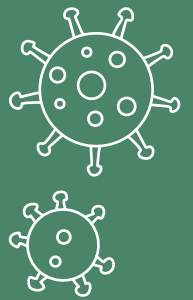




World Health  
Organization

# Strengthening COVID-19 vaccine demand and uptake in refugees and migrants



An operational guide

To support all those responsible for planning and implementing the rollout of COVID-19 vaccine to refugees and migrants at national and local levels

14 March 2022







**World Health  
Organization**

# **Strengthening COVID-19 vaccine demand and uptake in refugees and migrants**

An operational guide

To support all those responsible for planning and implementing the rollout of COVID-19 vaccine to refugees and migrants at national and local levels

14 March 2022



# Contents

Acknowledgements .....	iv
Executive summary.....	v
Checklist of priority actions.....	vi
Introduction .....	1
Background.....	1
Method .....	4
Priority areas for interventions .....	5
Priority area 1. Social and behavioural data collection and use .....	5
Priority area 2. Coordination, policy and planning .....	9
Priority area 3. Implementation of a communication strategy, including a mass media plan .....	15
Priority area 4. Social media monitoring and infodemic and misinformation management.....	19
Priority area 5. Community engagement and social mobilization .....	21
Priority area 6. Capacity-building and training .....	23
Priority area 7. Monitoring, learning and evaluation .....	25
References .....	28

# Acknowledgements

This document was developed by the WHO Health and Migration Programme team: Kanokporn Kaojaroen, Sally Hargreaves, Mohammad Darwish, Cetin Dikmen, Rifat Hossain, Palmira Immordino and Rita Sá Machado, under the strategic lead and supervision of Santino Severoni and in close collaboration with the WHO Departments of Immunization, Vaccines and Biologicals and Health Emergency Interventions.

Contributors from WHO include Candelaria Araoz, Ali Ardalan, Josef Bartovic, Rajendra Bohara, Ernest Dabire, Lokombe Elongo, Melinda Frost, Francine Ganter-Restrepo, Arti Garg, Julie Helene Issa, Ann Lindstrand, Lisa Menning, Aree Mounsookjareou, William Augusto Perea Caro, Camila Polinori, Dheepa Rajan, Tonia Rifaey, Katja Rohrer-Herold, Aarti Shrikrishana Singh, Balwinder Singh Chawla, Fina Tams and Elisabeth Waagensen.

External partners were Gulnara Abbasova (Migration Council Australia: Migrant and Refugee Health Partnership), Nesrine Bascales, Katherine Harris and Michael Woodman (United Nations High Commissioner for Refugees), Gabriela Benitez, Jose Nelson Chavez Rosales, Dan Irvine, Eduardo Nunes, and Marco T Villela (World Vision), Howard Chiou, Elizabeth E Dawson-Hahn, Reena Doshi, Megan Keaveney, Barbara Knust and Daiva Yee (United States Center for Disease Control and Prevention), Alison F Crawshaw and Anna Deal (St George's University), Garang Dut (Australian National University), Gabriel Gavin Green, Nicole Hoagland, Monica Posada, Stefania Tranfo and Rachel Yales (International Federation of Red Cross and Red Crescent Societies), Daniela Knoppik and Naureen Naqvi (United Nations Children's Fund), Betty Hanan and Patricio V. Marquez (World Bank), Talha Jalal and Susan Mackay (GAVI), Carlos van der Laat (International Organization for Migration) and Nyi Wynn Soe (International Rescue Committee).

## Executive summary

The COVID-19 pandemic has exacerbated existing inequalities in certain populations, which may include refugees and migrants. These populations may face a range of personal, social and physical barriers to uptake of COVID-19 vaccines that will underpin their decisions, motivation and ability to be vaccinated as rapid rollout of COVID-19 vaccines takes place globally; to date these populations have shown lower COVID-19 vaccination uptake and intent to vaccinate in the few countries where this has been measured. WHO recommends that vaccine prioritization within countries should include refugees and migrants and calls for affordable, non-discriminatory access to vaccines for all populations.

This document has been developed as an operational guide to support policy-makers, planners and implementers at national and local levels, including in governments, nongovernmental organizations (NGOs), WHO country offices and other stakeholders responsible for the rollout of COVID-19 vaccines to refugee and migrant populations. The guide is designed to provide practical support, strategies and good practices for understanding and addressing personal, social and practical barriers to COVID-19 vaccines among refugee and migrant populations, acknowledging that they may face a range of unique barriers to accessing immunization systems that need to be better considered by policy-makers and planners.

This guide provides an overview of key activities and considerations for increasing confidence and uptake of COVID-19 vaccines in refugee and migrant populations with the aim of supporting the operationalization of the recent WHO interim guidance COVID-19 Immunization in Refugees and Migrants: Principles and Key Considerations. The guide covers data collection, coordination of policy and planning, implementing communication strategies, social media monitoring, community engagement, capacity-building, and monitoring and evaluation.

The guide should be read in conjunction with a range of relevant supporting reports and guidance documents from WHO (for example on allocation and prioritization of COVID-19 vaccination, prioritizing uses of COVID-19 vaccines when supply is limited, and guidance on acceptance and demand) and relevant organizations. At each point in the guide, these supporting documents are grouped together as Key resources to support each of the priority areas outlined. To facilitate use of this guide, a checklist of key action points is also provided. This guide is highly relevant as a supporting tool for the delivery of all vaccinations to refugee and migrant populations.

To support the development of the document, a rapid evidence review was carried out of peer-reviewed and grey literature on barriers to vaccination in refugees and migrants worldwide. In addition, evidence, action points, and case studies were identified through compiling documents, guidelines and toolkits developed by WHO and other relevant organizations. Information was also obtained from expert members of a WHO-convened technical working group, a series of regional dialogues and a final consultation with key NGOs, WHO representatives and international and regional representatives from international organizations.

# Checklist of priority actions

This checklist provides priority actions and examples to achieve high confidence and uptake of COVID-19 vaccines for refugees and migrants. These domains and actions are not necessarily chronological and may take place concurrently.

Priority	Key implementation considerations
<b>Be driven by data</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Use existing tools to generate, analyse and use evidence about each community's context, capacities, perceptions and behaviours</li> <li><input type="checkbox"/> Obtain accurate refugee and migrant population estimates to facilitate the allocation of resources, vaccine procurement, deployment planning and to help to estimate vaccination coverage and needs in specific settings</li> </ul>
<b>Coordinate, plan and implement</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Work proactively with community-based organizations, refugees and migrants' rights organizations and community leaders to identify challenges and devise concrete strategies to address them</li> <li><input type="checkbox"/> Review the required national and local capacity for implementation, readiness, legal frameworks and regulatory requirements for vaccinating all refugees and migrants to ensure equal access to COVID-19 vaccines</li> <li><input type="checkbox"/> Innovation in service delivery may be required to reach these populations</li> <li><input type="checkbox"/> Plan, budget, deliver and evaluate</li> </ul>
<b>Address key barriers to health and vaccination systems</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Engage with community organizations to identify drivers and barriers to vaccination</li> <li><input type="checkbox"/> Utilize community and peripheral health centres as these are known to be more accessible for refugees and migrants, in particular for refugee and migrant women</li> <li><input type="checkbox"/> Consider onsite camp settings, resettlement or workplace vaccination</li> <li><input type="checkbox"/> Consider mass vaccination campaigns with women vaccinators to ensure social acceptability of services for refugee and migrant women in communities with gender segregation</li> <li><input type="checkbox"/> Design enrolment and registration to be inclusive and accessible to all, and limit contingencies that exclude some people in the population</li> </ul>
<b>Ensure effective communication and build trust</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Ensure refugees and migrants are effectively included in national risk communication and community engagement strategies</li> <li><input type="checkbox"/> Specifically work to build trust among refugee and migrant communities about COVID-19 vaccines</li> <li><input type="checkbox"/> Culturally and linguistically appropriate, accurate, timely and user-friendly information should be provided, including key messages in accessible formats, co-designed with communities</li> <li><input type="checkbox"/> Ensure feedback mechanisms and accountability</li> </ul>



Priority	Key implementation considerations
<b>Monitor and respond to social media</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Actively monitor social media and mainstream media to identify any anti-vaccine sentiment, fake information and rumours and respond in real-time</li> <li><input type="checkbox"/> Use community feedback mechanisms for capturing community in-sights and concerns about the vaccines</li> <li><input type="checkbox"/> Train frontline staff on the basics of infodemic management</li> </ul>
<b>Ensure effective community engagement</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Facilitate community-led responses adhering to minimum standards for risk communication and community engagement approaches</li> <li><input type="checkbox"/> Communicate with and provide orientation to local influencers and get their support for creating an enabling environment for vaccine introduction</li> <li><input type="checkbox"/> Develop a community action plan to engage communities in planning social mobilization and communication activities</li> </ul>
<b>Reinforce capacity and local solutions</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Improve training and awareness among health-care and frontline workers on the needs and perspectives of refugees and migrants, and ensure they have strategies to address these</li> <li><input type="checkbox"/> Identify and map key stakeholders and health facilities that provide COVID-19 vaccination services for these populations and assess them for readiness, vaccination capacity, policy and protocols</li> </ul>
<b>Monitor, learn and evaluate</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Measure vaccine uptake and coverage among the overall population, as well as among populations prioritized for vaccination</li> <li><input type="checkbox"/> Continuously measure behavioural and social data to track and be responsive to changes over time</li> <li><input type="checkbox"/> Demand planning should include plans and activities for the monitoring and evaluation of relevant activities linked with the NDVP and performance indicators</li> <li><input type="checkbox"/> Monitor progress over time, prioritization and inequities</li> <li><input type="checkbox"/> Aim for disaggregated vaccine uptake data so that national authorities can see the extent to which different groups are being reached</li> </ul>



# Introduction

## Background

Refugee and migrant populations in many countries and regions are known to have been disproportionately impacted by the COVID-19 pandemic (1–4).<sup>1</sup> Some refugee and migrant populations may have a range of specific risk factors and vulnerabilities for transmission and severe outcomes for COVID-19, linked to poor living and working conditions, residing in closed settings conducive to spread of SARS CoV-2 and being marginalized from health systems (1,4). However, despite these risks, to date these populations have shown lower COVID-19 vaccination uptake and intent to vaccinate in the few countries where this has been measured (4,7–9). Data are currently lacking on vaccine coverage and reasons for low uptake among refugees and migrants in low- and middle-income countries and the humanitarian contexts where COVID-19 vaccine rollout has been delayed due to poor availability of vaccine supplies.

