

Catalog of Tools for Assessing and Addressing Vaccine Hesitancy

Background

The Learning Network for Countries in Transition (LNCT) is a country-driven network dedicated to peer learning to support countries as they transition away from Gavi support to full domestic financing of their national immunization programs. The Vaccine Confidence Project™ at the London School of Hygiene & Tropical Medicine (LSHTM) was requested by Results for Development (R4D) to lead a vaccine hesitancy workstream for LNCT, in response to country requests for help in supporting them in assessing and addressing their vaccine hesitancy issues. 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 (Larson HJ & Jarrett C, et al. 2014; SAGE working group on vaccine hesitancy 2014). It includes factors such as complacency, convenience and confidence (SAGE working group on vaccine hesitancy 2014). Extensive literature has shown that understanding reasons for and individuals and groups choosing not to vaccinate is critical to accurately tailor strategies to address hesitancy and increase vaccine uptake (Jarrett et al. 2015; WHO 2013).

Aim

The aim of this catalog is to provide a resource of practical tools available for LNCT countries to assess and address vaccine hesitancy within their country, and to identify any gaps in available resources.

Tools for assessing and addressing vaccine hesitancy (adapted from [Tomsa 2018])

The table below lists tools in alphabetical order and are categorized by the type of support (research and measurement support and communication support). There are also three network websites that have a multiple resource listed in their online archives:

- [The Communication Initiative Network](#). Convening the Communication and Media Development, Social and Behavior Change Community
- [The Vaccine Confidence Project™ website](#), *The Vaccine Confidence Project™, London School of Hygiene & Tropical Medicine*
- [Vaccine Safety Communication Library](#) , *WHO Regional Office for Europe*

Tool name & Organization / author	URL link	Details	Type	Country(s)	Vaccine(s)
A Field Guide for Qualitative Research for New Vaccine Communication <i>WHO Regional Office for Europe</i>	http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2017/field-guide-to-qualitative-research-for-new-vaccine-introduction	Formative research to inform vaccine introduction communication plans. The guide includes step-by-step instructions to help immunization programs understand their target audiences before communicating about the introduction of a new vaccine. See pages 153-4, describing how to prepare and deal with public concerns around immunization , Annex V: Developing a crisis communication plan (pages 171-4) and Annex VI: Checklist for preparedness for an event that may erode public trust in immunization (pages 175-178).	Research / measurement support	Global	All
About Interpersonal Communication for Immunization <i>UNICEF</i>	https://ipc.unicef.org/about https://ipc.unicef.org/package-components	A resource website with job aids, resources, Q&As to support front-line workers in their immunization work, sub-national supervisors of front-line workers, and national immunization program managers and implementers, with a focus on improving their capacity to effectively use interpersonal communication to address barriers to immunization uptake and completion. This includes guidance on: <ul style="list-style-type: none"> • What to do if a caregiver refuses immunization (audio job aid) • Engaging communities and community leaders in dialogue (video) • Reaching dropouts, the unreached and socially distanced groups (video) • Addressing rumors or myths and role in vaccine safety events (video) • Guidance on strategies to interact with caregivers based on how hesitant they are (Reference cards) Materials also available in French, Spanish and Arabic.	Communication support	Global	All
Addressing Misconceptions on Measles Vaccination <i>European Centre for Disease Prevention and Control (ECDC)</i>	http://ecdc.europa.eu/en/healthtopics/measles/Pages/Addressing-misconceptions-on-measles-vaccination.aspx	Website outlining steps to help public health professionals address vaccination misconceptions in the best possible way: <ul style="list-style-type: none"> • Core facts: a refutation should always emphasize the facts, not the myth. The introduction should only present key facts easy to memorize. • Explicit warnings: before any mention of a myth, text, visual or oral cues should clearly warn that the upcoming information is false. 	Communication support	Europe	Measles vaccine

