Enhancing Acceptance and Demand for Vaccination in the Western Pacific Region

A Guide for Programme Managers on Strategies for Assessing and Addressing Hesitancy and Sustaining Vaccination Uptake
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Preface

Vaccine hesitancy was one of the top 10 global health threats cited by the World Health Organization (WHO) for 2019, as it threatens to reverse progress in tackling vaccine-preventable diseases. Vaccine hesitancy was discussed at the July 2016 meeting of the Technical Advisory Group on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region, which recommended development of a regional guidance document to support countries to overcome vaccine hesitancy and to enhance acceptance and demand in an effort to achieve high vaccination uptake.

The Vaccine-Preventable Diseases and Immunization unit of the WHO Regional Office for the Western Pacific initiated the development of a regional guide with Professor Noni MacDonald, chair of the Vaccine Hesitancy Working Group of WHO Strategic Advisory Group of Experts on Immunization. Dr Ananda Amarasinghe, Technical Officer, Vaccine-Preventable Diseases and Immunization unit of the WHO Regional Office for the Western Pacific, and Ms Lisa Menning, Technical Officer and Communication Specialist, WHO headquarters, undertook extensive work in developing and writing this regional guidance document.

The authors are grateful for the valuable input received from members of the Technical Advisory Group and our partners, including the East Asia and Pacific Regional Office of the United Nations Children’s Fund and the Global Immunization Division of the United States Centers for Disease Control and Prevention. The authors acknowledge the technical leadership of Dr Yoshihiro Takashima, Coordinator, and the valuable comments and support received from the team members of the Vaccine-Preventable Diseases and Immunization unit and the Communications unit of the WHO Regional Office for the Western Pacific and from immunization programme focal points in WHO country offices.

This document is intended for use as reference resource for countries to determine and address the reasons for hesitancy and describes possible tailored strategies in enhancing acceptance, demand and vaccination uptake that can be adapted to the local context.
## Abbreviations

<table>
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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AEFI</td>
<td>adverse events following immunization</td>
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<td>BeSD</td>
<td>behavioural and social drivers</td>
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<td>HPV</td>
<td>human papillomavirus</td>
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<td>NITAG</td>
<td>National Immunization Technical Advisory Group</td>
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<td>SAGE</td>
<td>Strategic Advisory Group of Experts on Immunization</td>
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<td>TIP</td>
<td>Tailoring Immunization Programmes</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>VPD</td>
<td>vaccine-preventable disease</td>
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<td>WHO</td>
<td>World Health Organization</td>
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It is necessary to intensify, tailor and optimize all available strategies to strengthen immunization programmes to close existing population immunity gaps.
1. Background

In 2012, the World Health Assembly endorsed the Global Vaccine Action Plan 2011–2020, or GVAP, which set five broad goals to achieve the Decade of Vaccines. Successful implementation of the Global Vaccine Action Plan will avert millions of additional deaths due to vaccine-preventable diseases (VPDs). The Regional Framework for Implementation of the Global Vaccine Action Plan in the Western Pacific, endorsed by the World Health Organization (WHO) Regional Committee for the Western Pacific in 2014, translates the global goals to fit the regional context and adds goals specific to the Western Pacific. The Regional Framework has eight goals for implementing the Global Vaccine Action Plan in the Western Pacific: 1) sustaining polio-free status; 2) maternal and neonatal tetanus elimination; 3) measles elimination; 4) rubella elimination; 5) accelerated control of hepatitis B; 6) accelerated control of Japanese encephalitis; 7) meeting regional vaccination targets (≥ 95%); and 8) introduction of new vaccines.

Despite the observed progress, challenges within the Western Pacific Region remain. These include the inadequate availability and use of immunization services by specific populations and uneven immunization coverage, particularly at subnational levels, leading to population immunity gaps. The potential risk of resurgence of VPDs, such as measles, diphtheria and pertussis, due to immunity gaps is a high concern in the Region and are the result of several factors including poor demand and vaccine hesitancy among some population groups. Therefore, it is necessary to intensify, tailor and optimize all available strategies to strengthen immunization programmes to close existing population immunity gaps.

The available information at the regional and global levels suggest that, in addition to practical and logistical barriers that hamper vaccination uptake, there is a risk of underutilization of available immunization services by some population groups for a variety of reasons, including knowledge gaps, a lack of public confidence, and concerns related to the risks and benefits of vaccines and immunization. Other reasons are related to health service delivery, accessibility barriers, and limited knowledge of health workers about vaccines and immunization, as well as insufficient budget and expertise to manage aspects of immunization programmes effectively.

Therefore, this guidance document, Enhancing Acceptance and Demand for Vaccination in the Western Pacific Region, is focused on tools to determine and address the reasons for under-vaccination, low demand and hesitancy for specific population groups, and describes possible tailored strategies that can be implemented in response. It also puts forward strategies to strengthen and sustain acceptance and demand that can enable countries to maintain high vaccination uptake and achieve their programme targets.

Despite the observed progress, challenges within the Western Pacific Region remain.
1.1 Purpose and document outline

The *Immunization Agenda 2030: A Global Strategy to Leave No One Behind*\(^1\) recognizes that the causes of under-vaccination must be understood and addressed to enhance vaccination demand. It recommends that tailored strategies should be developed to understand and overcome barriers to immunization and access immunization services. Commitment and demand are one of the strategic priorities of the Immunization Agenda 2030, which aims to “ensure that all people and communities value, actively support and seek out immunization services”.

The *Regional Strategic Framework for Vaccine-preventable Diseases and Immunization in the Western Pacific (2021–2030)* specifies the need and importance of strategic direction in addressing hesitancy through implementing tailored strategic interventions to achieve the status of “people and communities trust vaccines, value immunization and actively seek out and receive immunization service”.

Thus, this document is aligned with both the Immunization Agenda 2030 and the 2021–2030 Regional Strategic Framework to provide guidance on new approaches needed to deliver integrated, people-centred immunization services structured around the goal of addressing hesitancy and enhancing acceptance and demand for vaccination, leading to sustainable high vaccination uptake. In general, this requires a range of ongoing activities implemented nationwide to boost knowledge and awareness, to ensure accessibility and appropriateness of services, to harness the potential of community-based and national advocates and policy frameworks, and to monitor public sentiment. Ideally, all activities should be evidence informed, monitored and evaluated to guide corrective adjustments and enhancements, as needed.

Given that vaccine hesitancy and its determinants are often highly context specific, targeted and tailored approaches are required (the same applies for clustered areas of under-vaccination). This requires generating local data or insights to provide the evidence to inform the design, implementation and evaluation of corresponding strategies. Besides, it is important to know about lessons from other relevant assessments, interventions and evaluations that have been conducted in the other regions. This approach can help generate a better understanding of major gaps and areas of strategic interventions.

This regional guide for programme managers, *Enhancing Acceptance and Demand for Vaccination in the Western Pacific Region*, is intended to support Member States:

- to build awareness and understanding of the concepts related to demand and vaccine hesitancy;
- to determine the reasons for non-vaccination and vaccine hesitancy;
- to inform the assessment of behavioural and social drivers for vaccination;
- to advocate for investment in evidence-informed strategies to enhance acceptance and demand for vaccination leading to vaccination uptake; and
- to build social science capacity to support the application of a more people-centred approach.

As such, this guide is structured with following content:

*Sections 1, 2 and 3* of the guide provide background information, including definitions.

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\(^1\) The Immunization Agenda 2030: a global strategy to leave no one behind. Geneva: World Health Organization; 2020 [https://www.who.int/immunization/immunization_agenda_2030/en/].
and determinants, as well as an overview of specific examples from within the Region.

**Section 4** focuses on determining and addressing the reasons for under-vaccination and vaccine hesitancy for specific population groups, where tailored and targeted strategies are required, drawing on the Tailoring Immunization Programmes (TIP) approach. It also introduces initial scales and survey tools that may be adapted and used to assess hesitancy in a population. These scales may be used within the research phase of a TIP project or as a stand-alone assessment.

**Section 5** outlines a series of strategies to be implemented on an ongoing basis to enhance acceptance and demand for vaccination and vaccination uptake.

**Section 6** outlines roles and responsibilities of various stakeholder groups across a health system, including service providers. The facilitation of broad stakeholder engagement and cross-sectoral support for vaccination will ultimately help to reinforce positive social norms and shape many factors that contribute to vaccination demand and uptake.

The **Annexes** provide additional tools:

1. How to communicate about under-vaccination
2. How to respond to myths, misinformation and rumours about vaccination
3. Strategic activities to address hesitancy based on the Working Group of the WHO Strategic Advisory Group of Experts on Immunization (SAGE) on Determinants of Vaccine Hesitancy Matrix.

1.2 **Intended users**

The intended users for this guide include:

- national and subnational government health authorities and national and mid-level programme managers for immunization, child and maternal health, nutrition, and health education;
- members of a National Immunization Technical Advisory Group (NITAG), as well as other professional associations, and technical and advisory bodies for public health;
- health-care management officials (for example, hospital directors);
- other government stakeholders (education, adolescent and youth sectors, occupational health, etc.);
- immunization providers in the private sector; and
- partner organizations such as WHO, United Nations Children’s Fund (UNICEF), development organizations and civil society organizations working with national and subnational immunization, and public health authorities.

**Summary**

- This guide is structured around the goal of identifying and addressing hesitancy and enhancing acceptance and demand, leading to sustainable vaccination uptake.
- This document has three main components: 1) general background, concepts in vaccine hesitancy and demand, and the situation in the Western Pacific Region; 2) reasons for under-vaccination and vaccine hesitancy; and 3) strategies to enhance acceptance and demand for vaccination.
- Vaccine hesitancy and its determinants are often highly context specific and may change over time. Targeted and tailored approaches are therefore required, along with close monitoring and evaluation of interventions.
- The main intended users are national and subnational government health authorities, members of NITAGs, medical associations, other government stakeholders (education ministry, occupational health, etc.), private sector immunization providers, development partners and civil society.
Enhancing acceptance and demand for vaccination is a vital component of immunization programmes.
2. Vaccine hesitancy and demand: definitions and determinants

Enhancing acceptance and demand for vaccination is a vital component of immunization programmes. It aims to ensure that parents, caregivers, communities, health-care workers and other stakeholders have the necessary knowledge, capabilities, motivations and opportunities to seek vaccination or promote vaccination, and to complete the schedule on time.

There is growing recognition that interventions designed to boost acceptance and demand can play a critical role in helping countries to increase coverage and equity, and to make progress towards achieving universal health coverage targets and the Sustainable Development Goals.

Well-designed and effectively implemented demand interventions can:

- cultivate positive community attitudes towards vaccination;
- increase coverage and equity, leaving no one behind in routine immunization;
- expand immunization services throughout the life course; and
- build population resilience against vaccine safety scares, rumours and misinformation.

In recent years, work has been undertaken by the WHO SAGE to clearly define concepts such as vaccine hesitancy and demand in an effort to better inform evidence reviews and the related development of guidance to support national programmes and partners.

2.1 Hesitancy: definition and determinants

SAGE Working Group on Vaccine Hesitancy – definition of hesitancy:

Vaccine hesitancy refers to delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific varying across time, place and vaccines. It includes factors such as complacency, confidence and convenience (Fig. 1).

Note: SAGE retained the term "vaccine" rather than "vaccination" hesitancy. Vaccination more correctly implies the broader range of immunization concerns; however, vaccine hesitancy is used more commonly.

Maximum vaccine hesitancy exists when complacency is high, and confidence and convenience are low. However, several variations between the low and high levels of complacency, confidence and convenience can occur in each country and in different settings.

Vaccination confidence is trust in the effectiveness and safety of vaccines and in the system that delivers them, including the reliability and competence of the health services and health professionals, as well as having trust in the motivations of the policy-makers who decide which vaccines are needed and when they are needed. Vaccination confidence exists on a continuum, ranging from 0% to 100% confidence. Vaccination confidence is only one of several factors that affect an individual’s decision to accept a vaccine.

Vaccination complacency exists where perceived risks of VPDs are low and vaccination is not deemed a necessary preventive action. Besides perceptions of the threat of disease severity and/or transmission, complacency about a particular vaccine or about vaccination in general can be influenced by underappreciation of the value of vaccine (effectiveness and/or safety profile) or lack of knowledge. Immunization programme success may result in complacency and ultimately, hesitancy, as individuals weigh risks of vaccines against risks of diseases that are no longer common as a result of immunization.

Vaccination convenience is the quality of the service (real and/or perceived) and the degree to which vaccination services are delivered at a time and place and in a way that is considered appealing, affordable, convenient and comfortable; also affects an individual’s decision to vaccinate. Vaccination convenience and complacency are also determined by the priority that an individual places on vaccination.

The relationship between demand, acceptance and hesitancy is shown in Fig. 2. This figure is not to scale and will vary between and within countries.

The attitudes and practices can be seen in the figure on a continuum ranging from complete refusal of vaccines to total acceptance. Vaccine-hesitant individuals are a heterogeneous group in the middle of this continuum. Vaccine-hesitant individuals may refuse some vaccines but agree to others, or they may delay vaccines or accept vaccines, but are unsure in doing so.