The WHO SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply (10) recommends that vaccine prioritization within countries considers the vulnerabilities, risks and needs of groups who are at significantly higher risk of severe disease and death from COVID-19, including low-income migrant workers; refugees, asylum seekers, internally displaced people (IDPs),<sup>2</sup> irregular migrants<sup>3</sup> and populations in conflict settings or those affected by humanitarian emergencies (10–12). Interim WHO guidance states that promoting refugee- and migrant-friendly health systems and implementing policies affirming and protecting human rights and dignity can address confidence and uptake issues and promote vaccine equity globally and nationally (12). The Regional Risk Communication and Community Engagement (RCCE) Interagency Working Group, which UNICEF co-leads with WHO and the IFRC, has called for vaccine strategies for all populations to be community-led, data-driven, reinforce capacity and local solutions, and be collaborative (13).

---

1 The term “refugees and migrants” used in this document followed the WHA resolution 70.15 ‘Promoting the health of refugees and migrants. However, there is no universally accepted definition of the term migrant. The United Nations Department of Economic and Social Affairs defines an international migrant as “any person who changes his or her country of usual residence”, and this definition includes any people who are moving or have moved across an international border, regardless of legal status, duration of the stay abroad and causes for migration (5). According to the United Nations Convention relating to the status of refugees, a refugee is defined as “a person who, owing to a well-founded fear of persecution for reasons of race, religion, nationality, membership of a particular social group or political opinions, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country” (6).

2 An internally displaced person is defined as someone who is forced to leave their home but who remains within their country’s borders. They may live in camps, informal settlements or within the community.

3 An irregular migrant is a person who moves or has moved across an international border and is not authorized to enter or to stay in a State pursuant to the law of that State and to international agreements to which that State is a party.

Affordable, non-discriminatory access to the vaccine is a human right. The availability of vaccines, medicines, health technologies and health therapies is an essential dimension of the right to health, the right to development and the right to enjoy the benefits of scientific progress and its applications (14). WHO's new Immunization Agenda 2030: A Global Strategy to Leave No One Behind defines strategic priorities to ensure immunization is accessible to all people and contributes to universal health coverage and sustainable development; it also sets new and ambitious target, including increasing vaccine coverage globally for routine vaccines and including COVID-19 vaccines (15).

To increase vaccination coverage, it is vital to know *why* uptake is low. This requires measurement of the range of factors that drive uptake (16). Some refugees and migrant populations may face a range of unique personal, social and practical barriers to accessing health and vaccination services that will underpin their decisions, motivation, or ability to vaccinate and vary according to country context (17– 19).

Importantly, refugees and migrants may experience a range of legal and administrative barriers to immunization services, including real, restricted or perceived lack of entitlement to free COVID-19 vaccines or health care in general, and lack of safe and trusted access points (12,17). Irregular migrants and those residing in close settings such as camps, detention and reception centres may be disproportionately impacted. Stigma, discrimination and marginalization can exacerbate mistrust in government and create alienation from public health services (12,18). Motivation to have vaccinations in refugees and migrants may be hampered by concerns surrounding vaccine safety, contents and side-effects, stemming from a lack of information in appropriate formats or languages from trusted sources, and circulating rumours and misinformation (17,19). Some refugees and migrants experience barriers to robust public health guidance and information because of language and literacy barriers (17). In addition, at a policy level there is evidence that refugees and migrants may have been excluded from national plans for COVID-19 vaccine rollout in some countries (12,20,21). Logistical issues associated with expedited mass rollout, lack of vaccine supply and logistical barriers to vaccine services in several countries globally all make it more challenging to reach these populations. Box 1 summarizes these potential barriers although which barriers are significant will vary between individuals and groups (3,4,11,12,17–24).

## **Box 1. Potential barriers to COVID-19 vaccines for refugee and migrant populations**

### **Legal, administrative, financial, logistical, practical and technical barriers**

- Lack of legal and/or free entitlement to vaccination, or perceived lack of entitlement
- Absence of firewall between health and immigration authorities and/or specific documentation required and fears of providing sensitive information
- Lack of required documentation for registration for vaccines
- Lack of inclusion of refugees and migrants in national immunization plans for COVID-19
- Logistical barriers, resource and capacity constraints, such as limited supplies and staff, physical challenges in the cold chain, insufficient forecasting of demand
- High population movement impacting ability to access the vaccine and receive the necessary number of doses; absence of cross-border policies
- Lack of Internet and/or technology (phone, computer) in countries where vaccine bookings are made online, resulting in digital exclusion
- Concerns about fees being charged for vaccination or indirect costs
- Inconvenient, inaccessible and/or lack of access points for vaccination services.

### **Barriers relating to personal, social, cultural and religious beliefs and norms**

- Mistrust of health system/authorities, sense of alienation and disempowerment
- Lack of trusted access points, including the health workforce
- Fear of impacts on visa status and subsequent deportation
- Individual and community concerns about vaccine safety, the content of vaccines and side-effects
- Individual and community concerns about the content of COVID-19 vaccines
- Cultural, religious and social norms relating to vaccination
- Perception of low risk of disease or low importance of vaccination
- Lack of supportive social influences from relevant community leaders
- Competing priorities
- Fear of xenophobia, stigma, discrimination and violence when presenting.

### **Barriers relating to knowledge, information, and awareness**

- Lack of information available in relevant formats (considering health literacy, those with disabilities and age-appropriate formats), languages or broadcasted through appropriate channels
- Low levels of literacy (including health and digital literacy)
- Misinformation, disinformation and rumours circulating about the vaccines
- Lack of awareness of the availability of vaccine access points and lack of outreach
- Lack of information or practical support from health-care workers.

## Method

A rapid evidence review was carried out of peer-reviewed and grey literature on barriers to vaccination in refugees and migrants worldwide. In addition, evidence, action points and case studies were identified through compiling documents, guidelines and toolkits developed by WHO and other relevant organizations. Comprehensive input was sought from expert members of a WHO-convened technical working group, which included representatives from the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Organization for Migration, Red Cross Red Crescent Global Migration Lab, United Nations Children's Fund (UNICEF) and the United Nations High Commissioner for Refugees (UNHCR). In addition, the Health and Migration Programme, within the WHO Office of the Deputy Director-General organized virtual meetings of the Working Group to discuss the draft operational guide on 9 November, 27 November, and 15 December 2021. The 27 non-United Nations experts all completed a declaration of interests, with all declaring no personal or financial interests.

This guide should be read in conjunction with a range of relevant supporting WHO reports including the WHO SAGE Values Framework for the Allocation and Prioritization of COVID-19 Vaccination (25), the WHO SAGE Roadmap (10), Acceptance and Demand for COVID-19 Vaccines: Interim Guidance (26), Data for Action (27) and Guidance on Operational Microplanning for COVID-19 Vaccination (28).

# Priority areas for interventions

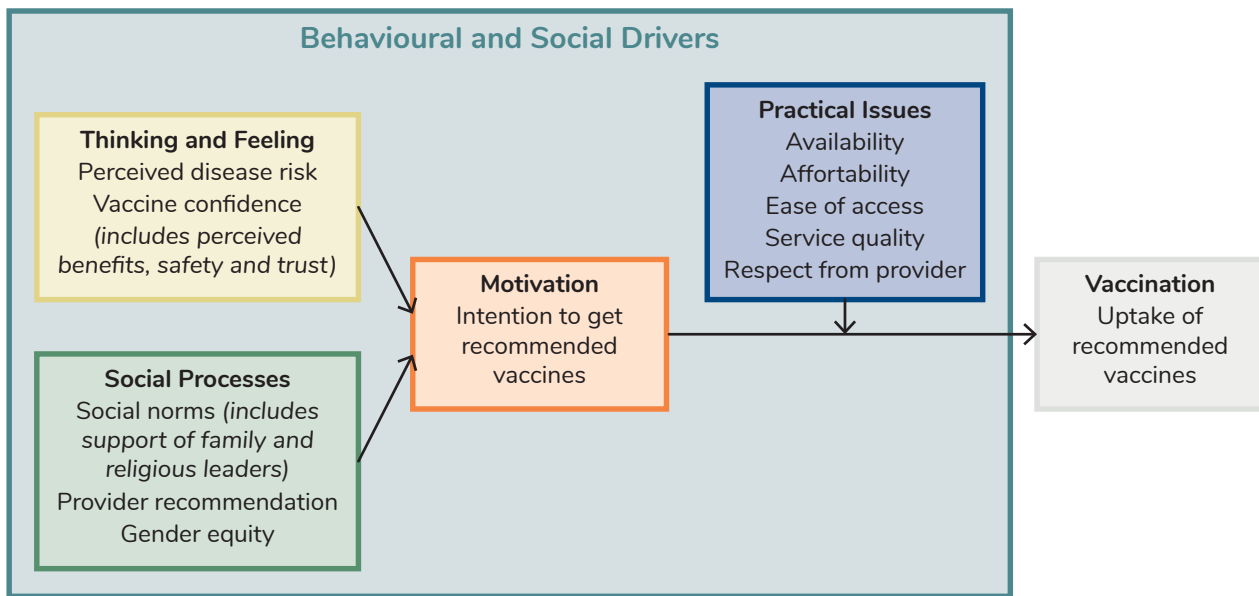
The seven priority areas for interventions of action described below have been developed in accordance with the framework of the previous WHO Interim Guidance, COVID-19 Acceptance and Demand for COVID-19 Vaccines (26), drawing specifically on key recommendations and action points from Data for Action (27) and the WHO COVID-19 Immunization in Refugees and Migrants: Principles and Key Considerations (12). In each section below, a priority area of intervention has been described and has been linked to a series of relevant case studies, implementation considerations and key resources.

