including through CHW representation on NCCs and subnational planning teams. ■ Conduct vaccine-related surveys, focus groups and community meetings as part of the preparatory/planning process.
Identification of target populations	■ Map locations of priority target groups within communities to be vaccinated in the first wave of vaccination and others as more vaccines become available, and register households to ensure accurate forecasting (37).
Vaccine acceptance and uptake	■ Listen to community feedback and monitor community conversations. Based on social listening, work towards trust building, myth-busting and/or encouragement to facilitate effective community entry and acceptance among target communities (i.e. demand generation). ■ Mobilize community influencers such as teachers, youth groups, women and men’s groups, and community-based organizations, to create an enabling environment for COVID-19 vaccination acceptance and uptake. ■ Engage communities in continuous dialogue to promote COVID-19 vaccination, build community trust and provide information about public health and social measures such as use of masks, hand washing and physical distancing.
Vaccination rollout tracking and follow-up	■ CHWs can mobilize target populations and accompany them to immunization sites. ■ During vaccine outreach, identify locations that are likely to reach target populations and potentially identify lodging and nourishment options for vaccinators spending the night. ■ Help with vaccination status verification and scheduling.

3. Human resources for health: optimizing roles and system support

In line with WHO SAGE guiding principles for countries to follow in planning and implementing a new vaccine, it is imperative to ensure sufficient financial and human resources to ensure continuity of essential health services alongside vaccine delivery.

As noted in the guidance on developing NDVPs (1), a range of activities are necessary to align requirements, policies and support for human resources for health. Optimizing the role of CHWs within interdisciplinary health worker teams should incorporate the following preparedness and response principles and activities.

3.1 Policy and regulatory preparedness

- Create supportive policies and regulation to recognize and remunerate CHWs.
- Tailor tasks according to the local context.
- Issue time-limited regulatory practice waivers for relevant tasks.
- Enrol CHWs in regular health system workforce systems.

In some countries, CHWs routinely administer intramuscular medicines (5–10, 38). Under circumstances where national governments assess the feasibility of CHWs to administer a specific COVID-19 vaccine, this must be supported intensively by training in vaccine handling delivery and adverse event management; and supervision – see modules available on OpenWHO (39); and by provision of adequate personal protective equipment (PPE). Ministries may need to address concerns from other occupational groups regarding ensuring skills acquisition and training, supervision structure, and perceived economic competition.

3.2 Resources and funding

- Clearly define the processes and costs involved in engaging CHWs.

Costs that should be budgeted for all roles include pre-service and in-service training; deployment; supplies, including hand hygiene supplies and PPE; supervision and performance management; and remuneration. While several of the investments required for rapid vaccine rollout are the same as those required to deliver essential health services and create or reinforce the infrastructure necessary to prevent the next pandemic, additional resources are required. COVID-19 vaccines should not replace budgets for other essential health services, including routine immunization.

Existing tools like the UNICEF/Management Sciences for Health [MSH] [Community Health Planning and Costing Tool](#) (40), [COVID-19 Vaccine Introduction and Deployment Costing Tool](#) (16) and the GAVI/UNICEF [Improving immunisation coverage and equity through the effective use of geospatial technologies and data](#) landscape analysis (41) can help provide rapid cost estimates across relevant domains.

3.3 Training and supervision

As vaccine knowledge and availability evolve, ministries of health and NCCs can identify their human resource needs, prepare learning materials and training modalities, and outline requirements for supportive supervision.

CHWs, who are likely to be reflective of the general population, may have localized, subjective opinions that contrast with public health knowledge.

In an online training of 1100 CHWs in Mozambique in September 2020 (42), only 48% answered correctly that human-to-human spread of the COVID-19 disease occurs through contact with an infected person when they cough or sneeze close to someone; 42% answered that COVID-19 is a disease for the rich which does not affect the poor, while 38% answered that is false and another 20% were unsure.

Competency-based education and learning programmes, tailored to the setting, will be required to prepare CHWs and their communities for vaccination campaigns, including on highlighting the importance of preventing the spread of COVID-19; use and disposal of PPE; the COVID-19 vaccines; interpersonal skills and communication; and community engagement.

WHO is developing (1):

- tools to quantify health worker requirements for vaccination teams;
- an online learning package for [health workers](#) (39) and [national focal points](#) (43);
- classroom and blended learning materials (slides, videos, etc.); and
- post-learning reference and support materials (job aids, checklists and summarized reference materials).

Translating and culturally adapting materials for a range of workers, including those with low literacy, may be required. Qualitative evidence suggests CHWs are more motivated to participate in training activities if their time is compensated and if they receive certificates or other types of recognition following demonstrable attainment of the relevant competencies, as a paving stone for career development.

Countries may also want to build or scale-up digital tools for training and supportive supervision, in addition to those provided through [OpenWHO](#) (43).

3.4 Counting and vaccinating CHWs

- Include CHWs in human resources for health information systems by updating or creating a list that, at minimum, stratifies CHWs according to geographic location and competence.
- Include CHWs among essential health workers prioritized for vaccination, based on their COVID-19 and continuity of essential health services delivery roles.

The [WHO SAGE values framework](#) (11), [WHO SAGE prioritization roadmap](#) (12), and the [fair allocation mechanism for COVID-19 vaccines](#) (44) through the COVAX Facility recommend that countries prioritize health workers among the first groups for vaccination.