### 2.2 Acceptance

Acceptance of vaccination is an outcome behaviour resulting from a complex decision-making process that can be potentially influenced by a wide range of factors.

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**Fig. 2. Continuum of vaccine attitudes and behaviours**

![Continuum of vaccine attitudes and behaviours](image)

Note: This continuum is not to scale and will vary between different local contexts.

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2.3 Demand: definition and determinants

SAGE Decade of Vaccines Working Group – definition of demand:\(^3\)

Demand is the actions of individuals and communities to seek, support and/or advocate vaccines and immunization services.

Demand is dynamic and varies by context, vaccine, immunization services provided, time and place. Demand is fostered by governments, immunization programme managers, public and private sector providers, local leadership, and civil society organizations hearing and acting on the voices of individuals and communities.

Summary

- Enhancing acceptance and vaccination demand aims to ensure that stakeholders have the necessary knowledge, capabilities, motivations and opportunities to seek vaccination or promote vaccination and to complete the schedule on time.
- For the SAGE Working Group on Vaccine Hesitancy, vaccine hesitancy is the delay in acceptance or refusal of vaccination despite availability of vaccination services. Demand is the actions of individuals and communities to seek, support and/or advocate vaccines and immunization services.

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SECTION 3

Vaccine hesitancy in the Western Pacific Region

Countries are encouraged to gather data to inform the design and evaluation of strategies to address hesitancy and boost acceptance.
3. Vaccine hesitancy in the Western Pacific Region

The SAGE Working Group on Vaccine Hesitancy developed two new indicators that were incorporated into the WHO–UNICEF Joint Reporting Form for the first time in 2014. The two indicators are detailed in Table 1.

A review of responses by countries that answered the Indicator 1 question revealed diversity in postulated reasons for not accepting vaccines globally, regionally and within countries over time.

Table 1. WHO–UNICEF Joint Reporting Form indicators and questions on vaccine hesitancy

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Questions</th>
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<td>Indicator 1. Reasons for vaccine hesitancy</td>
<td>Question 1: What are the top three reasons for not accepting vaccines according to the national schedule?</td>
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<td></td>
<td>Question 2: Is this response based or supported by some type of assessment, or is it an opinion based on your knowledge and expertise?</td>
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<tr>
<td>Indicator 2. Percentage of countries that have assessed the level of hesitancy in vaccination at the national or subnational level</td>
<td>Question 1: Has there been some assessment (or measurement) of the level of confidence in vaccination at the national or subnational level in the past (&lt; 5 years)?</td>
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<tr>
<td></td>
<td>Question 2: If yes, please specify the type and year and provide assessment title(s) and reference(s) to any publication/report.</td>
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3.1 Lead reasons for vaccine hesitancy in the Western Pacific Region, 2016–2018

Eleven of 37 countries and areas (30%) in the Western Pacific Region stated that an assessment of hesitancy had been conducted between 2016 and 2018, while 15 confirmed that no assessment had been conducted. Ten did not respond to the question.4

While there may be limitations of the data arising from varied interpretations of the questions and the term vaccine hesitancy, the low percentage of countries assessing reasons for vaccine hesitancy is concerning. Therefore, countries are encouraged to gather data to inform the design and evaluation of strategies to address hesitancy and boost acceptance.

Fig. 3. Lead reasons for vaccine hesitancy in Western Pacific Region, 2016–2018

Note: Given the limitation of qualitative information in WHO–UNICEF Joint Reporting Form data, these data should be interpreted with discretion. Source: WHO–UNICEF Joint Reporting Form 2016–2018
3.2 Case examples

Case examples of vaccine hesitancy across the Western Pacific Region are described below:

CASE EXAMPLE 1

China: Loss of confidence in vaccines following media reports of infant deaths after hepatitis B vaccination\(^5\)

In 1992, China successfully launched a neonatal hepatitis B vaccine to decrease mother-to-child transmission of hepatitis B virus. The programme was threatened in 2013 due to widespread media reports of infant deaths following immunization for the hepatitis B virus. During the height of the infant hepatitis B vaccine crisis, 30% of parents reported being hesitant to vaccinate and 18.4% reported they would refuse hepatitis B vaccine. This resulted in a steady drop in hepatitis B vaccine acceptance within the first day of life by 10% among infants born to mothers who tested negative for the hepatitis B surface antigen (HBsAg) and by 6% among infants born to mothers who tested positive. After health officials announced at two months that the investigation had shown that the deaths were coincidental and that the vaccine had been manufactured, handled and administered properly, confidence increased, although it did not get back to the baseline for several months.

**Lessons identified:** How difficult it can be to convincingly explain coincidental events, how helpful monitoring of media and parental concerns for programmes to understand the context for parental decisions and how important a comprehensive communication strategy is to maintain confidence in vaccines.

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CASE EXAMPLE 2

Malaysia: Declining vaccine acceptance: study to determine factors

Malaysia had an excellent track record of infant vaccine acceptance. However, starting in 2012, anti-vaccine social media postings began to appear more frequently, and vaccine refusals increased but varied across the country. Between 2013 and 2015, reasons for vaccine refusal were systematically collected at government hospitals and clinics with the most common concern being religious beliefs. Parents were unsure if the vaccine preparations met the standard of the halal religious requirement. The second concern was the practice of homeopathy, followed by vaccine safety concerns third. The Government has proactively addressed these issues on many fronts, and public confidence and acceptance have been sustained.

Lessons identified: The Government’s proactive and timely response to issues of public concerns is necessary to sustain acceptance of vaccination.

CASE EXAMPLE 3

Philippines: Impact of vaccine suspension

In November 2017, it was announced that the new dengue vaccine called Dengvaxia had risks for those not previously exposed to dengue. Following the announcement, the Philippines suspended the distribution and use of the Dengvaxia. This resulted to a breakdown in public trust with the dengue vaccine, as well heightened anxiety around vaccines in general. The Vaccine Confidence Project measured the impact of this crisis, comparing confidence levels in 2015, before the incident, with levels in 2018. The findings reflected a dramatic drop in vaccination confidence from 93% "strongly agreeing" that vaccines are important in 2015 to 32% in 2018. There was also a drop in confidence in those strongly agreeing that vaccines are safe from 82% in 2015 to only 21% in 2018. Similarly, confidence in the effectiveness of vaccines dropped from 82% in 2015 to only 22%. From 2017 to 2018, immunization coverage went down for most routine vaccines. The measles supplementary immunization activity in 2018, aimed at controlling a wide-scale measles outbreak in the country, was also adversely affected by the drop in vaccination confidence. However, by mid-2019, the country had launched a massive awareness campaign to rebuild public confidence and immunization coverage is gradually improving.

Lesson identified: The importance of routinely identifying gaps or breakdowns in public confidence of vaccines and immunization in order to rebuild trust before an epidemic threat.

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CASE EXAMPLE 4

Republic of Korea: Vaccine concerns undermine HPV vaccine acceptance8

Human papillomavirus (HPV) vaccine for 12-year-old girls was introduced in June 2016 with an awareness and promotion programme through printed, electronic and social media platforms, including vaccine supporters speaking up, a celebrity campaign and interviews with experts. Awareness-raising of parents through newsletters, schools and mailings was also carried out. By the end of October 2016, the cumulative uptake rate was only about 30%. With the start of the programme, concerns and rumours about safety arose in print and other media about HPV-related deaths in the United Kingdom of Great Britain and Northern Ireland, sterility following vaccine in the United States of America and inability to walk after vaccination in New Zealand. An anti-HPV group was established.

To address safety concerns, the Korea Centers for Disease Control and Prevention undertook proactive case-by-case monitoring of reported adverse events following immunization (AEFI), with follow-up and causality assessments by the national AEFI committee. The Korea Centers for Disease Control and Prevention also made expert contributions to a newsletter, including correction of misinformation and a press release on the results of the causality assessment. By December 2016, no serious AEFI occurred in the Republic of Korea and HPV vaccine acceptance began to improve.

Lesson identified: The value of being proactive and taking seriously all concerns that arise by the media.

Summary

- The SAGE Working Group on Vaccine Hesitancy developed two new indicators in 2014: 1) reasons for vaccine hesitancy; and 2) percentage of countries that have assessed the level of hesitancy in vaccination at the national or subnational levels.
- Only 11 of 37 countries and areas (30%) in the Western Pacific Region stated that an assessment of hesitancy had been carried out between 2015 and 2018.
- As much as possible, countries are encouraged to gather data to inform the design and evaluation of strategies to address hesitancy and boost acceptance.
- Lead reasons for hesitancy in the Western Pacific Region are: safety concerns including fear of adverse reactions; knowledge gaps in the benefits of vaccines; distrust on usefulness of vaccines and their effectiveness; religious concerns; and service gaps, particularly issues with accessibility and lack of staff motivation.

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Countries are encouraged to gather data to inform the design and evaluation of strategies to address hesitancy and boost acceptance.
4. Determining, assessing and addressing vaccine hesitancy and under-vaccination

In an immunization programme, there can be many interrelated factors that contribute to vaccine hesitancy and under-vaccination. Assessing under-vaccination includes but goes beyond assessing hesitancy. Collecting quality data to identify and assess all barriers and enablers and their relative contribution is essential to informing a complete and actionable diagnosis. Such a holistic assessment will determine whether hesitancy is present in a population to any significant degree and differentiate hesitancy from other reasons for under-vaccination, such as access to services, vaccine availability, missed opportunities, poor service experiences, etc. Therefore, use of a valid and reliable measure to diagnose why people do not vaccinate will support the design and evaluation of interventions that aim to increase demand and vaccine uptake.

The assessment will depend on many factors, including:

1. **Magnitude of focused issue(s):** significant drop in immunization coverage(s), low uptake of new vaccine(s), increasing number of vaccine deniers and hesitancy.

2. **Extent of the issue:** either limited geographic area or not, population group(s) involved. Often focused issues are more prevailing among specific geographic or/and population groups than across the country. In such situation, the assessment can be limited to those areas or population groups.

3. **Availability of resources and time:** Any systematic assessment requires resources and time. Therefore, the depth and breadth of an assessment will also depend on availability of adequate human and logistic resources.

This guide will provide four useful tools for diagnosing vaccine hesitancy and reasons for under-vaccination:

1. use of immunization and VPD surveillance data and indicators;
2. SAGE Working Group on Vaccine Hesitancy: survey tools;
3. Tailoring Immunization Programmes (TIP); and
4. Measuring behavioural and social drivers (BeSD).

Each of these tools has its advantages and limitations and, as a result, countries can use any of these tools depending the magnitude of the focused issue(s), extent of the issue, and the availability of resources and time.

In addition, the WHO Regional Office for the Western Pacific has developed a tool for countries to map available tools and resources related to vaccine hesitancy and a module for diagnosing and responding to under-vaccination (Annexes I and II).

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**Fig. 4. Diagnosing vaccine hesitancy and reasons for under-vaccination**

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<thead>
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<th>Use of immunization and VPD surveillance data and indicators</th>
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<tr>
<td>Careful review and interpretation of immunization data (coverage and dropout rates stratified by antigens, age groups, geographical areas, population groups) is simple and can provide proxy indicators to help identify potential hesitancy groups</td>
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<tr>
<td>VPD surveillance data can also provide ‘proxy’ indicators for potential hesitancy in the community</td>
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<td>This data only identifies potential hesitancy groups and needs additional assessment to understand the nature and reasons for hesitancy</td>
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<th>SAGE working group on Vaccine Hesitancy: survey tools</th>
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<td>The SAGE Working Group on Vaccine Hesitancy developed a compendium of three different types of survey questions to identify and assess vaccine hesitancy.</td>
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<td>Core vaccine hesitancy survey: potential questions to consider in assessing vaccine hesitancy at a community level</td>
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<td>Vaccine hesitancy Likert scale questions</td>
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<td>Vaccine hesitancy open-ended Survey questions</td>
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<th>Measuring behavioural and social drivers (BeSD)</th>
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<td>A survey tool targeted to caregivers.</td>
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<td>A range of interview guides targeted to caregivers, health workers, community leaders and local authorities.</td>
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<td>Implementation guidance to support local adaptation</td>
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<td>Data collection and analysis and reporting of findings.</td>
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<td>Frameworks to support the use of resulting findings to inform targeted planning</td>
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<th>Tailoring Immunization Programmes (TIP)</th>
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<tr>
<td>Reasons for suboptimal uptake or hesitancy vary in a population, and are often highly context specific</td>
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<td>WHO European Regional “Tailoring Immunization Programmes” (TIP) is a flexible, adaptable and structured process to:</td>
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<td>(i) identify and prioritize specific population groups;</td>
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<td>(ii) diagnose the demand supply-side barriers and enablers; and</td>
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<tr>
<td>(iii) inform the design and evaluation of evidence-based interventions intended to boost acceptance and uptake</td>
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</table>
4.1 Use of immunization and VPD surveillance data and indicators

Diagnosing and segmenting the barriers that contribute to under-vaccination, which may include hesitancy, is the initial step to apply effective, targeted strategies towards enhancing demand.