1. Social and behavioural data collection and use
2. Coordination, policy and planning
3. Implementation of communication strategy including a mass media plan
4. Social media monitoring and infodemic and misinformation management
5. Community engagement and social mobilization
6. Capacity-building and training
7. Monitoring, learning and evaluation

## Priority area 1. Social and behavioural data collection and use

Ensuring high COVID-19 vaccine uptake in refugees and migrants, as for all populations, will first require programmes and implementers to gain an understanding of barriers to vaccination uptake and gather local data on how people think, feel and act in relation to COVID-19 vaccination and their local knowledge in order to develop tailored, evidence-informed strategies and communication plans (27,29). The behavioural and social driver (BeSD) framework (Fig. 1) illustrates four domains that influence vaccine uptake: what people think and feel about vaccines; social processes that drive or inhibit vaccination; individual motivations (or hesitancy) to seek vaccination; and practical factors involved in seeking and receiving vaccination (27,30). The framework corresponds to a set of validated surveys and field-tested qualitative research tools to assist the gathering and use of data to design and evaluate strategies. Regularly using BeSD data will enable planners to monitor the outcomes of interventions and implement corrective actions where needed. Importantly, data may also be used to support advocacy efforts by or for these specific populations to ensure that the necessary services and strategies are in place to enable vaccination.

Fig. 1. The BeSD framework



Source: adapted from WHO & UNICEF, 2021 (27).

### Implementation considerations

- Be data-driven: generate, analyse and use evidence about each community's context, capacities, perceptions and behaviours. Identify gaps in existing evidence and how to fill them (13).
- Select the data collection tools to understand the reasons for low uptake:
  - BeSD survey tools (with standardized priority indicators) can be used to measure and monitor reasons for underimmunization for COVID-19 in real time, ahead of intervention design (27);
  - while use of the BeSD tools are recommended, if local resources are not available then recent existing data can be used, for example coverage and uptake surveys; knowledge, attitude and practice studies; rapid rural appraisals; rapid qualitative enquiries; in-depth interviews with stakeholders; or traditional or social media monitoring data (27); and
  - existing offline social listening mechanisms can be established or leveraged in partnership with refugee and migrant community networks to capture community concerns and perceptions towards COVID-19 vaccines and track risks associated with human mobility (21).
- Obtain, where possible, accurate refugee and migrant population estimates from a variety of sources to facilitate the allocation of resources, vaccine procurement, deployment planning and needs in specific settings (27). Target estimates can be established or obtained in different ways, using different in-country sources (31):
  - census-based population estimates are available from the national statistics office or similar, and exist for the total population of a country, as well as its geographical regions;



- counts could be organized for very specific beneficiaries of vaccination, such as refugees and migrants;
  - registers and databases may already exist for some of these priority populations, for example refugee and migrant registers, health insurance data, UNHCR or the United Nations Department of Economic and Social Affairs Statistics Division data;
  - service data for existing programmes such as influenza vaccination may provide additional estimates for people at risk; and
  - surveys, such as the Demographic and Health Survey.
- Start by sharing data on the percentage of respondents who have already received a COVID-19 vaccine or reported willingness to accept a COVID-19 vaccine, and the most commonly reported facilitators and barriers to vaccination (27).
  - Gather data to explore drivers of vaccine uptake among health workers, given their critical role in relation to vaccination (27).
  - Use data to drive decision and action. If there are multiple interventions to choose from that have similar feasibility, it is best to choose the intervention with high likely impact, high strength of supporting evidence and which is most appropriate for the local context. Plan and tailor interventions based on local expert and stakeholder consensus, including community representatives, behavioural scientists and programme managers (27).
  - Analyse and use behavioural and social data to develop and regularly review and update RCCE and other relevant plans, regularly refining and updating communication plans and strategies, tailored activities and messages (26,29).

Case study 1 describes assessing COVID-19 vaccination acceptance through a study of knowledge, attitudes and practices.

### **Case study 1. Measuring COVID-19 vaccination acceptance through a study of knowledge, attitudes and practices among refugees and IDPs in Iraq**

The NGO CARE Iraq conducted a study to better understand both community acceptance of COVID-19 vaccination and the existing barriers to vaccine uptake among marginalized populations including refugees, IDPs, returnees and host communities (31). The study found high levels of mistrust around COVID-19 vaccines, with participants reporting a lack of confidence in their access to accurate information. The results provided information for policy-makers and health actors when designing awareness campaigns and addressing barriers to vaccine uptake to increase the vaccination rate. The research led to a series of key recommendations, including specific initiatives to reach out to communities and build trust; simplified vaccine access procedures, specific focus on messaging to women, temporary labourers and religious leaders; and awareness campaigns to counter misinformation.

## Key resources to support social data collection and use

- WHO & UNICEF (2021). Data for Action: Achieving High Uptake of COVID-19 Vaccines (27)
- WHO (2021). Guidance on Operational Microplanning for COVID-19 Vaccination (28)
- WHO (2021). Social and Behavioural Insights COVID-19 Data Collection Tool for Africa (32)
- WHO & UNICEF (2021). Monitoring COVID-19 Vaccination: Consideration for the Collection and Use of Vaccination Data: Interim Guidance (33)
- WHO (2021). Acceptance and Demand for COVID-19 Vaccines: Communications Plan Template (34)
- United States Centers for Disease Control and Prevention (2021). COVID-19 Vaccine Confidence Rapid Community Assessment Guide (35)
- UNICEF (2021). Human Centered Design 4 Health Resources (36)

## Priority area 2. Coordination, policy and planning

Coordination, inclusive policy, vaccine plans and strategies, and their implementation, are all essential to reduce disease and death burdens of COVID-19. The principle of global equity is to ensure that all countries have fair access to vaccines and to ensure that vaccine allocation takes into account the specific risks of the pandemic and the needs of all countries, particularly for low- and middle-income countries. The lack of vaccine supplies and unpredictable availability have significant impacts on the ability of programmes to adequately manage community expectations and plan for appropriate strategies to achieve high uptake. Certain target groups at increased risk from COVID-19, including some refugee and migrant groups, should be prioritized for early vaccination in case of vaccine supply constraints (12).

### Coordination

#### *Implementation considerations*

- Effective preparations should include reactivating existing planning and coordination mechanisms at national and subnational levels, regular government-led advocacy, communication and social mobilization meetings to discuss communication strategies and plans in order to achieve high confidence and uptake, including related monitoring and reporting. WHO has developed a set of key action points for coordination (34), alongside guidance on vaccine supply and logistics (37). Demand generation needs to be carefully synchronized with supply availability to ensure the necessary number of people are ready when vaccines arrive and that doses are not wasted.
- Authorities at regional, national and subnational levels should work closely and proactively with community-based organizations, migrants' rights organizations and local leaders in host communities and migrant camps to identify challenges and devise concrete strategies to address them (12).
- Prior to any vaccination campaign, security requirements will need to be considered with the assistance of community leaders (37).

### Policy planning

Critical to ensuring full equitable inclusion of refugees and migrants in COVID-19 vaccine rollout is the inclusion of all refugee and migrant groups to national deployment and vaccination plans (NDVPs), including those excluded from health systems (12): for example, irregular migrants and migrants in closed settings including camps, detention and reception centres. Guidance is available on developing a NDVP for COVID-19 vaccines (38) including designing strategies for the deployment, implementation and monitoring of the COVID-19 vaccines.

## Implementation considerations

- Ensure that all refugees and migrants are included in COVID-19 vaccination policies, initiatives and health service delivery, with equal access to the COVID-19 vaccines as for host populations. Special arrangements should be made for those excluded from health systems, building on existing immunization programmes. This will require a major targeted effort to advocate for and facilitate access to vaccines for these populations alongside the host population (12).
- Ensure policy-makers and partners involved in NDVP development review the required national and local capacity for implementation, readiness, legal frameworks and regulatory requirements for vaccinating all refugees and migrants regardless of status, including proof of identity requirements (12).
- Consider refugee and migrant priority groups better in national planning and/or where NDVPs are being developed or updated:
  - prioritization and targeting of populations should be done in full accordance with the normative technical guidelines developed by WHO, the SAGE Values Framework (25) and SAGE Roadmap (10); and
  - discussions on prioritization must be mindful of incompleteness and biases in data, including with respect to sex/gender, age, race/ethnicity/migration status and other important aspects.
- Incorporate a gender and human rights perspective into all activities to ensure maximum success in vaccine deployment (12,39). Consider gender-related barriers to vaccine enrolment/registration and follow-up. Ensure gender balance and representation from women's groups and marginalized high-risk groups within coordination and decision-making bodies responsible for COVID-19 vaccine deployment.
- Ensure adequate protection and firewalls are in place to shield migrants in irregular situations from the possible transfer of their personal data to immigration authorities and to protect against the risk of them facing immigration enforcement measures when they attempt to access COVID-19 vaccines (12).

## Planning

Countries will need to carry out evidence-informed implementation planning for new service delivery models. This should include outreach and more convenient access points that better meet the needs of marginalized populations and refugees and migrants with restricted access to health systems or facing barriers to access. This will facilitate rapid deployment of vaccines as and when they become available, and ensure that refugees and migrants have equitable access. Representatives of refugee and migrant groups should be included in service delivery planning processes to guide the tailoring of delivery strategies to meet their specific needs. Particular attention should be given to the quality of services: that is, well located, timely, safe, effective, equitable and integrated with any other relevant primary care services.

Case study 2 illustrated with use of inclusive policies to improve COVID-19 vaccine access in refugees and migrants.