WHO recognizes that the health worker target population group, based on tasks performed rather than employment status, includes CHWs. To operationalize the initial health worker vaccine allocation, planners should access or create a master list or, at minimum, geographically stratified estimates of CHWs. Particularly in low- and middle-income countries, CHWs are informal, geographically dispersed and often are not nationally accredited or registered. Data gathered for the enumeration of health workers for prioritized vaccination can augment national human resources for health information systems.

Counting and vaccinating CHWs has critical equity implications. Predominantly female and of lower socioeconomic status, CHWs often receive less attention and resources than other health workers, yet in numerous contexts they are the first point of care for vulnerable populations generally, and especially for pregnant women, children and infants. Vaccination campaigns often engage CHWs and auxiliary groups (community health “volunteers”) on a short-term and unpaid basis to support demand generation, community engagement, outreach, educating communities and dispelling myths. In spite of their important role, their informal status widens the equity gap and reinforces stereotyped gender roles.

Where volunteers can be requested to support surge capacity in the initiation of COVID-19 vaccination, remuneration should be provided when labour is provided as regular work. Volunteers should not be coerced from a labour perspective into performing unpaid roles for the duration of vaccination campaigns. COVID-19 vaccination presents an opportunity to redress this and reinforce equity and economic objectives of health system strengthening.

Health workers engaged in vaccination activities should be prioritized in vaccine quantification exercises, including those who support CHWs, are nongovernmental organization-managed or are within voluntary groups (e.g. Zambia's paid community health assistants and informal community health volunteers; Ethiopia's paid health extension workers and Women's Development Army volunteers; Bangladesh's 40 000 BRAC-supported CHWs).

Accuracy of resource allocation, vaccine procurement, deployment planning and measuring vaccination coverage all depend on accurate disaggregated data on health workers.

3.5 Infection prevention and control

Countries will need to plan for, resource and implement IPC and environmental measures when providing vaccination, including the appropriate use of recommended PPE by health workers and availability of water, hygiene and sanitation facilities or, at minimum, hand sanitizer. For more information, please see the COVID-19 vaccination training for health workers (45).

CHWs will need to wear medical masks (46) if undertaking COVID-19 vaccination. To avoid vaccination events inadvertently becoming transmission events for high-risk populations, it is important that CHWs are trained in the IPC measures set out in the [Aide memoire: infection prevention and control \(IPC\) principles and procedures for COVID-19 vaccination activities](#) (45); and that the measures are implemented, including hand and respiratory hygiene, screening for symptoms of COVID-19, (vaccinators and public) mask use by the public, physical distancing and waste management strategies.

Other PPE will need to be available in vaccination clinics in case it is required for health workers' protection when dealing with vaccine adverse events, to prevent exposure of non-intact skin to blood or body fluids or if a suspected case of COVID-19 is identified during the screening process (45).

Whether at fixed sites or in the community, CHWs can mobilize the community to set up IPC stations and support IPC measures (47).

3.6 Health system strengthening

The introduction of a new vaccine provides the opportunity to improve not only the country's immunization programme, but its wider health system. It is an important opportunity to adopt a gender, equity and human rights lens, including empowering CHWs, many of whom are women. Many of the activities carried out to prepare, implement and monitor the introduction of COVID-19 vaccination are the same as those necessary to more efficiently deliver routine health services.

Professionalized and institutionalized CHWs, who receive regular compensation, dedicated supervision, accreditation and ongoing career development, will be well placed to undertake the roles outlined above – not only in this pandemic but in the future.

In line with the [WHO Guideline on health policy and system support to optimize community health worker programmes](#) (20) and UNICEF recommendations (40, 48), countries can seize the opportunity to achieve a well-trained and motivated health workforce, and to advance gender and equity, by aligning:

- **Role and recruitment:** Countries should clearly define, document and communicate what role CHWs will play in vaccine rollout and how CHWs are recruited/chosen for these activities.
- **Training:** CHWs should receive initial and ongoing training related to the roles they are expected to fulfil and on IPC measures.

- **Accreditation:** CHWs' knowledge/competencies should be evaluated to ensure they meet a minimum standard prior to assuming any COVID-19 vaccination role, with provisions made for re-evaluation if necessary.
- **Equipment and supplies:** All necessary supplies, including access to hand hygiene, PPE, waste management items such as sharps disposal boxes and job aids, should be made available to CHWs and monitored on an ongoing basis to reduce the risk of substantial stockout periods (45). As a prerequisite, CHWs should be safeguarded against carrying out COVID-19 vaccination activities in the absence of adequate PPE.
- **Supervision:** CHWs involved in vaccination campaigns, as with any work, should be supported by dedicated, trained supervisors with training on IPC measures.
- **Incentives/remuneration:** CHWs should be paid to do this work at a competitive rate relative to the national labour market benchmark (at least minimum wage, if not more competitive). In line with the WHO CHW Guideline (20), CHWs should not be paid primarily with performance-based incentives.
- **Community involvement:** CHWs should be supported to participate in ongoing dialogue with communities on health issues, including by using the data they gather.
- **Opportunity for advancement:** Career advancement opportunities should exist for CHWs who perform well during vaccination campaign activities.
- *Data:* CHWs should document home visits and vaccination activities in a standardized format (preferably digital) that can be readily reviewed by supervisor(s), reported to public sector monitoring and evaluation systems, and shared with communities.
- **Integration with health system:** CHWs' role in vaccination efforts should be recognized as part of the formal health system, i.e. policies are in place that define their roles, tasks, relationship to the health system. The national health budget should include appropriate provisions.

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