Stratified analysis of immunization data at different levels from service delivery at the subnational to national levels is a useful and simple first step to an initial assessment of under-vaccination and vaccine hesitancy. Immunization coverage and dropout rates stratified by antigens, age groups, geographical areas and population groups are useful proxy indicators that the national and mid-level immunization programme managers can use to identify areas for comprehensive in-depth assessments.

However, it is important to be cautious in interpreting immunization programme data and trends in uptake. For example, low coverage does not mean there is vaccine hesitancy. Low coverage may be due to service delivery gaps such as access issues and non-availability of vaccines. On the other hand, high vaccination coverage does not mean there is no vaccine hesitancy. Within high coverage populations, pockets of vaccine hesitancy or deniers can exist.

In addition, VPD surveillance data also can be used as proxy indicators to suggest potential hesitancy in the community. For example, an outbreak among a specific population group or in an area suggests possible lack of access, suboptimal service quality, possible knowledge gaps, a lack of supportive social norms and, in some cases, the existence of hesitancy in the community.

4.2 SAGE Working Group on Vaccine Hesitancy: survey tools

The SAGE Working Group on Vaccine Hesitancy developed a model of determinants of vaccine hesitancy based on a systematic review of literature and surveys with immunization managers, which categorized drivers into contextual influences, individual and group influences, and vaccine or vaccination specific issues. Further, it has developed a compendium of three types of survey questions to identify and assess vaccine hesitancy:

1. core vaccine hesitancy survey: potential questions to consider in assessing vaccine hesitancy at a community level;
2. vaccine hesitancy Likert scale questions; and
3. vaccine hesitancy open-ended survey questions.

Most of these survey questions are aimed at identifying vaccine-hesitant individuals and groups, not necessarily at identifying determinants of hesitancy. Therefore, further expansion of some questions aiming to determine major determinants in a local context is necessary. The listed example questions are not intended to all be used within one questionnaire, but rather present a set of questions to be considered and chosen from based on the specific needs. The survey question selection needs to fit the context they are used in. Question sequencing and lead questions may drive answers in a direction and make one factor seem more important. The context can also alter the relevance of specific questions and/or may influence the answers. Therefore, selection of questions, sequencing and interpretation of the answers need careful review, followed by piloting and validation before a proper assessment survey. Attention needs to be given to ensuring validity when translating the compendium to languages other than English.
4.3 Measuring behavioural and social drivers (BeSD)

To effectively be able to address under-vaccination and hesitancy with the design of robust interventions, the process must first begin by assessing the full range of behavioural and social drivers of vaccination. These involve the thoughts and feelings of individuals, social processes, and practical or access-related factors.

The package of globally standardized and validated tools to measure the BeSD of vaccination include:\(^9\)

- a survey tool (targeted to caregivers) and a range of interview guides (targeted to caregivers, health workers, community leaders and local authorities); and
- implementation guidance to support local adaptation and data collection, analysis and reporting of findings, as well as frameworks to support the use of resulting findings to inform targeted planning.

These tools will help countries generate quality data to guide the implementation and evaluation of specific strategies for improving coverage with equity.

The tools will be modular and easily adapted to local needs, languages and target populations. They may be integrated into existing mechanisms for data collection, for example, routine data collection processes, or periodic assessments such as Expanded Programme on Immunization reviews or coverage surveys, or they can be used alone, across a country or to generate greater insights concerning under-vaccination in specific population groups. Either or both the survey and interview guides may be used, depending on the setting and needs. Data may be gathered on paper or electronically and will be set up to facilitate triangulation and analysis with other programme data.

4.4 Tailoring Immunization Programmes (TIP)

The TIP\(^10\) developed by WHO in the European Region is a participatory process that can complement the use of the above measures of behavioural and social drivers and a flexible, adaptable and structured process:

i. to identify and prioritize specific population groups;
ii. to determine supply- and demand-side barriers and enablers to vaccination; and
iii. to design and evaluation of evidence-based interventions intended to boost acceptance and uptake.

TIP is underpinned by evidence from behavioural sciences, which aims to define which factors affect the likelihood of behaviours to take place in a positive way (enablers or drivers) or a negative way (barriers or obstacles).

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There are three key pillars of the TIP approach:

<table>
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<tr>
<th>Pillar 1. Values and principles</th>
<th>People-centred, equitable; participatory, focused on health goals, evidence driven and comprehensive.</th>
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</table>
| Pillar 2. Theoretical model and framework | • The theoretical model and framework used in the TIP approach is based on the COM-B model adopted for vaccination, focusing on a broad range of individual and contextual issues affecting health behaviour.  
• The COM-B model has three main focus areas for vaccination: CAPABILITY of individuals, contextual OPPORTUNITY; and individual MOTIVATION. |
| Pillar 3. Process with phases and steps | The primary phases of the TIP process are as follows:  
• Prepare and engage stakeholders: Two main areas of work may be undertaken: (a) planning considering aspects such as timelines, budgets, and roles and responsibilities to local needs and necessary resources; and (b) engaging stakeholders to raise awareness of TIP, generate input and contributions, and agree initial timelines, roles, and responsibilities.  
• Analyse and research: The objective of this phase is to review existing data and conduct research and expand knowledge, with the aim primarily to identify key issues, priority under-vaccinated target groups, and the barriers and drivers to vaccination uptake.  
• Design, implement and monitor: In this phase, the following main activities may be carried out: (a) design and plan behaviour change interventions, consisting of both underlying activities and policy actions; (b) consult with stakeholders to obtain their input and support; (c) elaborate a project plan with specific activities and policy actions, target groups, budgets, timelines, roles and responsibilities; and (d) develop a monitoring and evaluation framework that will help to track and document learning and successes and to identify any improvements or corrective actions that may need to be taken.  
• Evaluate, document and scale up: The objective of this phase is to obtain evidence regarding the extent to which planned activities and actions were implemented (process) and their quality (outputs, outcomes and impact). |

Note: The TIP approach has been applied in some countries within and outside the European Region. The lessons documented from those countries may be useful in exploring use of the TIP approach by countries in the Western Pacific Region to reshape it for better fit in local country contexts.

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Summary

- The use of a valid and reliable measures to determine under-vaccination will support the design and evaluation of interventions that aim to increase demand and vaccine uptake, and address gaps that may be due to a range of reasons, one of which is hesitancy.
- Immunization coverage data, dropout rates and VPD outbreaks reported in surveillance data are proxies, but they are useful indicators to monitor and identify under-vaccination.
- The SAGE Working Group survey questionnaires are aimed at identifying vaccine-hesitant individuals and groups. However, expanding and piloting survey questionnaires, adjusted to local context, is necessary to understand vaccine hesitancy determinants.
- The package of tools to measure BeSD of uptake are aimed at understanding the reasons for under-vaccination, including hesitancy. These tools can be locally adapted to respond to various local needs.
- TIP is a participatory process that can be used separately or in combination with the BeSD tools to measure under-vaccination in order to help generate the important understanding and contributions of local stakeholders.
- The SAGE Working Group survey tools, the BeSD tools and TIP are easily adaptable to country-specific settings and needs with some reshaping.
Currently, accepting vaccination is by far the most common vaccination decision, and this pro-vaccine social norm must be valued, reinforced and never taken for granted.

SECTION 5

Strategies for enhancing acceptance, demand and sustaining vaccination uptake
5. Strategies for enhancing acceptance, demand and sustaining vaccination uptake

It is common for immunization programmes to approach hesitancy – or even under-vaccination – as a "knowledge deficit" problem and respond with facts about vaccines and VPDs. But supporting populations to overcome hesitancy and accept vaccination is not simply a matter of information dissemination: knowledge and awareness, although important, are rarely adequate for acceptance of vaccination. A variety of other strategies and interventions should also be considered – for example, service access and quality improvements, policy or structural changes, or community engagement – all of which help to create a supportive environment, shape behaviours, and make a positive impact on acceptance and vaccination uptake (Annex III).

While it is essential to ensure that effective strategies to address vaccine hesitancy are implemented, any emphasis on hesitancy must not eclipse the importance of encouraging and supporting those who actively accept vaccination. Currently, accepting vaccination is by far the most common vaccination decision, and this pro-vaccine social norm must be valued, reinforced and never taken for granted.

This section will outline the following range of strategies to be considered to increase and sustain vaccination acceptance and demand:

- policy and political frameworks
- planning and preparedness
- partnerships
- people-centred services
- proactive on safety
- programme research and evaluation.

Supporting populations to overcome hesitancy and accept vaccination is not simply a matter of information dissemination: knowledge and awareness, although important, are rarely adequate for acceptance of vaccination.
5.1 Policy and political frameworks

Build strong political support for immunization

In all countries, decision-makers and political leaders should be aware of the significant socioeconomic returns that immunization represents – not only for child health – but also for quality of life, equity, prosperity, security and productivity. Accordingly, programmes should think strategically about routinely engaging with a range of decision-makers and political leaders with the support of media, academia, partners and others (community leaders, social influencers) with an interest in immunization in order to build their support and harness their influence.

The key areas of focus for such an effort include gathering the necessary data to define needs, identifying stakeholders, planning awareness-raising activities and mechanisms for collaboration, and providing policy- and decision-makers with clear information that is evidence based. Visuals, jargon-free documentation, cost-effective options and implementation considerations locally adapted to help support their understanding also are important.

Establish and communicate on transparent policy-making processes

Countries should have in place a clear and transparent process for making decisions about their investments. This includes consultations with key stakeholder groups and the involvement of a NITAG or equivalent in providing recommendations to national policy-makers and programme managers to support evidence-based decision-making. NITAGs may also be a valuable and visible resource that can contribute to maintaining trust in the vaccines and the authorities delivering them, and can also assist in responding to vaccine hesitancy.

Some steps are recommended in identifying and engaging with potential partners to contribute a supportive and positive voice for vaccination:

- Perform a stakeholder mapping that is tailored to the specific needs that have been identified.
- Early engagement with policy- and decision-makers and other relevant stakeholders to facilitate co-creation of policies.
- Develop activities where relevant stakeholders can exchange information for policy-making: policy brief production, policy dialogues, bilateral meetings, Café Scientifique, etc.
Review possible supportive policies and requirements

More and more, countries are faced with decisions related to increasingly complex schedules and recommendations. They are asked to balance the need to protect the public’s health against the difficulties presented by funding the recommended vaccines and addressing concerns of citizens who may object to mandatory immunization recommendations.

Accordingly, countries are implementing different types of laws and administrative rules, some of which may vary among vaccines, to boost uptake. Some of the various strategies to consider include school-entry requirements, financing of costs associated with accessing vaccination and penalties for non-vaccination. Prior to introduction, any such policy or law should be informed by local evidence and carefully assessed to inform its design and application.12

5.2 Planning and preparedness

There are three essential pillars that should be considered in terms of planning and preparedness for acceptance and demand: coordination among core partners, national planning for ongoing demand-generation activities and communications.

Coordination among core partners

A national coordination mechanism for demand should be established to ensure that all appropriate stakeholders are involved in joint planning for demand generation. In addition to securing the input and involvement of multiple partners and stakeholders for well-harmonized planning, the core partner group will prove its worth in any emerging crisis to facilitate a rapid and well-coordinated response. The group should:

- share information regularly, via emails and face-to-face meetings;
- agree on who will be involved in coordinating communications in case of a crisis, roles and responsibilities, and processes for sharing information in a crisis; and
- input into the national communications/demand-generation plan.

National planning for ongoing demand-generation activities

A national comprehensive plan for immunization demand should be developed, encompassing communications. This plan is intended to address the various determinants of demand, including service quality, and contribute to building a strong foundation of trust and confidence in vaccines. In this sense, it is recommended:

- to develop a national plan with the engagement of all relevant stakeholders who will take part in implementation;
- to adjust and budget the plan annually; and
- to endorse the plan by the appropriate levels of senior management, including national bodies such as immunization inter-agency coordination committees or technical advisory groups.

Elements of the national comprehensive plan for immunization demand. The scope of this plan should encompass communication goals, planning, audiences, messages and channels.

- **Background** – including a situation analysis and highlights from relevant data and studies.
- **Goals** – generally to inform, motivate and achieve mutual understanding on end points.
- **Objectives** – statements focused on the audiences and that are measurable.
- **Target audiences** – specific groups to whom the interventions and/or communication messages will be directed.
- **Messages** – short and concise information that should be communicated via specific communication channels to target audiences.
- **Strategy** – a plan of action listing strategic activities that will be undertaken to achieve the set objectives. These will include communications activities and other types of engagement and capacity-building interventions that contribute to building demand.
- **Timelines** – a timetable that shows the start and completion of each activity.
- **Monitoring** – mechanisms to monitor progress including issues identification and assessments against key indicators or questions that can inform corrective adjustments and revisions to activities.
- **Evaluation** – criteria for evaluation that should be realistic, credible and specific.
- **Budget** – specific details on how much it will cost to implement the plan of action.