## Case study 2. Creation of inclusive policies to improve COVID-19 vaccine access in refugees and migrants

**Colombia.** The Government has facilitated a policy shift to ensure the regularization of undocumented migrants from Venezuela, providing a 10-year temporary protection status to these migrants which allowed them to register for vaccination (40).

**Jordan.** The aim is to provide free and equitable access to COVID-19 vaccines for Iraqi and Syrian refugees housed in camps and other migrants (41).

**Kuwait.** All people within the territory have access to medical services linked to COVID-19, including, in principle, individuals who are not regularized and/or do not hold an identity card (23).

**Lebanon.** Stateless people were also included in national vaccination plans and, after advocacy efforts, the online registration platform added a statelessness option, thus enabling stateless persons to register (23).

**Peru.** Authorities have opened the vaccination registry for migrants regardless of their status (40).

### Implementation considerations

- Authorities at national, regional and local levels should work closely and proactively with community-based organizations, refugee and migrant rights organizations, and community leaders to identify challenges and devise concrete strategies to address them (12,29). This is especially important when introducing new tools and services such as vaccines. Services should be people-centred, codesigned with refugee and migrant communities, tailored and targeted (42).
- Innovation in service delivery may be required to reach these populations and/or make access more convenient:
  - advocate for mobile vaccination points and/or expanded hours for vaccination services that would improve accessibility (24);
  - consider mobile vaccination clinics, pop-up clinics in nonclinical venues, combined health-care services and mass vaccination campaigns;
  - consider alternative and flexible registration options that include safeguards to ensure that information provided to health-care providers during vaccination is not shared with immigration authorities or used for enforcement (12,24);
  - create more-effective outreach campaigns if needed to highlight the removing of immigration checks for migrants in irregular situations, with specific information on how and where they can access vaccines (12,24);

- consider hard-to-reach populations living in conflict or in insecure areas, and where centralized vaccination policies and implementation strategies may face additional barriers to building trust (12);
  - consider using direct engagement of private sector actors, trusted mediators, humanitarian actors, national and civil society organizations and community leaders to improve service delivery (12); and
  - consider mass vaccination campaigns with female vaccinators to ensure social acceptability of services for migrant women in communities with gender segregation (39).
- Improve considerations of refugee and migrant populations in transit and/or in humanitarian contexts in policy and planning (43,44):
- support from humanitarian partners experienced in immunization activities already operating with access to and acceptance from populations of concern can be leveraged, and they should be included in national planning from the outset (44); and
  - where possible, consider choosing contextually appropriate vaccines if multiple safe and quality vaccine options exist (e.g. single dose vaccines) (44) and ensure the necessary cold-chain infrastructure is available.

A number of countries have developed innovated access points and delivery methods for COVID-19 vaccines (Case study 3).

### Case study 3. Innovations in access points and delivery of COVID-19 vaccines

#### Lebanon: tackling registration barriers in refugees and migrant workers

Despite full inclusion of all refugees and migrants in the COVID-19 vaccine rollout in Lebanon, regardless of nationality or residency status, several obstacles were encountered by refugee and migrant workers, with concerns raised that the requirement for formal documentation for online registration could lead to refugees failing to register out of fear of harassment, arrest or detention. Several potential approaches have been recommended by the World Bank, including that specific support should be given to refugees to access the registration platforms, with special focus on those who do not own or are not comfortable with the use of mobile phones and online applications, as well as a relaxation in the requirements for identity documents for registration (45). Innovative approaches such as group registrations facilitated by the United Nations or NGOs, mass vaccination outreach campaigns tailored to reach the different groups and working through embassies for migrant workers are also being explored.

### **The Maldives: supporting registration of irregular migrants**

Irregular migrants were unable to register on the Ministry of Health's online vaccination portal in the Maldives because of their lack of identity documentation (46). Following effective dialogue and advocacy with the Government, the Maldivian Red Crescent now registers irregular migrants and issues a vaccination registration card to them, allowing them to proceed for vaccination. Migrants' information is only shared with the health authorities responsible for vaccination, safeguarding their information and making it clear that it will not be used for immigration enforcement. The Maldivian Red Crescent also operates a migrant support call centre to provide additional orientation and support.

### **Sweden: mobile outreach to irregular migrants**

The Vaccine Bus is a mobile service operated by Healthcare Region I Stockholm that reaches out to groups that have difficulties accessing vaccination through the digital booking system. The Swedish Red Cross House in Stockholm, a social centre for irregular migrants and other vulnerable groups, invited the Vaccine Bus to come to the House and deliver vaccinations. By coordinating with the public health provider, the Red Cross facilitated access to COVID-19 vaccines for irregular migrants who faced barriers due to lack of digital identification, as well as difficulties in reaching health-care centres where vaccines were being offered (46).

### **Thailand: improving access through outreach to temporary shelters**

The Thai Red Cross and its network of partners have set up a vaccination campaign in Tham Hin Temporary Shelter, home to displaced refugees and migrants (47). This pilot vaccination programme built on previous pilot projects launched by the Chulabhorn Royal Academy. During September–August 2021, the Royal Academy implemented a pilot vaccination programme that has benefited 374 urban refugees. It also allocated 20 000 doses for up to 10 000 refugees, with over 4000 refugees having received their first vaccine dose in Mae La Temporary Shelter.

### **Thailand: mobile outreach to returning migrant workers**

Savannakhet Province saw a significant increase in returning migrant workers, and temporary quarantine and isolation facilities were set up at sport centres, factories and schools. In Kaison City, many fixed vaccination sites and mobile teams were set up and mobile teams travel to the 11 quarantine facilities and the Second Thai–Lao Friendship Bridge to vaccinate frontline workers, military personnel and health-care workers who might have missed previous rounds of vaccination activities (48).

### **Zambia: mobile outreach to migrants at borders**

The Zambian Government is deploying mobile vaccination teams to border areas to target migrant and host populations who may not be routinely or easily covered by health services (including targeting small-scale cross-border traders with the support of the International Organization for Migration) (21).

## Key resources for coordination and planning

- WHO (2020). SAGE Roadmap for Prioritizing Uses of COVID-19 Vaccines in the Context of Limited Supply (10)
- WHO (2021). COVID-19 Immunization in Refugees and Migrants: Principles and Key Considerations (12)
- WHO (2020). SAGE Values Framework for the Allocation and Prioritization of COVID-19 Vaccination (25)
- WHO (2021). Guidance on Operational Microplanning for COVID-19 Vaccination (28)
- WHO (2021). Acceptance and Demand for COVID-19 Vaccines: Communications Plan Template (34)
- WHO (2021). COVID-19 Vaccination: Supply and Logistics Guidance (37)
- WHO (2021). Guidance on Developing a National Deployment and Vaccination Plan for COVID-19 Vaccines (38)
- WHO (2021). SDG3 Global Action Plan For Healthy Lives and Well-Being: Gender Equality Working Group. Guidance Note and Checklist for Tackling Gender-related Barriers to Equitable COVID-19 Vaccine Deployment (39)
- WHO (2021). Critical Sex and Gender Considerations for Equitable Research, Development and Delivery Of COVID-19 Vaccines: Background Paper (49)
- WHO (2017). Vaccination in Humanitarian Emergencies: Implementation Guide (43)
- Global Health Cluster (2021). COVID-19 Vaccination in Humanitarian Settings: 12 Key Messages for Advocacy (44)



### Priority area 3. Implementation of a communication strategy, including a mass media plan

Refugees and migrants need to routinely receive accurate, systematic information about the vaccines from trusted sources in order to build confidence and uptake, including when and where to get the vaccine, information on its benefits and safety, requirements for accessing vaccines, and changes to policy and practice (e.g. entitlement to health care). They will, therefore, need to be included in national RCCE strategies (50). Communication will be specifically needed to ensure refugee and migrant communities are aware of access points available to them, requirements for accessing vaccines and changes to policy and practice regarding issues such as entitlement. All communications and media activities should consider language and health literacy needs and address information barriers such as access to media and mobile technology and electricity (50).

#### Implementation considerations

- Ensure refugees and migrants are effectively included in RCCE strategies (50).
- Build confidence among refugee and migrant communities concerning the vaccines available to them and to communicate the benefits and safety of vaccines and the risks of the disease they prevent (26):
  - participatory approaches should be used to engage and communicate with refugees and migrants to support development of inclusive and acceptable communications for increasing COVID-19 vaccine uptake (24);
  - initiatives, communications and information need to be community centred and codesigned with at-risk refugee and migrant communities; and
  - messages need to be distributed through trusted local communication channels using community leaders and peer support (12,42).
- Create clear communication strategies to address both host and refugee and migrant communities to explain the selection of priority groups and why others may not be receiving the vaccine (12,44).
- Plan appropriate communication on access to vaccinations for refugees and migrant communities. Multiple communication strategies will be needed to address any common questions or concerns, but also to account for specific social and cultural practices (24). Ensure communication strategies highlight the removing of immigration checks for migrants in irregular situations, with specific information on how and where they can access vaccines (12).
- Consider the following for mass media plans:
  - language and health literacy needs and information barriers such as access to media and mobile technology and electricity (50);

- provision of culturally and linguistically appropriate, translated, accurate, timely and user-friendly information, including key messages in accessible formats (including digital/mobile or social media systems) (12);
  - utilization of a range of specific communication activities that considers potential information barriers (50), including generation of digital content and/or printing and dissemination of information, education and communication material; developing a mass media plan based on research and channel analysis; contracting agencies to develop public service announcements for television and radio; dissemination of messages through mass media; and message dissemination through social media (34);
  - utilization of preferred and trusted communication channels that meet a range of different communication needs and consider trusted media outlets that serve community needs in local languages, taking into account cultural differences (24);
  - vaccine uptake should be made visible, demonstrating social norms, which may be especially important in refugee and migrant populations, identifying recognizable public figures who are willing to get vaccinated publicly, and encouraging sharing on social media;
  - community engagement strategies to detect and respond to concerns (50) ensuring that credible, accessible information flows;
  - utilization of media and media development organizations to develop creative, entertaining and engaging communications that address marginalized people's priorities while exploring COVID-19 vaccine acceptance and other prevention behaviours (24); and.
  - actively involve communities in identifying preferred communication channels, formats and venues for messaging (24).
- Collaborate and coordinate with involved stakeholders to amplify communication impact and avoid duplication. Consider partnering with camp management, civil society organizations and community and religious leaders and influencers, as well as with government if possible. Engage partners providing health-care services and information and other non-health-related services to expand communication reach (50).
  - Include feedback mechanisms and accountability to guide iterative enhancements to plans, activities and messaging. Consider creating ways to collect and respond to feedback remotely (50).
  - Understand and address misinformation, concerns and challenges in compliance with the promoted measures, linking to vaccination services:
    - placing a specific focus on building trust and countering misinformation on COVID-19 vaccines and promoting uptake is critical (12,44), as is being prepared to continuously adapt messages to an evolving situation.

- Address gender-related barriers to information through tailored messages and communication channels that address the specific concerns of different subgroups of women, men and gender-diverse people, including pregnant and lactating women (39).

The Collective Service for RCCE has provided a list of considerations for marginalized groups (Box 2) (24).

## **Box 2. General RCCE considerations for all marginalized groups**

- Advocate for vaccination plans and related communication plans to be inclusive of all populations, without any discrimination: gender, legal status, age, religion, origin, location or any other characteristic.
- Adopt a do-no-harm approach and conduct a protection analysis when targeting populations at risk of exclusion. Develop strategies with an aim to avoid creating new risks, such as further stigmatization.
- Plan for different stages of community engagement at each point of the vaccine process, as information and perceptions will change.
- Understand and use preferred and trusted communication channels that meet a range of different communication needs for people with disabilities and for those with literacy and cognition needs.
- Encourage partners to adapt and agree on harmonized communication goals and strategies, supported by harmonized messaging for marginalized populations.
- Simplify and pre-test messages with specific marginalized groups for easy understanding, adjust messages for literacy levels and translate them into preferred languages using local terms and concepts.
- Encourage discussion about the lack of access or unavailability of the vaccine to avoid additional frustrations.
- Understand that marginalized populations may have intersecting needs: for example, a migrant with a disability and a community health worker who is a refugee working in insecure areas.
- Consider the gender implications of COVID-19 vaccination programmes for all marginalized people.
- Include health-care workers and community health workers as audiences in RCCE activities.

Case study 4 describes effective communication strategies in Africa.

## Case study 4. Effective communication strategies in Africa

### Kenya: countering misinformation through radio campaigns

In Kenya, vaccine hesitancy within the Government and the national population as well as misinformation about COVID-19 spread through social media and word of mouth in refugee camps, has had a strong effect on populations living in refugee camps (51). Misinformation included rumours that international aid agencies were creating the virus to make money. In Dadaab Camp, a radio host from the camp, known locally as the Corona Guy, has used his radio station with success to directly combat misinformation circulating in the camp and to create a dialogue with other camp residents.

### North Africa: identifying key information sources, channels and trusted messengers for migrants

The Mixed Migration Centre in north Africa explored access to information on COVID-19 for refugees and migrants in Libya and Tunisia, highlighting the prevalent use of online platforms and social media as a key source of information by refugees and migrants. The Mixed Migration Centre recommended systematic sharing of information on COVID-19 via online communities and through expanded awareness campaigns that translated information material into local languages, as well as looking at different information channels used by refugees and migrants and the high levels of trust placed in community leaders and mobilizers (52).

## Key resources for implementing a mass media plan

- Collective Service for RCCE (2021). Guidance on COVID-19 Vaccines for Marginalised Populations (24)
- WHO (2021). Conducting Community Engagement for COVID-19 Vaccines: Interim Guidance (42)
- Global Health Cluster (2021). COVID-19 Vaccination in Humanitarian Settings: 12 Key Messages for Advocacy (44)
- British Red Cross (2020). Practice Guidance for Risk Communication and Community Engagement (RCCE) for Refugees, Internally Displaced Persons (IDPs), Migrants and Host Communities Particularly Vulnerable to COVID-19 Pandemic (50)
- WHO Regional Office for Europe (2013). Vaccine Safety Events: Managing the Communications Response: A Guide for Ministry of Health EPI Managers and Health Promotion Units (53)

## Priority area 4. Social media monitoring and infodemic and misinformation management

Misinformation and disinformation on vaccines can spread rapidly through social media and mainstream media and may have a strong influence on individual and community vaccine confidence. This rapid spread has been termed an infodemic.<sup>4</sup> It may be particularly evident in refugee and migrant communities where distrust already exists and/or access to robust public health information may be more limited. There is some evidence that refugees and migrants make substantial use of social media as a source of public health information (54,55), with mistrust, rumours and misinformation about the vaccines linked to negative experiences with government and health systems and delays in sharing information (24).

### Implementation considerations

- Actively monitor digital/social media and mainstream media to identify any anti-vaccine sentiment, fake information and rumours:
  - create or use community feedback mechanisms and a reporting mechanism to regularly assess community perceptions and concerns about the vaccines and vaccine rollouts (24);
  - respond to misinformation and disinformation in real time by sending accurate messages through trusted communication channels, having trusted community members briefed and spokespeople available to contact the media, and building alliances with media networks to facilitate quicker responses (34,26); and
  - follow up with social mobilization and community engagement to mitigate the risks of rumours and negative information about vaccines (50,56).
- Explore opportunities for sharing and transmitting accurate information to highly mobile populations via social media-based communication channels alongside other innovative approaches.
- Train frontline staff in the basics of infodemic management, how rumours and mis/disinformation happen and how to avoid spreading them (24). Encourage frontline workers to include their own motivations in the dialogue, acknowledging their own experiences and describing reasons why they want to be vaccinated.

---

4 Infodemic refers to a large increase in the volume of information associated with a specific topic, where growth can occur exponentially in a short period of time due to a specific incident, such as the current pandemic. In this situation, misinformation and rumours appear and proliferate, alongside manipulation of information with doubtful intent. In the information age, this phenomenon can be amplified through social networks, spreading farther and faster like a virus.

Case study 5 outlines an initiative to track rumours relating to COVID-19 in the community in Turkey.

### **Case study 5. COVID-19 rumour tracking report for a community-based migration programme in Turkey**

A knowledge, attitudes and practices assessment was carried out and a feedback mechanism implemented to monitor rumours circulating via word of mouth and social media concerning COVID-19 and vaccines in Turkey (57). The rumours were then addressed by providing clear and accurate information via different channels in different languages to reach both refugees and local communities. Audiovisual and written materials (including information brochures, frequently asked questions, leaflets and videos) were produced based on the collected rumours and misperceptions in coordination with the Turkish Red Crescent Society, public health departments and a communications team. The materials were shared on social media through WhatsApp, in online community meetings and at advisory committee meetings. Online community meetings were held to promote acceptance and trust. Establishing systems to monitor rumours on a regular basis and having an effective feedback mechanism meant that rumours could be responded to with accurate information in a timely manner.

### **Key resources for social media monitoring and misinformation management**

- Collective Service for RCCE (2020). COVID-19 Global Risk Communication and Community Engagement Strategy (13)
- UNICEF (2020). Vaccine Misinformation Management Field Guide: Guidance for Addressing a Global Infodemic and Fostering Demand for Immunization (56)
- Pan American Health Organization (2020). Understanding the Infodemic and Misinformation in the Fight against COVID-19: Digital Transformation Toolkit (58)
- WHO (2020). A Guide to Preventing and Addressing Social Stigma Associated with COVID-19 (59)
- WHO (2022). Infodemic (60)
- United States Centers for Disease Control and Prevention (2021). How to Address COVID-19 Vaccine Misinformation (61)

## Priority area 5. Community engagement and social mobilization

WHO recommends that each country develops a strategy to increase confidence and uptake of COVID-19 vaccines, with a robust community engagement component integrated into microplans (28,42). RCCE should be integrated into all COVID-19 responses and countries should support the adoption of RCCE minimum standards (13). Interim WHO guidance on conducting community engagement for COVID-19 vaccines is available (42). People-centred and community-led approaches should be championed widely because they result in increased trust and social cohesion, and ultimately a reduction in the negative impacts of COVID-19 (13). Specific efforts will be needed to reach refugees and migrant populations (26). When carried out appropriately, community engagement increases the likelihood that communities take the lead on issues that affect them, use services and build resilience (42).

### Implementation considerations

- Practise community-led approaches in developing community engagement strategies to emphasize the participation of the local community in developing initiatives and to ensure community ownership, commitment and accountability. Engage existing volunteer groups to use their creativity to raise awareness (24).
- Offer orientation sessions concerning COVID-19 vaccines to local influencers such as community leaders, religious leaders and other influential people, and obtain their support in creating an enabling environment for vaccine introduction (42).
- Consider engaging the following groups in community-engagement approaches (24): local volunteer groups; community groups and leaders; religious groups and leaders; peer groups; youth associations; traditional healers; health-care workers; trusted media outlets (e.g. trusted local media); and established diaspora groups outside the country of focus;
  - do not assume blanket legitimacy among local leaders and representatives, especially in conflict-affected communities, and understand local dynamics when integrating leaders into planning and communication processes (24); and
  - encourage community engagement teams to be inclusive of marginalized populations that specifically make use of trusted leaders (24).
- Organize community interactions in underserved areas, with a focus on marginalized groups.
- Disseminate posters, flyers, lists of frequently asked questions and organize and leverage public events such as sports competitions, carnivals, music and film showing to engage communities (34).
- Develop a community action plan to engage communities in planning social mobilization and communication activities (42). The national and subnational plans can be adapted to fit the local context. Messages and materials should be tailored to reflect audience perceptions and knowledge at the local level.