**Communications**\(^{13,14}\)

**a. Public communication**

Through effective communication, it will be possible to continuously maintain an awareness of vaccine safety and susceptibility to the diseases that vaccines prevent. When well prepared and delivered, communication and proactive community engagement will help to build trust in vaccines and the immunization programme. As with any communication intervention, these efforts should be tailored and tested, contextualized for content, design and format, and lastly should always be evaluated to inform any later adjustments.


A preference for easy information

Research shows that the human mind is more trustful, positive and receptive when it receives information that repeats something that it has heard before, and when the message is clear and simple in format and language. Accordingly, research has revealed three key approaches that increase trust:

- use clear, understandable and non-technical language;
- demonstrate an ability to listen to people’s concerns, taking these seriously and responding to them; and
- regularly provide and repeat information, even when there is nothing new to say. If needed, it is fine to repeat the same messages, being confident about expressing any possible uncertainties while sharing information about steps being taken.

Refer to Annexes I and II that address techniques to manage under-vaccination, including communicating about under-vaccination and responding to myths, misinformation and rumours about vaccination.

When well prepared and delivered, communication and proactive community engagement will help to build trust in vaccines and the immunization programme.

The most important elements of a risk communication plan are prepared in advance of a public health emergency:

**Elements of the risk communication plan**

- **Identification of risks scenarios** – thorough analysis of possible risk scenarios in a specific context, for example, AEFI, other safety-related events, or widely circulating myths or misinformation, etc.
- Thorough analysis of groups that may be affected by the possible risks, and how they would think/react if the risk occurred. The motivations of each group are important to identify.
- Development of messages that are tailored to the groups who may be affected. These messages should be clear, evidence based and motivational. They should respond to the risk and therefore mitigate possible reactions and even build trust.
- **First-step actions** – develop communication actions that can be taken within a few hours of an event (begin to analyse the event, prepare an initial response accordingly, communicate with affected families).
- **Identification of communication channels** – analyse and identify how information will be shared with stakeholders, the media and the public. Depending on the target group, information can be shared through various channels, for example, radio, television, social media, websites, press releases, etc. Includes mechanisms for handling media enquiries.
- **Roles and responsibilities** – clearly defined roles and responsibilities during a crisis, including guidance on coordination among stakeholders and designated spokespeople. Engage proactively with media, including briefings on any important announcements or changes during risk management.
- **Monitoring public opinion** – build systems for media monitoring and response to misinformation.
- **Contacts** – continuously update lists with media contact information, members of crisis response teams and other relevant stakeholders.
- **Resource mobilization** including funding and expert groups, particularly clinicians and academia.

More information can be found in a guide published by the WHO Regional Office for the Western Pacific: *Vaccine Safety Communication: A Guide for Immunization Programme Managers and Regulatory Authorities.*

**b. Risk communication**

In the case of an event, readiness to rapidly assess the situation and then implement a well-planned risk communication strategy will help to maintain the public’s confidence in vaccines, the national immunization programme and health authorities. An effective strategy can also contribute to sustaining high coverage and eventually prevent a resurgence of VPDs. Building on the plan for demand generation, a set of special considerations in relation to risk communication should be prepared, either as part of the main plan or as an annex.

Risk communication takes into consideration political, social and economic factors, and it analyses risk and risk perception in an effort to communicate effectively and gives great importance to dialogue with affected and targeted populations to help them make the best possible decisions during public health emergencies.
5.3 Partnerships

Given the complexity of generating acceptance and demand, or in addressing hesitancy, it is important to maximize the coordination to achieve the highest impact. Quality partnerships can save time and resources and add to the voices emphasizing the importance of vaccines. Given that the public is more drawn towards, and accepting of, information and sources that share their worldview,16 having many supportive partners can help to move people towards vaccine acceptance and demand. These many voices also reinforce and enhance the credibility of the voice of health workers.

Benefits of growing strong partnerships in support of the programme:

- generates demand for vaccines
- shares information and coordination
- amplifies consistent messaging
- enhances health worker acceptance of vaccines and credibility in conveying messages related to vaccines
- facilitates access to priority groups
- saves time and resources
- maintains a positive and supportive environment.

Partners that can help in addressing hesitancy might include parental networks and religious leaders, parliamentarians, key influencers and the media, civil society organizations, academia, medical professional organizations particularly paediatric societies, global agencies, nongovernmental organizations and even the private sector. Partnerships with manufacturers need to be approached with caution as this may be perceived by the public as a conflict of interest and lend support to unfounded concerns raised by anti-vaccine supporters.

Credible local media outlets should also be considered by partners. Work with key journalists to gain their trust, increase their knowledge of immunization and amplify the message. Some points of action are recommended:

- identify the stakeholder groups relevant to the specific subject for discussions;
- ensure there are communication mechanisms through which all groups have a voice, including dialogues, bilateral meetings, etc.;
- ensure their opinions and thoughts are listened to and discussed; and
- build relationships through regular interaction, keeping them current about key programme updates.

5.4 People-centred services

Competent health workers

Health workers are generally the most trusted advisers and influencers of vaccination decisions.17,18 Given the important role health workers play in vaccine acceptance and demand, regardless of socioeconomic setting, they must be knowledgeable about vaccines, VPDs and immunization best practices. Information and assurances provided by health workers to the caregivers or parents are the main reasons why those who planned to delay or refuse a vaccine change their minds.19,20 Consequently, to be competent, health workers need to be able to listen, offer a kind and caring environment, and provide the right information during interactions with the parents, caregivers or community members. They should have appropriate tools (for example, job aids, posters, etc.) and interpersonal communication training that help them to explain complex concepts in language that parents are likely to understand, enabling them to build trust through this demonstration of competency.21

However, in some situations, health workers themselves may be hesitant, with the potential to negatively impact vaccine acceptance with their
comments and demeanour. Thus health workers need to be engaged in dialogue to uncover and address their own concerns, and to help build their confidence in vaccination, if necessary.

In this sense, in order to work with health workers, some elements to be considered include:

- analysing existing knowledge, attitudes and practices of health workers, as a basis for the design and evaluation of training and tools;
- providing health workers with interpersonal, community engagement and managerial skills;
- providing information sessions between target groups and health workers, addressing specifically the lack of awareness, fears, beliefs, etc.; and
- providing recognition and performance support to health workers to improve motivation.

How would a competent health worker handle multiple injections and pain mitigation?

Concerns about multiple injections for infants (presenting a caring persona), if not addressed with both technical competence (steps taken to mitigate pain and good injection technique) and with compassion (communication messaging and techniques), may undermine parental trust in the immunization programme.

Quality of immunization service

High-quality health services involve the right care, at the right time, responding to the needs and preferences of the service users. In the context of immunization, quality care increases the likelihood of vaccination and other desired health outcomes.

In this context, quality is considered consistent with the following measurable characteristics: effectiveness, safety, people-centredness, timeliness, equity, integration of care and efficiency. These quality mechanisms should be integrated into the foundations of vaccination services and health-care systems.

Seven categories of interventions (Fig. 6) stand out and are routinely considered by health system stakeholders, including providers, managers and policy-makers, when trying to improve the quality of the immunization service system, with benefit of acceptance and demand for vaccination.

People-centred service: how to improve immunization service

Seven categories of interventions stand out and are routinely considered by health system stakeholders, including providers, managers and policy-makers, when trying to improve the quality of the immunization service system, with benefit to acceptance and demand for vaccination.

**Changing practice at the front line**
Tailoring service delivery to meet local community needs, in partnership with community representatives can lead to service and front-line workers having better skills and knowledge when supporting immunization service providers with the goal of achieving the most effective care while reducing immunization error-related adverse events following immunization.

**Setting standards**
Standard setting is an area of quality improvement where professional bodies should play a major role, either working independently or in partnership with governments to develop standards and norms within a holistic quality approach to boost the quality of immunization and developing evidence-based protocols that can establish consistency in delivery of high-quality care across diverse health systems.

**Engaging and empowering caregivers, families and communities**
Immunization service needs to go further than health literacy programmes to make full use of the potential of people-centredness as an entry point to higher-quality care. Developing interventions that seek to engage and empower caregivers and families, along with systematic and sustained community engagement mechanisms to build trust in communities are essential.

**Information and education for health-care workers, managers and policy-makers**
To be effective, information systems for quality improvement must meet the needs of immunization service stakeholders and staff, policy-makers and regulators. This requires information and educational methods that are targeted for each respective audience.

**Use of continuous quality improvement programmes and methods**
Quality improvement is not a static concept, but rather a continually emerging, dynamic system property. Many different methods are used to continuously assure and improve quality of immunization service care. Some include broad governance mechanisms, peer review and immunization audits, and evidence-based decision-support tools based on guidelines.

**Establishing performance-based incentives (financial and non-financial)**
Evidence remains mixed about the ability of pay-for-performance programmes to change health outcomes by themselves. However, incentives – both financial and increasingly recognized non-financial approaches – can serve an important motivating and sustaining function when used as part of a robust quality improvement programme.

**Legislation and regulation**
Governments use both legislation and regulation to achieve national health objectives. Legislation directed at improving quality of immunization services may address a wide range of issues, such as coverage and benefits, licensing of facilities and individual providers, and public performance reporting.
Working across a range of quality interventions to contribute to vaccination can also be undertaken in relation to the wider system environment to offer broader benefits for patients and community engagement, empowerment, and eventual health outcomes.

5.5 Proactive on safety

It is important for countries to continue to emphasize the benefits of vaccinations and risks of VPDs and be prepared to respond to any concerns about the safety of vaccination, including any concerns that may arise in relation to serious adverse events. After vaccination, there are different types of AEFI that are possible, some of which may be caused by reactions to the vaccine constituents, some caused by immunization-related error and some are coincidental. Therefore, to be ready to respond on a timely and effective manner, locally adapted messaging should be available for these different scenarios, together with data on the frequency of AEFI per vaccine.24

Key messages and supporting data on the following themes should also be easily accessible:

- **A comparison between the health risks following vaccination vs following infection.** The bottom-line message should clearly state that the dangers of VPDs are far greater than any risks associated with the vaccines.
- **The process of clinical trials and assessments of vaccine safety** in order to demonstrate that vaccines undergo extensive testing and review before licensure.
- **Surveillance data used to monitor vaccine safety after licensing** in order to show the continuation of monitoring after approval of the vaccine.
- **Expected rates of coincidental deaths following vaccination,** indicating that given the normal incidence of disease and death in relevant age groups, that coincidental events are inevitable when vaccinating.

Such proactive communication strategies will help programmes manage perceptions of vaccine risks and benefits and be prepared to manage events and concerns about vaccine safety promptly, ultimately preserving trust in vaccination as much as possible.

5.6 Programme research and evaluation

Where feasible, data centred on caregivers (and/or the public), health workers and key influencers should be gathered on a routine or targeted basis to support planning and implementation of ongoing activities focused on acceptance and demand. The following approaches may be considered:

- Monitor trends in coverage, dropouts, VPD clusters and cases, media coverage, rumours, for example, through social media monitoring, feedback from health workers or other mechanisms.
- Characterize vulnerable populations (with low coverage) and identify barriers and enablers to acceptance and uptake.
- Understand the relationship between caregiver knowledge, attitudes, vaccination experiences and commitment to vaccinate, as well as practical and logistical challenges to vaccination.
- Inform the design, monitoring and evaluation of specific activities or interventions.

**Examples of potential outcome indicators**

- % of caregivers who say they intend to fully vaccinate their children.
- % of caregivers with correct knowledge of the schedule and/or timing for when a child needs to be brought for vaccination in the first year (or two years) of life.
- % of health workers with correct knowledge of the national schedule.
- % of health workers who consistently and correctly communicate to caregivers on the timing of an infant’s next visit for vaccination.
- % of health workers who can respond to questions or reassure caregivers about the safety of vaccines.

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STRATEGIES FOR ENHANCING ACCEPTANCE, DEMAND AND SUSTAINING VACCINATION UPTAKE

Summary

- Strengthening demand or addressing vaccine hesitancy requires focused strategies in each situation.
- A variety of strategies and interventions should be considered to support populations to accept and demand vaccination. These include communications and risk communication, but also interventions that focus on community engagement, alliance-building and service-quality enhancements.
- It is always vital to have local data to determine the reasons for under-vaccination, before designing tailored strategies to respond to barriers and to harness drivers that facilitate vaccination. Interventions should be monitored and evaluated to guide adjustments that may be needed over time.
- To strengthen acceptance and demand, the following areas of intervention may be considered: 1) policy and political frameworks; 2) planning and preparedness; 3) partnerships; 4) people-centred services; 5) proactive safety; and 6) programme research and evaluation.
By understanding the key stakeholders, and engaging with them, it may be possible to strengthen public trust in immunization and in health authorities.
6. Stakeholders to engage in supporting vaccination

Stakeholder management is highly context specific. However, by understanding the key stakeholders, and engaging with them, it may be possible to strengthen public trust in immunization and in health authorities. Ideally, you may be able to limit negative interference based on misconceptions and benefit from the support of advocates. Stakeholder relations need to be established long before any crisis occurs.

The following is an indicative list of stakeholders who may have varied types of responsibility and involvement in supporting acceptance and demand for vaccination.