- Plan for different stages of community engagement at each point of the vaccination process, because perceptions and information needs will change (24). Create or use community feedback mechanisms and a complaint mechanism to regularly assess community perceptions and concerns about vaccines and vaccine rollouts, and to denounce and combat discrimination if it occurs (24).
- Implement a community action plan with relevant partners to engage with identified audiences and communities (42). Ensure participation and accountability mechanisms are in place.

Case study 6 describes community engagement and social mobilization measures in various countries.

## Case study 6. Community engagement and social mobilization

### Norway: working in partnership with community ambassadors

In partnership with civil society, academia and the Norwegian Institute for Public Health, Somali-speaking ambassadors from communities, identified by health workers in collaboration with the communities, have been sharing information about COVID-19 in Somali languages. Information on vaccination has also been translated and is available in over 45 languages (62).

### Venezuela: direct community engagement to develop communication messages

Using questions from the RCCE Collective Service questions bank, the Communications with Communities/ Communication for Development Working Group of the Regional Interagency Coordination Platform for Refugees and Migrants from Venezuela conducted a survey on COVID-19 vaccine perceptions, with an estimated 200 participants (55). According to the study, 34% said they did not know if they would have access to the vaccine. Equipped with this information, a Regional Reference Group with refugees and migrants from Venezuela was convened to review and draft key messages on the COVID-19 vaccines for dissemination (24).

## Key resources for community engagement and social mobilization

- Collective Service for RCCE (2020). COVID-19 Global Risk Communication and Community Engagement Strategy (13)
- Collective Service for RCCE (2021). Guidance on COVID-19 Vaccines for Marginalised Populations (24)
- WHO (2021). Conducting Community Engagement for COVID-19 Vaccines: Interim Guidance (42)
- British Red Cross (2021). Practice Guidance for Risk Communication and Community Engagement (RCCE) for Refugees, Internally Displaced Persons (IDPs), Migrants and Host Communities Particularly Vulnerable to COVID-19 Pandemic (50)
- Risk Communication and Community Engagement Working Group on COVID-19 Preparedness and Response in Asia and the Pacific (2020). COVID-19: How to Include Marginalized and Vulnerable People in Risk Communication and Community Engagement (63)
- UNICEF (2020). Coronavirus disease (COVID-19): Key Tips and Discussion Points for Community Workers and Volunteers (64)
- United States Department of Health and Human Services (2021). Community Engagement Playbook Index (65)



## Priority area 6. Capacity-building and training

Reinforcing capacity and local solutions will be crucial to vaccine rollout and controlling the pandemic (13). It is critical to strengthen and expand the capacity of health systems, including primary health-care providers, and provide health literacy education programmes regarding health services to refugees and migrants (12). WHO guidance on key considerations for human resources strengthening is available (37). WHO has recommended a range of specific interventions and monitoring mechanisms to increase demand for COVID-19 vaccines among health care workers, focused around BeSD (27).

Interpersonal communication training modules for health workers will need to be integrated into the training being organized at national, subnational and community levels, and it will need to be adjusted for local contexts (26). National immunization programmes should be resilient to humanitarian or health crises, and lessons learned from previous campaigns and immunization outreach efforts used to reach such populations should be considered in developing strategies (12). It is critical to integrate the current workforce needs for urgent COVID-19 vaccine rollout into the broader health system (12).

### Implementation considerations

- Improve training and awareness among health-care and frontline workers on how to avoid stigmatization of refugees and migrants, to build their trust in health and vaccination systems, and to understand their cultural, religious and social needs and ensure health-care and frontline workers have strategies to address any issues (12,24):
  - involving the host community can defuse any potential conflict (vaccine nationalism discourse) (24);
  - training to increase awareness among health-care providers prior to vaccination efforts could include simulation exercises (12).
  - training health-care workers should include infection, prevention and control skills and infodemic management (34);
  - using social mobilizers for community engagement and social mobilization (34);
  - creating designated teams in crisis communications at national/provincial/district level (34);
  - considering the range of competencies needed to guide the empowerment, education and training of health-care workers and planners in managing the infodemic (66); and
  - including health-care workers and community health workers in the audiences for RCCE activities, training frontline workers to listen and engage with people's questions and concerns about COVID-19 vaccines with empathy (24).

- Ensure health systems are culturally and linguistically sensitive to the needs of refugees and migrants and the circumstances that may increase their health risks and generate barriers in accessing treatment and care (12).
- Identify and map key stakeholders and health facilities that provide COVID-19 vaccination services for these populations and assess them for readiness, vaccination capacity, policy and protocols, as per WHO guidance (38).
- Leverage community health workers and other health providers to support messaging and to acknowledge their unique and pivotal role in supporting efforts to encourage acceptance and demand (12).

### **Key resources to support capacity-building**

- WHO (2021). COVID-19 Vaccination: Supply and Logistics Guidance: Interim Guidance (37)
- UNICEF (2020). Coronavirus disease (COVID-19): Key Tips and Discussion Points for Community Workers and Volunteers (64)
- WHO (2021). WHO Competency Framework: Building a Response Workforce to Manage Infodemics (66)

## Priority area 7. Monitoring, learning and evaluation

Demand planning should include a section dedicated to monitoring and evaluation of relevant activities linked with the NDVP and performance indicators, in order to show the effectiveness of interventions during the vaccine rollout and to correct where needed (26). A simple monitoring and evaluation framework may be included, outlining specific activities, intended outputs, outcomes and corresponding measures or indicators. WHO has developed guidance on monitoring COVID-19 vaccination uptake<sup>5</sup> and considerations for the collection and use of data (33).

Monitoring COVID-19 vaccination (33) can use uptake, coverage and equity indicators to evaluate:

- progress over time:
  - monitoring vaccine uptake by total population, by geographical area or by any population group for which disaggregated data exist; or
  - evaluating vaccine uptake against targets (e.g. 80% coverage among the general population) or milestones (e.g. vaccinate 50% of all people over 60 years by June);
- prioritization: monitor expected differences in immunization outcomes, for example to assess to what extent older people or health workers are vaccinated ahead of the general population; and
- inequities: monitor unexpected differences in immunization outcomes, for example differences between men and women, between regions of a country or between ethnic groups.

### **Implementation considerations**

- Design and implement monitoring systems to measure the progress and effectiveness of COVID-19 vaccine programmes:
  - measuring vaccine coverage among the overall population, as well as among the at-risk populations prioritized for vaccination (33);
  - estimating target and population groups for priority grouping using a top-down estimate based on census and survey data or bottom-up figure using, for example, beneficiary lists of health workers (33); and
  - measuring behavioural and social data (including social listening data) continuously to track changes over time and stay aware of the different factors that influence uptake (27), which will be particularly important to monitor changing public behaviour and sentiments with new variants and the emerging need for booster doses.

---

<sup>5</sup> Vaccine uptake or vaccination rate is the number of people vaccinated with a certain dose of the vaccine in a certain time period (e.g. during a month or year). It can be expressed as an absolute number or as the proportion of a target population.

- Surveillance systems and routine immunization data collection systems should be strengthened or designed to capture data on COVID-19 epidemiology, testing, treatment and vaccination uptake in all refugee and migrant populations. This would be greatly facilitated if data on vaccine uptake were collected and disaggregated by groups so that national authorities can see the extent to which different groups are being reached (12).
- Establish mechanisms in collaboration with governmental and civil society organizations to monitor COVID-19 vaccination uptake in refugee and migrant populations, obtaining accurate population estimates to facilitate the allocation of resources and estimate vaccine coverage (12).
- Advocate for information systems to capture vaccination coverage data for refugees and migrants, while ensuring data protection (24).

Box 3 outlines possible dimensions for coverage and equity monitoring for COVID-19 vaccines (33) and Box 4 dimensions for tracking uptake and coverage data for refugees and migrants (27).

### Box 3. Coverage and equity monitoring illustrated

Monitoring coverage by the suggested dimensions will allow public health officials to report data in a variety of ways:

- 50 000 people received a final dose of any COVID-19 vaccine by May 2021, corresponding to 5% of the total population of 1 000 000 (coverage of 5%);
- 30 000 people received a single dose of product A, which requires one dose, and 20 000 a second dose of product B, which requires two doses;
- total vaccinated included 15 000 health workers, out of 20 000. Coverage among health workers is, therefore, estimated at 75%;
- 30 000 (60%) of those vaccinated were over 60 years of age (out of an estimated total of 150 000 in this age group), which corresponds to 20% coverage; or
- 40% of vaccinations were provided to men and 60% to women, which may indicate an equity issue or demographic differences in targeted populations (the health worker population may be predominantly female, for example).

## Box 4. Tracking uptake and coverage data for refugees and migrants

Uptake and coverage for refugees and migrants should be tracked by dose and can be annotated as follows:

- COV-1: the number of refugees and migrants receiving a first dose of the vaccine, or the proportion of a target group that did so, for example, 50 000 first doses, corresponding to 5% of the total population.
- COV-2, the number or proportion of refugees and migrants receiving a second dose of the vaccine.
- COV-3: the number or proportion of refugees and migrants receiving any booster doses if relevant for future recommended vaccination schedules.
- Drop-out from COV-1 to COV-2: the proportion of refugees and migrants who received at least one dose of a two-dose COVID-19 vaccine but did not receive a second dose yet. Calculated as  $(\text{COV-1} - \text{COV-2}) / \text{COV-1}$ .