The list above may not be complete, and each country and community may have their own unique stakeholders and potential partners for vaccination. Identification of these groups should be informed by local mappings and various engagement activities.

Ministry of health and respective authorities at different levels of the system
- They have specific roles and responsibilities in ensuring public acceptance and demand such as leading and coordinating support for national immunization programmes in order to increase and sustain public acceptance and demand and developing region- and country-specific plans, together with other stakeholders in region/country.

Health workers
- Their roles and responsibilities are to provide high-quality immunization services and information on them; serve as proactive, credible voices for the value of vaccines; use existing and emerging technologies to improve delivery and better capture information; and engage in dialogue with communities and the media and use effective communications techniques to convey messages about vaccines and to address safety concerns.

Professional and academic institutions and associations
- They should work on and pursue a multidisciplinary research agenda that focuses on vaccines and immunization, vaccination behaviours, service quality and communication and embrace new ways of communication and advocacy tools and methods that speed up scientific approach on addressing hesitancy and demand generation.

School managers and teachers
- Their roles and responsibilities can be supporting school-based immunization carried out by national immunization programmes and promoting students learning benefits of vaccines.

Private sector health and immunization service providers
- Work on close collaboration with national immunization programme, middle level immunization managers and immunization service provides to build trust on vaccines and demand generation.

Media
- Understand the benefits of, and concerns about, immunization in order to responsibly and accurately report on and effectively promote immunization programmes and engage in country, regional and global advocacy beyond the immunization community to ensure vaccines and immunization are understood as a right for all.

Development partners
- Support countries and regional entities to achieve immunization goals and contribute to the advancement of their priorities and participate in international advocacy through access to open evidence that can be shared with stakeholders and public.

Civil society (nongovernmental, civil society, and faith-based organizations)
- Involvement in the promotion and implementation of immunization programmes at national, subnational and field levels; and build grassroots initiatives within communities to create demand and hold the national Immunization programme, development partners and other stakeholders accountable for providing high-quality immunization services.

Manufacturers
- Participate in open dialogues with countries and the public sector to ensure public acceptance and demand on vaccines and share vaccine-related data and information with stakeholders and the public on transparent manner to increase trust on vaccines.
Some of the stakeholders shown will have a role at a national level, others may have a role at the subnational or local community level.

Depending on the setting, it may be useful to carry out a mapping of all various stakeholders to identify roles in supporting and advocating for vaccination, based on their broader function and profile.

6.1 Ministry of health and respective authorities at different levels of the system

The ministries and authorities can be:

- Ministries of health, social affairs, education, agriculture and livestock, information, religious affairs, etc.
- National immunization programmes, NITAGs, national regulatory authorities, as well as other technical and advisory bodies for public health.
- Departments or units for communication and advocacy, public relations, public information, and health promotion.
- Subnational public health and immunization authorities.

The ministries and authorities are the main providers of support for immunization. They have specific roles and responsibilities in ensuring public acceptance and demand, such as:

- Leading and coordinating support for national immunization programmes in order to increase and sustain public acceptance and demand.
- Developing regional and country-specific plans, together with other stakeholders in the Region or country.
- Responding with timely information when public concerns are raised about safety and efficacy to sustain public trust.
- Increasing awareness of the importance of immunization to improve a population’s health and its contributions to strengthening health systems and primary health care.
- Effectively conveying messages on vaccines to create demand.
- Engaging in dialogue with media and using effective communications techniques to convey messages about vaccines and to address safety concerns.
- Identifying and using vaccine champions for advocacy and promoting vaccination.
- Encouraging and supporting research on vaccines and vaccination issues, and encouraging education at all levels on vaccines.
- Engaging with the private sector to ensure alignment in providing vaccination services according to national standards and in building trust towards vaccines.
- Collaborating regionally and internationally in advocacy programmes, evidence sharing and coordinated preparedness.
- Participating in open dialogues with manufacturers to ensure affordability of current and new vaccines.
- Introducing vaccine education courses on immunization at universities and institutions training health-care professionals, as well as in continuing education for all health-care providers (medical, nursing, pharmacy and public health practitioners).
- Ensuring transparency on new vaccine introduction, vaccine registration and licensure, engagement with partners, donors and manufacturers.
- Identifying areas where immunization services could be improved and innovations made.

6.2 Health workers

Health workers can be mid-level immunization managers, immunization service staff and hospital staff.

Their roles and responsibilities are:

- Providing high-quality immunization services and information on the services.
- Serving as proactive, credible voices for the value of vaccines.
• Using existing and emerging technologies to improve delivery and better capture information.
• Engaging in dialogue with communities and the media and using effective communications techniques to convey messages about vaccines and to address safety concerns.

6.3 Professional and academic institutions and associations

These institutions and associations can be:
• universities
• medical professional associations
• research centres.

These institutions and associations can support and work on:
• Pursuing a multidisciplinary research agenda that focuses on vaccines and immunization, vaccination behaviours, service quality and communication.
• Embracing new ways of communication and advocacy tools and methods that strengthen the scientific approach to addressing hesitancy and demand generation.
• Improving dialogue with other researchers, regulators and manufacturers in order to align actions and increase effectiveness in responding to local and global immunization safety challenges.
• Providing the core data, methods and arguments that help drive the continued prioritization of immunization both globally and locally.
• Ensuring close engagement with national immunization programmes during crisis situations and proactive engagement with public dialogue to maintain trust and acceptance.
• Providing evidence and recommending best immunization practices.

6.4 School managers and teachers

School managers and teachers can be school directors or principals and teachers.

Their roles and responsibilities can be:
• Supporting school-based immunization carried out by national immunization programmes.
• Adopting school-entry screening and maintaining demand for vaccines.
• Promoting students learning the benefits of vaccines and engaging in activities to promote vaccines at home, in neighbourhoods and among peer groups.
• Promoting understanding by parents of the benefits of vaccines.

6.5 Private sector health and immunization service providers

Private sector service providers can be private hospitals and general practitioners.

Private sector service providers should work on:
• Closely collaborating with national immunization programmes, mid-level immunization managers and immunization service providers to build trust on vaccines and demand generation.
• Promoting vaccines to the public by following and adhering to the national guidelines and policies so there is no confusion and misperception among the public about government-provided vaccines.
• Sharing vaccine- and immunization-related information with national immunization programmes.
• Closely engaging with national immunization programmes during crises.
and proactively engaging in public dialogue to maintain trust and acceptance.

- Engaging in country, regional and global advocacy beyond the immunization community and serving as champions for immunization to ensure vaccines and immunization are understood as a right for all.

### 6.6 Media

The media can be:

- Print, web and social media agencies.
- Influential bloggers who write about vaccine hesitancy and/or demand.
- Media and journalists with an interest in health, children, parenthood and pregnancy.

The media contribution could be:

- Understanding the benefits of, and concerns about, immunization in order to responsibly and accurately report on and effectively promote immunization programmes.
- Engaging in country, regional and global advocacy beyond the immunization community to ensure vaccines and immunization are understood as a right for all.
- Using effective communications techniques to convey messages about vaccines and to address safety concerns.
- Leading constructive and scientific discussions to disseminate correct information on vaccines and immunizations.
- Developing and maintaining professional communication with immunization stakeholders and sharing information with the public for informed decision-making.
- Closely engaging with national immunization programmes during crises and proactively engaging in a public dialogue to maintain trust and acceptance.

### 6.7 Development partners

Development partners can be partners such as bilateral agencies, foundations and philanthropists.

Development partners would:

- Support countries and regional entities to achieve immunization goals and contribute to the advancement of their priorities.
- Promote country ownership and country-led health, vaccine and immunization plans, focusing on communication and advocacy to enhance acceptance and demand for vaccines.
- Promote comprehensive integrated packages of essential interventions and services that include vaccines and immunization and strengthen health systems.
- Participate in international advocacy through access to open evidence that can be shared with stakeholders and the public.

### 6.8 Civil society organizations

Civil society organizations can be nongovernmental organizations and faith-based organizations.

Civil society organizations can:

- Assist in the promotion and implementation of immunization programmes at the national, subnational and field levels.
- Participate in the development and testing of innovative approaches to enhance the demand and acceptance of vaccines.

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• Educate, empower and engage vulnerable groups and communities on their right to health, including vaccines and immunization.
• Build grassroots initiatives within communities to create demand and hold national immunization programmes, development partners and other stakeholders accountable for providing high-quality immunization services.

6.9 Manufacturers

Manufacturers can be government-owned vaccine manufacturers and private vaccine manufacturers.

Manufacturers should:
- Participate in open dialogues with countries and the public sector to ensure public acceptance and demand on vaccines.
- Share vaccine-related data and information with stakeholders and the public in a transparent manner to increase trust of vaccines.
- Support media outreach for the Expanded Programme on Immunization to increase awareness.
- Work in coordination with other partners on vaccine and immunization advocacy.

6.10 How to develop a stakeholder management process

Developing a stakeholder mapping analysis can foster the understanding of relevant actors in each context. Some of the objectives can be:
- Identifying what each stakeholder group is working on, such as vaccine hesitancy and demand in various settings and countries.
- Supporting those working on vaccine hesitancy and demand to identify potential partners, donors and collaborators in the field.
- Identifying the regions where work is being undertaken on vaccine hesitancy and demand and what kind of work is being undertaken in each area.
- Serving as a regularly updated resource on work currently being undertaken in vaccine hesitancy and demand.
- Helping to identify and design interventions — particularly in countries where there are more significant vaccine hesitancy issues.

Other groups

The list above may not be complete, and each country and community may have its own unique stakeholders and potential partners for vaccination. Identification of these groups should be informed by local mapping and engagement activities.
Following is a sample tool for stakeholder mapping analysis and strategies that countries can use and further expand according to their context.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>What is important to the stakeholder?</th>
<th>Information to provide</th>
<th>How could the stakeholder contribute to vaccine acceptance and demand generation?</th>
<th>Strategic activities for engaging the stakeholder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy-makers at the ministry of health</td>
<td>Getting accurate information that can readily be used</td>
<td>Accurate data, actionable points, recommendations</td>
<td>Sharing information at higher levels, liaising with other stakeholders to advocate</td>
<td>Consultation workshops, bilateral meetings, policy and implementation briefs</td>
</tr>
<tr>
<td>Media, journalists</td>
<td>Articles and stories that inform</td>
<td>Relevant information to be shared, information relevant to population</td>
<td>Wide dissemination, if a balanced story</td>
<td>Training and press kits about vaccine hesitancy and demand, permanent communications with target journalists with a track record in vaccine hesitancy and demand</td>
</tr>
</tbody>
</table>

To undertake a proper stakeholder mapping analysis, and to reach target audiences effectively, these are some questions you can ask yourself:

1. Who are your stakeholders? This would be the first question. It can be further subcategorized:
   - Who are the most trusted and capable sources of information for your target audiences, for example, for health-care workers or for the public?
   - What is your area of expertise for collaboration?
   - What level of influence do the target audiences have?
   - Answering these questions will help provide a clearer understanding of the stakeholders and potential areas of support that reflect the context of the problem and the country.

2. What information do you want to transmit? At this stage, it is important to think about the key messages you want to convey. These will need to be specific and, if possible, action oriented. Some subcategories can be:
   - What do you need your audiences to know?
   - What information would your audiences be more open to receive and use?

3. What are the best strategies to reach your audiences? Each group can be very different to approach. For example, if you want to reach the population at large, strategies could include social media and mass media such radio and television. On the other hand, if you want to approach policy-makers from the ministry of health, some strategies could include consultation workshops, infographics, policy dialogues or policy briefs. For each target group, you will need to find the most suitable strategy to approach them.
Summary

- Stakeholder management is highly context specific. By understanding and engaging with stakeholders, we can strengthen the public’s trust in immunization and in health authorities.
- Main stakeholders are:
  - Ministries of health and respective authorities at different levels of the system
  - Health workers and professionals
  - Professional and academic institutions and associations
  - School managers and teachers
  - Private sector health and immunization service providers
  - Media
  - Development partners
  - Civil society (nongovernmental organizations, faith-based organizations)
  - Manufacturers.
- All stakeholders have a wide range of roles and responsibilities in generating demand for vaccination and addressing hesitancy. Close collaboration among stakeholders is essential to ensure that their efforts are effective.
- To develop a stakeholder management process, you need to ask yourself some questions, such as: Who are your stakeholders? What information do you want to disseminate? What are the best strategies and strategic activities to reach your audience? What can be their role? What are their interests in being advocates for vaccination?
Annex I. How to communicate about vaccination to reinforce positive social norms

This module is a complement to WHO's Regional Guide on Enhancing Demand for Vaccination in the Western Pacific.

What are social norms on vaccination?

We are all influenced by the written and unwritten rules of the community and society in which we live. The opinions of our neighbours, family and community can be strong predictors of our behaviour. Social norms guide behaviour in a particular social group, community or culture. Social norms can be both descriptive (doing what you believe others do) and injunctive (doing what you believe others think you should do).¹ For example, in vaccination, a mother may be motivated to get her child vaccinated because she believes that the majority of families in her village fully vaccinate their children (descriptive). That same mother may have second thoughts and choose not to get her child vaccinated, because she believes her local spiritual leader is against immunization (injunctive). When combined - when you believe others behave a certain way and they want you to behave the same, social norms can be very difficult to influence.