## Key resources for monitoring, learning and evaluation

- WHO & UNICEF (2021). Data for Action: Achieving High Uptake of COVID-19 Vaccines (27)
- WHO & UNICEF (2021). Monitoring COVID-19 Vaccination: Consideration for the Collection and Use of Vaccination Data: Interim Guidance (33)
- WHO (2021). Acceptance and Demand for COVID-19 Vaccines: Communications Plan Template (34)

## References

1. Hayward SE, Deal A, Cheng C, Crawshaw AF, Orcutt M, Vandrevalla TF et al. Clinical outcomes and risk factors for COVID-19 among migrant populations in high-income countries: a systematic review. *J Migr Health*. 2021;3:100041. doi: 10.1016/j.jmh.2021.
2. Locked down and left out? Why access to basic services for migrants is critical to our COVID-19 response and recovery. Melbourne: Red Cross Red Crescent Global Migration Lab; 2021 (<https://www.ifrc.org/sites/default/files/2021-08/EN-RCRC-Global-Migration-Lab-Locked-down-left-out-COVID19.pdf>, accessed 11 January 2022).
3. High risk – low priority: why unlocking COVID-19 vaccine access for refugees and internally displaced communities is critical for children. Uxbridge: World Vision International; 2021 ([https://www.wvi.org/sites/default/files/2021-06/WRD%20report\\_final%20with%20profiles.pdf](https://www.wvi.org/sites/default/files/2021-06/WRD%20report_final%20with%20profiles.pdf), accessed 11 January 2022).
4. Reducing COVID-19 transmission and strengthening vaccine uptake among migrant populations in the EU/EEA. Stockholm: European Centre for Disease Prevention and Control; 2021 (<https://www.ecdc.europa.eu/en/publications-data/covid-19-migrants-reducing-transmission-and-strengthening-vaccine-uptake>, accessed 11 January 2022).
5. International migration report 2017: highlights. New York: United Nations Department of Economic and Social Affairs; 2017 (ST/ESA/SER.A/404; [http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017\\_Highlights.pdf](http://www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/MigrationReport2017_Highlights.pdf), accessed 23 October 2018).
6. Convention and protocol relating to the status of refugees. Geneva: Office of the United Nations High Commissioner for Refugees; 1951 (United Nations General Assembly Art. 1(A)(2); <http://www.unhcr.org/3b66c2aa10.pdf>, accessed 23 October 2018).
7. El Salibi N, Abdulrahim S, El Haddad M, Bassil S, El Khoury Z, Ghattas H et al. COVID-19 vaccine acceptance in older Syrian refugees: preliminary findings from an ongoing study. *Prev Med Rep*. 2021;24:101606. doi: 10.1016/j.pmedr.2021.101606.
8. Community, engagement and accountability: survey on the beliefs of the vulnerable population regarding the COVID-19 vaccine; a case study of the Hellenic Red Cross. Athens: Hellenic Red Cross; 2021 (<https://communityengagementhub.org/resource/survey-on-the-beliefs-of-the-vulnerable-population-regarding-the-covid-19-vaccine/>, accessed 11 January 2022).
9. Hargreaves S, Hayward S, Noori T, McKee M, Kumar B. COVID-19: counting migrants in. *Lancet*. 2021;398(10296):211–12. doi: 10.1016/S0140-6736(21)01339-8.

10. WHO SAGE roadmap for prioritizing uses of COVID-19 vaccines in the context of limited supply. Geneva: World Health Organization; 2020 (<https://www.who.int/publications-detail-redirect/who-sage-roadmap-for-prioritizing-uses-of-covid-19-vaccines-in-the-context-of-limited-supply>, accessed 11 January 2022).
11. Bartovic J, Datta SS, Severoni S, D'Anna V. Ensuring equitable access to vaccines for refugees and migrants during the COVID-19 pandemic. *Bull World Health Organ.* 2021;99:3–3A. doi: 10.2471/BLT.20.267690.
12. COVID-19 immunization in refugees and migrants: principles and key considerations: interim guidance, 31 August 2021. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/covid-19-immunization-in-refugees-and-migrants-principles-and-key-considerations-interim-guidance-31-august-2021>, accessed 11 January 2022).
13. COVID-19 global risk communication and community engagement strategy: December 2020 – May 2021. Geneva: Collective Service for Risk Communication and Community Engagement; 2020 (interim guidance 23 December 2020; [https://rccehub.wpengine.com/wp-content/uploads/2021/02/RCCE\\_GlobalStrategy-25012021.pdf](https://rccehub.wpengine.com/wp-content/uploads/2021/02/RCCE_GlobalStrategy-25012021.pdf), accessed 11 January 2022).
14. Human rights and access to COVID-19 vaccines. New York: United Nations Office of the High Commissioner; 2020 ([https://www.ohchr.org/Documents/Events/COVID-19\\_AccessVaccines\\_Guidance.pdf](https://www.ohchr.org/Documents/Events/COVID-19_AccessVaccines_Guidance.pdf), accessed 11 January 2022).
15. Immunization agenda 2030: a global strategy to leave no one behind. Geneva: World Health Organization; 2020 (<https://www.who.int/teams/immunization-vaccines-and-biologicals/strategies/ia2030>, accessed 11 January 2022).
16. Meeting of the Immunization and Vaccine-related Implementation Research Advisory Committee (IVIR-AC), March 2021. *Wkly Epidemiol Rec.* 2021;96(17):133–44 (<https://www.who.int/publications/i/item/weekly-epidemiological-record-no-17-2021-96-133-144>, accessed 11 January 2022).
17. Crawshaw AF, Farah Y, Deal A, Rustage K, Hayward SE, Carter J et al. Defining the determinants of under-vaccination in migrant populations in Europe to improve routine and COVID-19 vaccine uptake: a systematic review. *MedRxiv.* 202111.08.21266058. doi: 10.1101/2021.11.08.21266058.
18. Tankwanchi AS, Bowman B, Garrison M, Larson H, Wiysonge CS. Vaccine hesitancy in migrant communities: a rapid review of latest evidence. *Curr Opin Immunol.* 2021;71:62–8. doi: 10.1016/j.coi.2021.05.009.
19. Crawshaw AF, Deal A, Rustage K, Forster AS, Campos-Matos I, Vandrevalla T et al. What must be done to tackle vaccine hesitancy and barriers to COVID-19 vaccination in migrants? *J Travel Med.* 2021;28 (4):taab048. doi: 10.1093/jtm/taab048.

20. Migrant inclusion in COVID-19 vaccination campaigns: IOM country office review. Geneva: International Organization for Migration; 2021 ([https://www.iom.int/sites/g/files/tmzbdl486/files/our\\_work/DMM/Migration-Health/iom-vaccine-inclusion-mapping-17-may-2021-global.pdf](https://www.iom.int/sites/g/files/tmzbdl486/files/our_work/DMM/Migration-Health/iom-vaccine-inclusion-mapping-17-may-2021-global.pdf), accessed 11 January 2022).
21. Data 4 action: RCCE for COVID-19 vaccine demand in Eastern and Southern Africa, special edition on migrants, refugees, IDPs, asylum seekers, undocumented migrants: Oct 2021, Issue 3. Geneva: Collective Service for Risk Communication and Community Engagement; 2021 ([https://www.rcce-collective.net/wp-content/uploads/2021/12/03-DATA-4-ACTION-Migrants\\_IDPs\\_Refugees.pdf](https://www.rcce-collective.net/wp-content/uploads/2021/12/03-DATA-4-ACTION-Migrants_IDPs_Refugees.pdf), accessed 11 January 2022).
22. Sight unseen: a vision for effective access to COVID-19 vaccines for migrants. North Melbourne: Red Cross Red Crescent Global Migration Lab; 2021 (<https://www.ifrc.org/sites/default/files/2021-08/RCRC-GML-Sight-Unseen-COVID19-Vaccines-FINAL.pdf>, accessed 11 January 2022).
23. The impact of COVID-19 on stateless populations: policy recommendations and good practices on vaccine access and civil registration. New York: ReliefWeb; 2021 (<https://reliefweb.int/report/world/impact-covid-19-stateless-populations-policy-recommendations-and-good-practices-vaccine>, accessed 11 January 2022).
24. Guidance on COVID-19 vaccines for marginalised populations. Geneva: Collective Service for Risk Communication and Community Engagement; 2021 (<https://www.rcce-collective.net/resource/risk-communication-and-community-engagement-guidance-on-covid-19-vaccines-for-marginalised-populations/>, accessed 11 January 2022).
25. WHO SAGE values framework for the allocation and prioritization of COVID-19 vaccination. Geneva: World Health Organization; 2020 (<https://apps.who.int/iris/handle/10665/334299>, accessed 11 January 2022).
26. WHO, UNICEF. Acceptance and demand for COVID-19 vaccines: interim guidance 31 January. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/339449>, accessed 11 January 2022).
27. WHO, UNICEF. Data for action: achieving high uptake of COVID-19 vaccines: interim guidance 1 April 2021. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccination-demand-planning-2021.1>, accessed 11 January 2022).
28. Guidance on operational microplanning for COVID-19 vaccination. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccination-microplanning-2021.1>, accessed 11 January 2022).
29. 10 steps to community readiness: what countries should do to prepare communities for a COVID-19 vaccine, treatment or new test. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/339428>, accessed 11 January 2022).