When are social norms important?

Social norms are unavoidable, and they are influenced by many factors: the context, how observable a behaviour is, how tight the supporting social network is, and even the individual’s perceived power or selfefficacy to challenge the norm. Vaccination is the social norm for most people in most places. You may see this through parents actively demanding vaccines, or a more passive acceptance of vaccination because it’s common practice, a signal of being a responsible citizen. Understanding how tightly norms are held, both for and against vaccination, is an important and continuous step. Social norms can evolve and shift.

How we communicate about vaccination can imply that certain norms exist, and can contribute to reinforcing those norms.

What can YOU do to reinforce positive social norms around vaccines?

Unlike individual behaviour change, social norms involve understanding groups of people. Before you start, do your best to understand the specifics of the normative environment and population you are prioritizing. Use qualitative research, including mapping community networks, interviews and observation into how information, communication and decisions spread. There are two categories to consider when appealing to social norms for change. Approaches that shape behaviour and those that facilitate action. There is overlap and many techniques can be drawn to design the most appropriate response.

¹ (Cialdini and Trost 1998)
How to communicate about under-vaccination to reinforce positive social norms

SHAPE BEHAVIOUR:

1. Appeal to a sense of community
   People look to each other for clues for desirable and rational behaviour. Amplifying vaccination, making it public, desirable, responsible and what others are doing can help encourage vaccination.

2. Influence the influencers
   Stories, personal connections and anecdotes from those in our social circles have more influence than fact alone. We are more motivated by what a friend of ours did, than by abstract statistics. Identify those who can impact change and amplify their voices.

3. Peer pressure
   Highlight what the majority are doing. Highlighting the behaviour of our community, neighbour, religious group etc. can challenge incorrect assumptions about what individuals believe their neighbours are doing. Saying, “95% of children in your city vaccinated their children”, can reach people more than a generic appeal to “vaccinate your children”.

4. Offer positive reinforcement
   We all like to believe we have done the right thing. Regularly and consistently offering praise for vaccination can be motivating. Reinforcing messages to communities that are connected through a strong bond and sense of responsibility to one another, could emphasize the positive impact of vaccination on herd immunity and the protection of newborn and vulnerable children. Where communities and people are more individualistic, reinforcing messages that appeal to individual responsibility and family protection could be impactful.

5. Increase social pressures around vaccination
   a. Use media, news channels and other communications channels to construct vaccine refusal as a social undesirable behaviour. Using advertising campaigns, for example, to associate under-vaccination with social rejection can position vaccination as a desirable, even aspirational behaviour. For example, the advert could warn, “is your child playing with someone who isn’t vaccinated?”
   b. Use social media to encourage people to publicly post on social media after being vaccinated, highlighting the majority behaviour and making the vaccine choice of strategic influencers visible and positive.
   c. Use media to highlight how common vaccination is through stories that highlight the high number of people getting vaccinated.
   d. Reinforce the social norms of vaccination – people will often follow what they see others doing. Use trustworthy public figures, such as community leaders, entertainers and sport celebrities, and/or health officials.
   e. Provide the media with evidence, stories and videos on vaccination, and a trusted database of answers to common questions from the public on vaccination.

FACILITATE ACTION

1. Present Vaccination as the default
   Recommendations from trusted influencers are even more effective when taking a presumptive form. This action reinforces the norm of vaccination and shows endorsement of the vaccine. For example, health care workers can confirm the date of a child’s first vaccination, rather than assume it’s up for debate. Or, for example, saying “thank you for coming in, we will vaccinate Sam today”, instead of “are you ready for Sam to have her vaccines today?”

2. Conduct vaccination at convenient and appropriate locations
   Vaccination services that consider social and cultural norms can reduce barriers to uptake. Examples have included outreach at mosques, schools, among nomadic populations, and in refugee camps.

3. Incorporate vaccination into routine care
   Take a full health system approach to vaccination, ensuring that immunization status is discussed and advocated for at other health and medical touch points. This increases the importance and opportunity for vaccination counselling and acceptance.

4. Make vaccination more convenient than non-vaccination.
   Difficult exemption policies are important, because they communicate that the default option is getting vaccinated and that not vaccinating falls outside of the social norm. For example, in some countries in the Western-Pacific, such as Australia, parents or caregivers are required to fully vaccinate their children, or to have obtained an approved exemption. This could include requiring parental exemption forms, or making vaccination a prerequisite to access other community social services, like education.
### 5. Recruit local health workers and volunteers

People who come from the same community, speak the same language and can relate to community beliefs and concerns can go a long way to position vaccination as a behaviour consistent with social norms. This includes all communication and public information materials.

### 6. Have health workers explain why they vaccinate

A personal story from health workers about their experience and family can help personalize the vaccination experience, make it relatable and provide immediate positive social reinforcement.

### 7. Have health workers use priming

Often, a parent or caregiver will have existing intentions to vaccinate. Formalising these plans will increase the likelihood that they will follow-through on this behaviour. Ask health workers to have their patient report on their attitudes and intentions to vaccinate. For example, a question like, ‘Are you going to get the HPV vaccine this year?’ forces people to consider their choices head-on. Importantly, **do not use this technique on a person who is planning not to vaccinate**, as this may reinforce that intention.

### 8. Prepare the parent or caregiver to manage local myths or rumours, and address any concerns on vaccination

Sometimes referred to as ‘prebunking’, this can help inoculate people from damaging misinformation by previewing it, and thus reducing its power. As ever, honest and empathetic communication is the backbone of interpersonal communication. See WHO WPRO’s module on ‘how to respond to myths, misinformation and rumours about vaccination’ for tips on how to communicate about myths or rumours. Further, if a parent or caregiver raises a question or worry about vaccination, let the person finish, acknowledge the validity of their question and then respond with a simple and resonant answer.

### 9. Use reminders and recalls

Using reminders can serve as a call to action that it is time to get vaccinated, either prior to an appointment or for those who are overdue for vaccination. The medium (and its source) is important to consider: People are more likely to respond to a reminder/recall from a source that is familiar and trusted, so where possible, ask the parent, caregiver or patient for their preferred means of communication. Consider language, dialect, tone, gender, age and other factors in the ‘messenger’ and depending on the mode of communication.
Annex II. How to respond to myths, misinformation and rumours about vaccination

How to respond to myths, misinformation and rumours about vaccination

This module is a compliment to WHO’s Regional Guide on Enhancing Demand for Vaccination in the Western Pacific.

4 Steps to preventing and responding to vaccination misinformation

This document is intended to support frontline workers, programmes and partners to understand and address misinformation and rumours. Understanding and addressing misinformation and rumours is one of many important factors to be carefully managed to achieve high confidence and uptake of vaccination.

1. LISTEN

Monitoring and engaging with public opinion will improve our capacity to anticipate and prevent mistrust before it takes root. It can offer insight to guide quick and targeted responses, if action is required.

Remember, those engaging in the debate, whether on social or traditional media, are only a small piece of your audience. Many others are watching and listening from a distance, and could be informed by the discussion and how it’s managed.

Key Actions

1. Develop and update a map of key information streams highlighting areas of high-risk for misinformation spread. Maps should be frequently updated based upon new mediums for information exchange. This may include social media (Facebook, Twitter, Instagram etc.), local news, anti-vaccination websites, radio, messaging channels (Viber, WhatsApp, Messenger, LINE, WeChat etc.), as well as offline sources such as community groups, influencers, or through other information sharing networks.

2. Reach out to key stakeholders, including health workers, religious or community leaders and your network. Depending on your available resources, conduct monitoring to gain a deeper understanding of local beliefs, levels of mistrust and misinformation channels, in order to develop a tailored response.

Here’s some common strategies:

Speak to People:
• Gather information from frontline health workers:
  Health workers are invaluable resources on community sentiment and questions asked by parents and local community members. Be sensitive to new kinds of concerns being raised, and where misperceptions seem to be taking hold.
• Collect feedback from religious or community leaders:
  Conduct interviews or informal discussions with religious or community leaders to gain a better understanding of the social norms and values around vaccines, and to better understand local offline channels of misinformation.
• Use your network:
  Ask your colleagues, partner organizations, friends, families and relatives about their opinions and perceptions, and ask them to inform you if they hear of any rumours circulating.

Monitor media
It is important to monitor media channels to detect signals of misinformation amid the background noise. Anti-vaccine activists spreading misinformation, myths and rumours, news of anti-vaccine demonstrations or campaigns, and signs of perceived safety risks of vaccines are signals that may require a response.

To do this, subscribe to free services that search keywords (like Google News alerts) and receive a daily report of relevant news items. Keep track of the debate on vaccines and immunization over time, by region or population group using sentiment analysis, organizing coverage into positive, neutral and negative categories. Remember to consider all relevant languages and relevant regional media.
How to respond to myths, misinformation and rumours about vaccination

**Monitor social media channels**
Mapping social media and private messaging channels will help you to target your listening to the most relevant channels. Social listening can then be done by joining and following relevant groups and conversations on priority channels. Use free or low-cost social media analytics tools or if you have the budget, agencies can be hired locally to monitor vaccine narratives and advise on responses.

**Maintain an official channel with the public**
Establish a telephone or SMS hotline, email, webpage, or social media account for questions from the public. Register questions and look for trends such as most common questions, emerging issues, who is asking and who are most affected. Remember if not resourced and managed well, this can backfire and increase frustration and mistrust.

**Conduct ongoing surveys**
Surveys allow you to detect changes in attitudes and to shape your strategies and messages accordingly. Surveys can be for larger populations, or tailored to specific target groups based on identified need.

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**2. ASSESS**

Assessment is a moment to pause to determine two main things:

1. Whether a response is required
2. Whether capacity and resources are available to respond.

Not all misinformation challenges will benefit from a response, as we will see in the Response step below.

**Common profiles of misinformation, rumours and myths**
Persistent anti-vaccine messages that patients, families and communities may be exposed to, both online and offline include: Scepticism of Science; Denying the impact of vaccines; Emphasizing potential harmful side effects of vaccines; Claiming profit motivation and pharmaceutical self-interest; Anti-western rhetoric; Citing religious or other objections to tradition and social norms.

**Key Action**

Carry out a rapid assessment of the situation.

**Ask yourself, is the response required?**
- What are the current and/or new threats of misinformation?
- Where is the source of the misinformation?
- Who is it targeting?
- Is misinformation already spreading widely, and to priority populations?

**Readiness and Coordination:**
- Are you able and ready to respond?
- What resources do you have available?
- Are your public health and Government partners informed and aligned with your proposed approach?
- Do you have established local alliances and/or coalitions?

For example, with non-governmental organizations or front line health workers, who can contribute to listening and responding?

- Are current communication activities to counter misinformation working, or are major interventions required?
- Are other stakeholders, including Government and partners, responding? Is coordination, amplification, or support and monitor, the best response?

- Consider your allies: Do health workers require further skills, such as interpersonal communications training? Can the media be better informed and harnessed? Are health services coordinating with health workers and subnational bodies to support the proposed response? Have your online influencer and messaging networks been activated? Have community groups been engaged?
How to respond to myths, misinformation and rumours about vaccination

3. RESPOND

3.1 PREVENTION.
Longer-term continuous engagement.

“In the battle against misinformation, it is better to prevent than cure”.

The public needs to trust vaccines and be resilient in the face of a vaccine-related event, for example vaccine safety scares, misinformation or rumours. While a crisis cannot be anticipated, preparedness can reduce the impact of a vaccine-related event. It is important to remember there is no one-size-fits-all approach, and the strategies that follow should be tailored to your local needs.

Prevention, when done well, is a constant process, a conversation. Misinformation is often more memorable, personal and “sticky” than the truth. Research has shown that even after a successful intervention, without sustained action, misinformation can easily take root again.¹

Key Actions

1. Establish or reinvigorate a coordination mechanism or working group
This group should come together to plan communication about immunisation on a routine basis. It will also be used to facilitate a rapid and well-coordinated response following a surge of misinformation, or in response to a myth or rumour.

2. Empower the audience to recognize and resist misinformation by ‘inoculating’ them against it.
Inoculating against misinformation is an approach you can use to pre-emptively warn the public about misleading tactics and present a refutation of the anticipated misinformation. This pre-exposure can help to generate “mental antibodies” against misinformation.

Key actions include:
- **Step 1:** ‘Forewarning’ patients, families and the community through regular outreach that they are vulnerable to a threat - misinformation.
- **Step 2:** Raise and refute common counter arguments to vaccination. This may include engaging with weakened versions of common anti-vaccine arguments, and then directly confronting these arguments with scientific evidence for vaccine use.

Use anecdotes, stories, and personal narratives to make the message more memorable. Crucially, this information should only be presented before misinformation has been spread. The messages should be succinct and easy to understand, to be used by the public to refute arguments against vaccines and make people more resistant to persuasion.

3. Ensure vaccination is seen as a social norm
Highlighting pre-existing, high rates of vaccination can increase people’s intentions for vaccinating themselves. Use online and offline information channels to highlight high rates of vaccination and send out messages on these social norms to people.

Work with media channels to give more airtime to those who are getting vaccinated, rather than those who refuse or delay. For more actions see WHO WPRO’s tool ‘How to communicate about under-vaccination to reinforce positive social norms’.

4. Prepare your organization with long-term adaptable communication plans
These plans should be endorsed by senior management, with a budget for responding to a crisis.

Key actions could include:
- Preparing holding statements for use in a crisis, and appropriate to all major channels.
- Training spokespersons and establishing relations with the media, both online and off.
- Training frontline health workers in vaccination safety and interpersonal communication.

5. Develop important relationships with advocates and influencers before you need them
These relationships will depend on your context. They may include national authorities, experts, social media influencers, opinion leaders, health workers, professional associations, community leaders, the media, civil-society organizations and non-governmental organizations working in vaccination or child health more broadly. Key actions could include:

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How to respond to myths, misinformation and rumours about vaccination

- Engaging these groups in disseminating and adapting accurate information and developing communications plans of their own.
- Working with the media to build capacity, gain their trust and increase their knowledge of immunisation for more accurate and critical reporting.
- Being visible to increase public knowledge of immunisation and trust in your spokespersons. If trust is a challenge and others may be more influential, identify and train credible spokespersons who can deliver the message on your behalf.


Key actions could include:
- Ensuring up-to-date knowledge on public trust from Step 1.
- Testing communication products and messages.
- Developing targeted information to priority groups as well as health care workers, based on insights gained from your Listening.
- Providing basic vaccine safety training for health workers and community members.
- Continuously disseminating communications to build awareness and knowledge of risks of VPDs and benefits of immunization.

3.2 RESPOND: Crisis and shorter-term response strategies

Each context, country and situation is different. These general guidelines may help you to consider and prioritize your response.

Here’s some common strategies:

When to organize a response?
- High reach and significant impact on coverage: Does information run the risk of damaging vaccine confidence and reducing coverage?
- Vulnerability: Is misinformation negatively affecting vulnerable or priority populations or regions?
- Safety: Does a confirmed adverse event from immunization (AEFI) or other vaccine safety issue run the risk of impacting public trust for vaccines if not managed and addressed?
- Global Impact: Is global misinformation gaining traction in-country? Or, are national concerns negatively impacting global priorities?
- Prominence: Are individuals or groups with high influence potential for spread or traction starting or amplifying rumours and misinformation?

When to wait and monitor?
- Low reach and little impact on coverage: Is information limited to a select few, or fringe groups? Is it not impacting confidence or coverage?
- If it’s Disinformation: Does false information seem to be coordinated and deliberately spread? Disinformation may require an institutional response to find the source and seek support to address obviously false and damaging information that seeks to seed doubt. Examples can include reaching out to social media companies, traditional broadcasters or Government ministries.
- Regional and Global WHO support can be mobilized.

Suggested actions include:

1. Make sure you understand the problem

Analyze events and continuously update your response accordingly. Key actions include:
- Obtain as much information as possible about the misinformation or event(s) that took place.
- Analyse the situation. What is the reach of the misinformation and impact on perceptions and uptake?
- What is the potential level of impact on trust in vaccines and the immunization programme?
- Determine your audience. Who is your real audience?
- Be aware of the impact on the “silent audience” – (those observing, not liking/posting)
- Shape your communications response according to your conclusions.

2. Gather your alliances:

Collaborate and pool resources with partners to close information gaps and amplify accurate information. Consider the following:
- Activate your crisis coordination and working group.
- Engage relevant partners across institutions, e.g. ministries of health, education and social affairs; regulatory authorities; centers for disease control, health promotion, communication, press and emergency response; vaccine experts; professional associations.
How to respond to myths, misinformation and rumours about vaccination

3. Develop your content and communicate externally

If the decision is to respond, be clear and concise when providing an alternative explanation. Use repeated statements to counteract the misinformation, but be careful not to repeat the misinformation itself, which can make it seem true and familiar, particularly if significant time has passed.

Consider the channel, format and form of response carefully. If the main challenge you are facing is on WhatsApp, for example, the Government-owned national TV station may not be the best strategy for response.

Remember, even when addressing rumours and anti-vaccination sentiment you are also communicating with the pro-vaccination community, a group that should never be taken for granted.

Responses that address fears, concerns and emotions are critical for everyone.

Suggested actions include:

Emphasize facts
Do not repeat the misinformation, rumour or myth. Start with the facts to make sure people remember them. Present only core facts. Myths are often simple, so your message must also be as simple as possible.

Combine facts with stories that speak to people’s beliefs and values
In many cases the truth is at a disadvantage, as rumours and misinformation are memorable and scientific explanations must be accurate, detailed and at times, complex. Responding to misinformation is about making the truth memorable, while decreasing the familiarity and fluency of incorrect information. Official communications about vaccines should have a clear, simple take home message, tell a memorable story and elicit emotion.

Empathize and actively listen
Use visual materials that are engaging, simple and in plain language. Research shows that combining text and illustrations increases accessibility and understanding of information, especially when the text is technical or complex.

Use graphics and illustrations
Use visual materials that are engaging, simple and in plain language. Research shows that combining text and illustrations increases accessibility and understanding of information, especially when the text is technical or complex.

Pay attention to language
Avoid strong language when you intend to state that, for example, “there is no risk”. Strong claims denying the possibility of risk associated with vaccinations may backfire and increase risk perception and mistrust. Be honest, while emphasizing the overwhelming safety and effectiveness of vaccines.

Be brief and polite
Any interactions with anti-vaccine activists should be brief and polite. Do not debate. Always critically consider if participating in a debate will lend legitimacy to misinformation.

Avoid overstating the size of the anti-vaccine movement and negative public sentiment.

Reframe the risks
Reframing the risks of refusing to vaccinate should highlight the obvious consequences on a person’s health, as well as other consequences such as the financial risks of getting sick.⁴

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⁴ John Hopkins (2016) Expanding Use of Vaccines Could Save Up to $44 for Every Dollar Spent. Study Suggests
How to respond to myths, misinformation and rumours about vaccination

4. MONITOR:

SYSTEMATICALLY AND REPEATEDLY

Monitoring data can help provide an idea of whether interventions to combat misinformation are effective, how public sentiment is changing, how best to design interventions, and to help identify patterns that can be used to predict and prepare for future outbreaks of misinformation.

Factors impacting misinformation are highly context-specific and will be guided both in terms of focus, depth, speed and frequency by your local circumstances.

In general, actions to monitor signs of misinformation could include monitoring trends in coverage, dropouts, vaccine preventable disease clusters and cases. It can also include media coverage, rumours, e.g. through traditional and social media monitoring, feedback from health workers, or other mechanisms that capture perceptions, attitudes and changing behaviours. This can be as detailed and expensive as a representative Knowledge Attitudes and Practice survey, to rapid contextual interviews with parents in high risk areas following vaccination, to relatively light and systematic sentiment analysis of traditional and social media channels.

Broader tools that you can use to monitor reasons for under-vaccination, where you may identify misinformation as a key issue include:

Behavioural and Social Drivers (BeSD) of vaccination measuring tools:
The WHO working group on measuring BeSD of vaccination have developed two key tools to help monitor and measure of vaccine hesitancy challenges, which may include misinformation:

• **Childhood Immunization Survey (CIS):** The aim of the survey is to identify and measure local perceptions, attitudes, beliefs and perceptions that influence decision-making on vaccination for parents of children under-5. It is a 15-item survey, with a 5-item short form. The survey is available in English, French, Spanish and Arabic. [LINK]

• **Interview guides:** To support the survey data, interview guides that can be targeted to parents/ caregivers, as well as health workers, community leaders, local authorities, and other key stakeholders or influencers have been developed. [LINK]

Identifying missed opportunities for vaccination:

This manual provides the detailed instructions, standardized methodology, and tools for conducting field work (including sample health facility exit interviews and health worker knowledge, attitude, and practice (KAP) questionnaires), and detailed guidance for conducting in-depth interviews and focus group discussions, to identify missed opportunities for vaccination. The tool is available here

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Annex III. Strategic activities to address hesitancy

Implementers must identify the target population and understand the true nature of their particular vaccine and/or vaccination concerns

<table>
<thead>
<tr>
<th>Issue or challenge</th>
<th>Diagnosis of major causes</th>
<th>Proposed strategic activities and interventions</th>
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</thead>
<tbody>
<tr>
<td>Communication and media environment conveys negative information</td>
<td>Person/group has more trust in the media (TV, radio, social media, etc.) than in any other relevant actor (e.g. health-care providers, government, etc.). Person/group believes negative information related to vaccination within their social media network. Person/group believes negative information related to vaccination from mass media. Person/group believes in reports in the media by parents claiming to have lost a child due to a vaccine, and that affects decision to vaccinate child.</td>
<td>Diagnosis of reasons people do not trust relevant stakeholders. Address these reasons to increase trust of relevant stakeholders. Media monitoring: compilation of main negative information; development of messages based on evidence to address negative information that has been previously monitored. Design and disseminate information on the benefits of vaccination and disseminate through digital/social media (Infographics, newsletters, quiz, stories, etc.). This is intended: (i) to increase knowledge and awareness; (ii) to provide correct facts; and (iii) to engage in proactive scientific dialogue, while avoiding any personal or institutional counterattack. Use media programmes (TV, radio, etc.) proactively, such as: (i) health talks, educational programmes, TV film/radio programme on the benefits of vaccines and staff competencies (to build trust of staff); and the (ii) use of advocacy films and/or serial dramas, develop stories on parents who lost children to vaccine-preventable diseases (VPDs). Conduct periodical awareness activities (workshops, seminars) targeting key journalists and key media. This will minimize the publishing negative media accounts. Engagements (one-on-one meetings, dialogues, specific seminars, workshops) with leaders and communities to communicate evidence-based information to address negative information coming from general media, reports or social media.</td>
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</table>
### Issue or challenge

| Influential leaders, gatekeepers and anti-vaccination lobbies advise against vaccination |

Person/group can have doubts or refuse vaccination due to community leaders and influencers, including religious leaders in some settings, celebrities in others.

### Diagnosis of major causes

- A celebrity advocates against (a certain) vaccine that makes the person/group have doubts about having a child vaccinated.
- Religious leaders advocate against vaccination and person/group follows this advice.
- Influential leaders (political, celebrities, teachers, health-care workers) in the community do not support vaccines for infants and children.