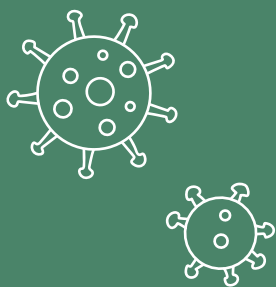
30. Development of tools to measure behavioural and social drivers (BeSD) of vaccination: progress report. Geneva: World Health Organization; 2020 ([https://cdn.who.int/media/docs/default-source/immunization/besd\\_progress\\_report\\_june2020.pdf?sfvrsn=10a67e75\\_3](https://cdn.who.int/media/docs/default-source/immunization/besd_progress_report_june2020.pdf?sfvrsn=10a67e75_3), accessed 11 January 2022).
31. COVID-19 vaccination uptake: a study of knowledge, attitudes and practices of marginalized communities in Iraq. New York: ReliefWeb; 2021 ([https://reliefweb.int/sites/reliefweb.int/files/resources/Iraq-Vaccination-Uptake-Study-CARE\\_FINAL.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/Iraq-Vaccination-Uptake-Study-CARE_FINAL.pdf), accessed 11 January 2022).
32. Social and behavioural insights COVID-19 data collection tool for Africa. Geneva: World Health Organization; 2021 (<https://www.who.int/news/item/25-08-2021-social-and-behavioural-insights-covid-19-data-collection-tool-for-africa>, accessed 11 January 2022).
33. WHO, UNICEF. Monitoring COVID-19 vaccination: consideration for the collection and use of vaccination data. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/monitoring-covid-19-vaccination-interim-guidance>, accessed 11 January 2022).
34. Acceptance and demand for COVID-19 vaccines: communications plan template, 31 January 2021. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/339463>, accessed 11 January 2022).
35. COVID-19 vaccine confidence rapid community assessment guide: a guide to help you understand your community's needs regarding COVID-19 vaccines in 3 weeks. Atlanta (GA): United States Centers for Disease Control and Prevention; 2021 (<https://www.cdc.gov/vaccines/covid-19/vaccinate-with-confidence/rca-guide/downloads/CDC-RCA-Guide-2021-508.pdf>, accessed 11 January 2022).
36. Resources. In: Human Centered Design 4 Health resources [website]. New York: United Nations Children's Fund; 2021 (<https://www.hcd4health.org/resources>, accessed 11 January 2022).
37. COVID-19 vaccination: supply and logistics guidance: interim guidance 12 February 2021. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/339561>, accessed 11 January 2022).
38. Guidance on developing a national deployment and vaccination plan for COVID-19 vaccines. Geneva: World Health Organization; June 2021 (<https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccine-deployment-2021.1-eng>, accessed 11 January 2022).
39. SDG3 Global Action Plan For Healthy Lives and Well-Being: Gender Equality Working Group. Guidance note and checklist for trackling gender-related barriers to equitable COVID-19 vaccine deployment. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/m/item/gender-related-barriers-to-equitable-covid-19-vaccine-deployment>, accessed 11 January 2022).

40. COVID-19 vaccines for displaced people in Latin America and the Caribbean. Washington (DC): Refugees International; 2021 (<https://www.refugeesinternational.org/reports/2021/8/9/covid-19nbspvaccines-fornbspdisplacednbsppeoplenbspin-latin-america-and-the-caribbeannbsp>, accessed 11 January 2022).
41. Bellizzi S, Aidyralieva C, Alsawhala L, Al-Shaikh A, Santoro A, Profili MC. Vaccination for SARS-CoV-2 of migrants and refugees, Jordan. *Bull World Health Organ.* 2021;99(9):611. doi: 10.2471/BLT.21.285591.
42. Conducting community engagement for COVID-19 vaccines: interim guidance, 31 January 2021. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/339451>, accessed 11 January 2022).
43. Vaccination in humanitarian emergencies implementation guide. Geneva: World Health Organization; 2017 (<https://www.who.int/publications/i/item/WHO-IVB-17.13>, accessed 11 January 2022).
44. GHC position paper: COVID-19 vaccination in humanitarian settings: 12 key messages for advocacy. Geneva: Global Health Cluster; 2021 (<https://healthcluster.who.int/publications/m/item/covid-19-task-team-covid-19-vaccination-in-humanitarian-settings>, accessed 11 January 2022).
45. Vaccinating refugees: lessons from the inclusive Lebanon vaccine roll-out experience. Washington (DC): World Bank; 2021 (<https://www.worldbank.org/en/news/feature/2021/06/18/vaccinating-refugees-lessons-from-the-inclusive-lebanon-vaccine-roll-out-experience>, accessed 11 January 2022).
46. International Federation of Red Cross and Red Crescent Societies, Australian Red Cross. Sight unseen: a vision for effective access to COVID-19 vaccines for migrants. Melbourne: Red Cross Red Crescent Global Migration Lab; 2021 (<https://www.ifrc.org/sites/default/files/2021-08/RCRC-GML-Sight-Unseen-COVID19-Vaccines-FINAL.pdf>, accessed 11 January 2022).
47. COVID-19 vaccination of vulnerable displaced persons begins in Thailand. Bangkok: United Nations High Commissioner for Refugees Thailand; 2021 (<https://www.unhcr.org/th/en/30817-covid-19-vaccination-of-vulnerable-displaced-persons-begins-in-thailand.html>, accessed 11 January 2022).
48. Mobile vaccination teams deliver COVID-19 vaccines to frontline workers at Sanamxay quarantine center in Savannakhet Province. Geneva: Collective Service for Risk Communication and Community Engagement; 2021 (<https://www.rcce-collective.net/case-study/mobile-vaccination-teams-deliver-covid-19-vaccines-to-frontline-workers-at-sanamxay-quarantine-center-in-savannakhet-province/>, accessed 11 January 2022).

49. Critical sex and gender considerations for equitable research, development and delivery of COVID-19 vaccines. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/m/item/critical-sex-and-gender-considerations-for-equitable-research-development-and-delivery-of-covid-19-vaccines>, accessed 11 January 2022).
50. Practice guidance for risk communication and community engagement (RCCE) for refugees, internally displaced persons (IDPs), migrants and host communities particularly vulnerable to COVID-19 pandemic. London: British Red Cross; 2020 (<https://communityengagementhub.org/wp-content/uploads/sites/2/2020/06/Practical-Guidance-RCCE-Refugees-IDPs-Migrants.pdf>, accessed 11 January 2022).
51. Walker R, Maple N, Vearey J. Migrants & the COVID-19 vaccine roll-out in Africa. Johannesburg: Migration and Health Project; 2021 (<https://www.mahpsa.org/wp-content/uploads/2021/06/MiCoSA-Migrants-the-Covid-19-vaccine-OccasionalPaper-June2021.pdf>, accessed 11 January 2022).
52. 4Mi snapshot: access to information on COVID-19 in Libya and Tunisia. Geneva: Mixed Migration Centre; 2020 (<https://mixedmigration.org/resource/4mi-snapshot-access-to-information-on-covid-19-in-libya-and-tunisia/>, accessed 11 January 2022).
53. Vaccine safety events: managing the communications response: a guide for ministry of health EPI managers and health promotion units. Copenhagen: WHO Regional Office for Europe; 2013 ([https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0007/187171/Vaccine-Safety-Events-managing-the-communications-response.pdf](https://www.euro.who.int/__data/assets/pdf_file/0007/187171/Vaccine-Safety-Events-managing-the-communications-response.pdf), accessed 11 January 2022).
54. Ganczak M, Bielecki K, Drozd-Dabrowska M, Topczewska K, Biesiada D, Molas-Biesiada A et al. Vaccination concerns, beliefs and practices among Ukrainian migrants in Poland: a qualitative study. BMC Public Health. 2021;21 (1):93. doi: 10.1186/s12889-020-10105-9.
55. Only half of refugees and migrants from Venezuela feel informed, survey finds. Panama City: Coordination Platform for Refugees and Migrants from Venezuela; 2020 (<https://www.r4v.info/sites/default/files/2021-06/CWC%20EN.pdf>, , accessed 11 January 2022).
56. Vaccine misinformation management field guide: guidance for addressing a global infodemic and fostering demand for immunization. New York: United Nations Children's Fund; 2020 (<https://vaccinemisinformation.guide>, accessed 11 January 2022).
57. COVID-19 rumour tracking report. Ankara: Turkish Red Crescent Society; 2021 (<https://communityengagementhub.org/wp-content/uploads/sites/2/2021/10/Rumour-tracking-report-2021.pdf>, accessed 11 January 2022).
58. Understanding the infodemic and misinformation in the fight against COVID-19: digital transformation toolkit. Washington (DC). Pan American Health Organization; 2020 ([https://iris.paho.org/bitstream/handle/10665.2/52052/Factsheet-infodemic\\_eng.pdf?sequence=16](https://iris.paho.org/bitstream/handle/10665.2/52052/Factsheet-infodemic_eng.pdf?sequence=16), accessed 11 January 2022).

59. A guide to preventing and addressing social stigma associated with COVID-19. Geneva: World Health Organization; 2020 (<https://www.who.int/publications/m/item/a-guide-to-preventing-and-addressing-social-stigma-associated-with-covid-19>, accessed 11 January 2022).
60. Infodemic. In: Health topics [website]. Geneva: World Health Organization; 2022 ([https://www.who.int/health-topics/infodemic#tab=tab\\_1](https://www.who.int/health-topics/infodemic#tab=tab_1), accessed 11 January 2022).
61. How to address COVID-19 vaccine misinformation. Atlanta (GA): United States Centers for Disease Control and Prevention; 2021 (<https://www.cdc.gov/vaccines/covid-19/health-departments/addressing-vaccine-misinformation.html>, accessed 11 January 2022).
62. Facilitating COVID-19 vaccination acceptance and uptake in the EU/EEA. Stockholm: European Centre for Disease Prevention and Control; 2021 (<https://www.ecdc.europa.eu/sites/default/files/documents/Facilitating-vaccination-uptake-in-the-EU-EEA.pdf>, accessed 11 January 2022).
63. Risk Communication and Community Engagement Working Group on COVID-19 Preparedness and Response in Asia and the Pacific. COVID-19: how to include marginalized and vulnerable people in risk communication and community engagement. Geneva: Inter-Agency Standing Committee; 2020 (<https://interagencystandingcommittee.org/COVID-19-how-include-marginalized-and-vulnerable-people-risk-communication-and-community-engagement>, accessed 11 January 2022).
64. Coronavirus disease (COVID-19): Key tips and discussion points for community workers and volunteers. New York: United Nations Children's Fund; 2020 (<https://www.unicef.org/documents/coronavirus-disease-covid-19-key-tips-discussion-points-community-workers-volunteers>, accessed 11 January 2022).
65. ATSDR community engagement playbook index. In: agency for Toxic Substances and Disease Registry (ATSDR) [website]. Atlanta (GA): United States Department of Health and Human Services; 2021 (<https://www.atsdr.cdc.gov/ceplaybook/index.html>, accessed 11 January 2022).
66. WHO competency framework: building a response workforce to manage infodemics. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/345207>, accessed 11 January 2022).





## Health and Migration Programme (PHM)

World Health Organization | 20, avenue Appia,  
1211 Geneva 27, Switzerland