### Proposed strategic activities and interventions

- Analysis of reasons why a leader/celebrity advocates against vaccination.
- Engagement with other celebrities and vaccine champions to support our message. Development of messages based on evidence to address negative information coming from celebrities who advocate against vaccination.
- Dialogue on radio/TV with celebrities who advocate against vaccination. Use a spokesperson to talk with the celebrity, with a planned interview with key messages that the public needs.
- Engagements (one-on-one meetings, dialogues, specific seminars, workshops) with religious/political leaders and teachers to communicate evidence-based information to address their beliefs and negative perception about vaccination.
- Using grassroots mobilization campaigns such storytelling, theatre and emotional movies addressing specifically the fears and misunderstandings coming from influential leaders.
- Social media/digital/media interventions, with concrete evidence-based messages addressing specifically the fears and misunderstandings coming from influential leaders.
- Distribution of information, education and communication materials (IEC) (video clips, factsheets, brochures, infographics, etc.) with concrete evidence-based messages addressing the fears and misunderstandings of influential leaders.
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</table>
| **Historical influences**  
Negative historical influences undermine public trust and influence vaccine hesitancy, especially when combined with pressures of influential leaders/media. | - There have been events (such as serious adverse events following immunization, vaccine scandals) in the past that discourage the person/group from getting a vaccine for themselves or their children.  
- Historically, they refused to accept all or selected vaccines without any valid reasons. | - Analysis of historical events that have influenced negativity in the community.  
- Provide and disseminate widely correct facts. Any serious adverse events with public concerns and scandals are to be fully investigated and findings to be available for public awareness.  
- Individual group discussions focusing specific historical events to clarify doubts and provide correct facts.  
- Use of proposed strategies and interventions suggested under section "Communication and media environment conveys negative information" at the beginning of this annex. |
| **Religion/culture/gender-based belief, practices**  
A person/group does not take a vaccine because of religious or cultural reasons. | - The religious belief prevents vaccines (non-halal, non-kosher, contraceptive effects).  
- The cultural norms, practices, distrust, non-acceptance lead to a lack of support for vaccinating children (e.g. a man vaccinating a girl or woman, staff from different ethnic or religious groups).  
- Gender equity issues: (i) fathers do not allow children to be vaccinated; or (ii) more importantly, vaccination is permitted for boys but not girls. | - Understand the specific context to understand the reasons behind religious/cultural beliefs for not accepting vaccination, etc.  
- Initiate dialogue with religious leaders/groups and provide scientific facts, while respecting religion’s core values. Develop awareness materials with correct information with agreement and support from religious leaders/groups.  
- Health-care providers are selectively used to comply with cultural norms and to be accepted by the community (female staff to vaccinate girls and women; staff from the same ethnic background/religion).  
- Becoming a vaccine champion. Train parents and people that be influential within their groups of influence, so that they can explain issues about religious beliefs (non-halal, non-kosher, etc.).  
- Make available a "specialist immunization spot" that people can refer to or voluntarily search for correct information on vaccines related to gender equity issues, cultural norms and religious beliefs. |
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<tr>
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<tbody>
<tr>
<td><strong>Policies/politics mandates</strong></td>
<td>Vaccine mandates provoke vaccine hesitancy not necessarily because of safety or other concerns, but due to resistance to the notion of forced vaccination, or government mistrust.</td>
<td>• Make available relevant information on government decisions and procedures (vaccine introduction, choice of vaccines) to the public (through electronic and social media): e.g. summaries of the decisions of the national immunization technical advisory group (NITAG) on new vaccines introduction, vaccine registration information by the national regulatory authority (NRA).</td>
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<td></td>
<td>• Mistrust that government is making decisions in their best interest with respect to what vaccines are provided.</td>
<td>• Use NITAG and other independent professionals for public awareness programmes.</td>
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<td>• Disagreement with the choice of vaccine or the vaccination recommendation provided by the government.</td>
<td>• Use of proposed strategies and interventions suggested under section “Communication and media environment conveys negative information” at the beginning of this annex.</td>
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<td>• Impression that government/health-care provider does not provide the best vaccine on the market.</td>
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<td></td>
<td>• Mandatory vaccination policy for day-care or school.</td>
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<tr>
<td><strong>Mistrust of the pharmaceutical Industry</strong></td>
<td>Industry can be perceived to be driven only by financial motives; government can be perceived as being influenced by industry.</td>
<td>• National regulatory authority:</td>
</tr>
<tr>
<td></td>
<td>• Person/group does not believe the vaccine producers are interested in their health.</td>
<td>◦ to make available to the public relevant information of all vaccine product profiles on the NRA website;</td>
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<td></td>
<td>• Belief that governments are influenced by lobbyists or industry.</td>
<td>◦ to make available to the public relevant information on all vaccine registrations in the country on the NRA website; and</td>
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<td>• Mistrust on pharmaceutical companies to provide safe and effective vaccines.</td>
<td>◦ to operate a public information centre to clarify public concerns.</td>
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<td>• Use NITAG and other independent professionals for public awareness programmes on vaccine products safety and effectiveness.</td>
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<td>• Provide data on average government spending on vaccines and other health-care interventions to show how marginal the vaccines market is compared to other drugs/interventions, including treatment of VPD cases. Insist of cost/benefit analysis of vaccination.</td>
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## FOR INDIVIDUAL AND GROUP INFLUENCES

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<tr>
<td><strong>Experience with vaccination</strong>&lt;br&gt;Negative experience with past vaccination makes the person reconsider vaccination.</td>
<td>• The person or someone they know had a vaccine safety event/reaction that made them reconsider getting vaccines.&lt;br&gt;• The person heard of someone who had a serious adverse event after immunization.</td>
<td>• Individual/group focused discussion to clarify particular vaccine safety event(s) of concern. To gain acceptance, this is to be undertaken by a medical doctor or mid-level manager (not by clinic/field staff). Use risk communication strategies to build awareness of vaccines benefits and risks.&lt;br&gt;• Training health-care workers on:&lt;br&gt;  ° minimizing immunization errors and related adverse events; and&lt;br&gt;  ° communication skills and motivational interviews.&lt;br&gt;• Training tool (paper-based, electronic or web-based) for health workers to increase knowledge and change attitudes about vaccine hesitancy and to inform health workers on hesitancy and the main interventions to address hesitancy.&lt;br&gt;• Use of proposed strategies and interventions suggested under section “Communication and media environment conveys negative information” at the beginning of this annex.&lt;br&gt;• Refer the target to a specialist immunization spot where people can be informed about any possible doubt.&lt;br&gt;• Becoming a vaccine champion: train people to be the leaders within the groups they influence.</td>
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<tr>
<td><strong>Beliefs, attitudes about health and prevention</strong>&lt;br&gt;Negative beliefs and attitudes about health and prevention can influence vaccine hesitancy</td>
<td>• Belief that it is possible to have received too many vaccines at one time.&lt;br&gt;• Belief that vaccines destroy important natural immunity.&lt;br&gt;• Belief that other behaviours (breastfeeding, traditional/alternative medicine or naturopathy) are as or more important than vaccination to maintain health and prevent VPDs.&lt;br&gt;• Belief that vaccines are given to babies when they are too young.</td>
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<td>Issue or challenge</td>
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<tr>
<td>Lack of knowledge/</td>
<td>• The person is not aware of what a vaccine is and what it does to the body.</td>
<td>• Using grassroots mobilization campaigns such storytelling, theatre, emotional movies.</td>
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<tr>
<td>awareness</td>
<td>• The person does not know which vaccines they should get for their children.</td>
<td>• House visits to inform, clarify and reduce resistance to vaccination.</td>
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<td></td>
<td>• The person informed themselves about a certain vaccine and then decided against it/delayed receiving it.</td>
<td>• Develop and make available updated awareness materials (video clips, factsheets, pamphlets, brochures, infographics, etc.) focusing on specific concerns by parents and community, as well as presenting basic information about the risks, safety and benefits of vaccines.</td>
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<td>• Vaccinators in door-to-door or mass immunization campaigns do not provide sufficient information to address the concerns around vaccination.</td>
<td>• Make the public aware of clinic sessions (time, venues, etc.) using short message service (SMS text messages), public announcements, etc.</td>
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<td>• The person feels they did not get enough information about vaccines and their safety.</td>
<td>• Improve conditions for counselling (allocate more time, ensure privacy, etc.).</td>
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<td>• The person does not feel that the health professional or worker provides them with all the information needed to answer their questions on immunization.</td>
<td>• Social media/digital/media interventions with concrete evidence-based messages addressing specifically the lack of awareness, fears, beliefs, etc.</td>
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<td>• The person considers that some vaccines are more important than others.</td>
<td>• Online educational interventions aim to inform target groups about vaccines, the benefits and the risks if members of the target group are not vaccinated.</td>
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<td>• Mass media and/or digital communication strategies to spread evidence-based and tailored messages: radio, SMS, WhatsApp, social media, websites, etc.</td>
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<td>• Information sessions between target groups and health workers addressing specifically the lack of awareness, fears, beliefs, etc.</td>
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<tr>
<td>Risk/benefit (scientific evidence)</td>
<td>• The person does not believe vaccines are safe for themselves or for their children</td>
<td>• Training tool (paper-based, electronic, web-based) for health-care workers about information regarding</td>
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<td>• The person does not believe vaccines are safe for those in the community.</td>
<td>hesitancy, risk/benefit and main interventions to address.</td>
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<td>• Before administering the vaccine, the health-care worker does not provide the person</td>
<td>• Training health-care workers on:</td>
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<td>with enough information on the side effects that might follow.</td>
<td>◦ sensitivity skills for health workers aimed at changing attitudes; and</td>
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<td>• The person considers some vaccine products for preventing a disease (live attenuated</td>
<td>◦ communication skills and motivational interviews.</td>
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<td>influenza virus or standard/measles or measles-rumps-rubella) safer than others.</td>
<td>• Online and offline educational intervention aims to inform target groups about: (i) the benefits and the risks</td>
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<tr>
<td>Hesitancy to accept a new vaccine or new formulation</td>
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<td>if the target is not vaccinated; (ii) new vaccines; and (iii) vaccine schedule.</td>
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<td>• The person does not consider rotavirus vaccine/human papillomavirus vaccine (HPV)</td>
<td>• Evidence-based dialogues with communities and parents to speak about hesitancy, risk/benefit, mode of</td>
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<td>/meningococcal vaccine/pentavalent vaccine to be safe.</td>
<td>delivery, etc.</td>
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<td>• Individuals do not see the direct impact of the vaccine (e.g. HPV vaccine preventing</td>
<td>• Refer the target to a specialist immunization spot, where their doubts can be addressed and they are informed</td>
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<td>cervical cancer).</td>
<td>about the risks and benefits, mode of delivery, hesitancy about new vaccines, vaccination schedule within</td>
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<td>• Individuals think new vaccines are not trail tested to the same rigorous standard as</td>
<td>their group of influence.</td>
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<td>any normally prescribed drug.</td>
<td>• Distribution of IEC materials (video clips, factsheets, pamphlets, brochures, infographics, etc.) presenting</td>
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<td>• Individuals feel it has not been tested or used for long enough.</td>
<td>information about: (i) the need and safety of vaccines; (ii) information about the new vaccines; (iii) benefits</td>
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<td>• Individuals feel that the new vaccine is not needed.</td>
<td>and risks; and iv) the vaccination schedule.</td>
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<tr>
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<tr>
<td><strong>Mode of administration</strong>&lt;br&gt;Mode of administration can influence vaccine hesitancy for different reasons.</td>
<td>• The person fears the pain they or their children might experience or fears the injection needles when receiving a vaccine and thus makes them hesitant to be immunized.&lt;br&gt;• Parent believes injectables (e.g. inactivated polio vaccine) are better than oral (e.g. oral polio vaccine), then refuse oral vaccines.&lt;br&gt;• The person does not trust the healthcare worker to safely administer the vaccine to them or their child.</td>
<td>• Becoming a vaccine champion. Train people (leaders, teachers, etc.) who can inform about vaccine risks and benefits, mode of delivery, hesitancy about new vaccines and the vaccination schedule within their group of influence.</td>
</tr>
<tr>
<td><strong>Design of vaccination programme/mode of delivery</strong>&lt;br&gt;Delivery mode can affect vaccine hesitancy in multiple ways.</td>
<td>• The person does not think the vaccination process is welcoming or finds it difficult to get the vaccines on time for themselves and their children.&lt;br&gt;• Parents do not have confidence in door-to-door vaccinators.&lt;br&gt;• Parents do not have confidence in a campaign approach driven by the government.&lt;br&gt;• Parents do not have confidence having themselves or their children vaccinated during a mass immunization campaign.&lt;br&gt;• Parents do not have confidence in a school-based programmes.&lt;br&gt;• The person does not think they received a thorough enough medical consultation.&lt;br&gt;• The health centre is too far or the hours are inconvenient.</td>
<td>• Evidence-based social, digital and general media interventions addressing specific messages about risks and benefits, mode of delivery, hesitancy about new vaccines, and the vaccination schedule within their group of influence.</td>
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<td>• Using grassroots mobilization campaigns, such as storytelling, theatre and emotional movies addressing risks and benefits, mode of delivery, hesitancy about new vaccines, and vaccination schedule within their group of influence.</td>
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<td>• House visits to inform, clarify and reduce resistance to vaccination.</td>
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### Issue or challenge

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<tbody>
<tr>
<td>• The person does not have confidence that the health centre or doctor’s office will have the vaccine they need, when they need them.</td>
<td>• Social marketing strategies to promote HPV vaccination (using price, promotion, product and place).</td>
</tr>
<tr>
<td>• The person did not return to a health centre or their doctor after not receiving the vaccine during an initial visit.</td>
<td>• Use oral or nasal administrations to those who find injections fearful or they do not have confidence in the health workers skills or the devices used.</td>
</tr>
<tr>
<td>• At the health centre, the person has not received a vaccine as the healthcare worker indicated there were too few people to start vaccinating.</td>
<td>• Improve convenience and access to vaccination.</td>
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<tr>
<td>• Caregivers do not have confidence that a needed vaccine and/or health staff member will be at the health facility if they go there.</td>
<td>• To establish a feedback loop, such as a complaints box, SMS number to send complaints or rate-your-service panels.</td>
</tr>
<tr>
<td>• The person decided against a vaccine as it was produced by a manufacturer they did not trust.</td>
<td>• To organize exchange visits in which health staff members visit communities to learn about their history, economy, talents and so on, and community representatives visit the health facility to receive a tour and explanation of its services.</td>
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<tr>
<th>Vaccination schedule</th>
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<td>There may be reluctance to comply with the recommended schedule (e.g. multiple vaccines or age of vaccination).</td>
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<tr>
<th>Role of health-care professionals</th>
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<tbody>
<tr>
<td>Health-care professionals are important role models for their patients; if they hesitate for any reason, it can influence their clients’ willingness to vaccinate.</td>
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</tbody>
</table>

| • Health-care professionals have treated the person without respect (e.g. in regard to appearance, education or cultural background) so that they hesitate to return to the health-care facility. | • To remind health workers of, and discuss with them, the official contraindication policy and give them a copy (if needed) that they can show to caregivers. |
| • The health-care provider advised the person that a certain vaccine was not necessary or had too many side effects for them or their child. |

Note: This table was developed based on SAGE Working Group Determinants of Vaccine Hesitancy Matrix (refer to pp. 52–57 in below link) https://www.who.int/immunization/sage/meetings/2014/october/2_SAGE_Appendicies_Background_final.pdf