		<ul style="list-style-type: none"> Alternative explanation: any knowledge gaps left by addressing misconceptions linked to vaccination should be filled by providing an alternative casual explanation for why the myth is false. Graphics: core facts should be displayed graphically when possible. <p>Careful language: moderate language and formulations should always be used when saying that there is no risk as strong negations of risk may backfire and lead to a higher risk perception.</p>			
Answering Parents' Questions about HPV Vaccine <i>Centers for Disease Control and Prevention (CDC)</i>	https://www.cdc.gov/hpv/hcp/answering-questions.html	A short guide for healthcare workers to answer parents' questions about HPV vaccination.	Communication support	Global	HPV
Best Practice Guidance: How to Respond to Vocal Vaccine Deniers in Public <i>WHO Regional Office for Europe</i>	https://www.who.int/immunization/sage/meetings/2016/october/8_Best-practice-guidance-respond-vocal-vaccine-deniers-public.pdf	Guidance document providing basic broad principles for spokespersons of health authorities on how to respond to vocal vaccine deniers.	Communication support	Europe	All
Caregiver Vaccine Acceptance Scale in Ghana	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6534746/	A validated tool for measuring caregiver vaccine acceptance in Ghana.	Research / measurement support	Ghana	Childhood vaccinations
The Communication Initiative Network. Convening the Communication and Media Development, Social and Behavior Change Community <i>The Communication Initiative</i>	https://www.comminit.com/global/search/apachesolr_search/vaccine%20hesitancy?filters=tid:36	"The Communication Initiative" has an extensive archive of resources about communication more broadly and lists a number of publications specifically about vaccine hesitancy.	Network resources	Global	All
The Guide to Tailoring Immunization Programs (TIP)	http://www.euro.who.int/en/health-topics/communicable-diseases/poliomyelitis/publications/2013/2013-guide-	This guide provides tools to identify susceptible populations, determine barriers to vaccination and implement evidence-based interventions. TIP aims to provide proven methods and tools to assist national immunization programs (NIPs) design	Research / measurement support	Europe	All

WHO Regional Office for Europe	to-tailoring-immunization-programmes	targeted strategies that increase uptake of infant and childhood vaccinations. Guide also available in Russian.			
Improving Vaccination Demand and Addressing Hesitancy WHO	https://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/	Website providing guidance on improving vaccination demand and addressing hesitancy. Summary of understanding the determinants of vaccine hesitancy , tailored evidence-based strategies to improve uptake, and monitoring and evaluation to determine the impact and sustainability of the interventions. WHO has developed a set of tools to support programs and partners to measure and address these reasons for under-vaccination , and to track consistent and comparable data over time. The tools include quantitative surveys, qualitative interview guides, and related user guidance. Materials also available in Arabic, French and Spanish.	Communication support	Global	All
Interpersonal Communication for Immunization – Training for Front Line Workers UNICEF Europe and Central Asia Region	https://www.unicef.org/eca/reports/interpersonal-communication-immunization-participant-manual	Interactive evidence-based training package for front-line healthcare workers to identify and address their own biases and misconceptions and to equip them with the essential knowledge, skills, and attitudes they need for positive and meaningful interpersonal communication for immunization to help address concerns and mitigate hesitancy. Guide and facilitator manual. Field tested with participants from Serbia, Bosnia and Herzegovina, Ukraine and Kyrgyzstan.	Communication support	Europe and Central Asia Region.	All
Let’s Talk about Hesitancy: Enhancing Confidence in Vaccination and Uptake European Centre for Disease Prevention and Control (ECDC)	https://www.ecdc.europa.eu/sites/default/files/media/en/publications/Publications/lets-talk-about-hesitancy-vaccination-guide.pdf	This guide provides practical evidence-based and peer-reviewed advice for public health program managers and communicators involved with immunization services. It identifies ways to enhance people’s confidence in vaccination and addresses common issues which underlie vaccine hesitancy .	Communication support	Europe	All
Parent Attitudes about Childhood Vaccines Survey	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3360071/	A survey to assess parental vaccine hesitancy. Uses qualitative methodology to identify vaccine-hesitant parents and has content and face validity.	Research / measurement support	USA	Childhood vaccinations
Responding to Concerns about Vaccination WHO Regional Office for Europe	http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2015/responding-to-concerns-about-vaccination	The purpose of the document is to support immunization program managers and staff in their efforts to secure sustainable funding for immunization. The document provides tips to respond to decision-makers who may have concerns about immunization safety. Guide also available in Russian.	Communication support	Global	All

<p>Rapid Literature Review on Motivating Hesitant Population Groups in Europe to Vaccinate</p> <p><i>European Centre for Disease Prevention and Control (ECDC), World Health Communication Associates and London School of Hygiene & Tropical Medicine (LSHTM)</i></p>	<p>https://www.ecdc.europa.eu/en/publications-data/rapid-literature-review-motivating-hesitant-population-groups-europe-vaccinate</p>	<p>This rapid literature review brought together knowledge and research related to vaccine hesitancy in the EU and EEA countries into a format that is easy to understand and follow. The review focuses on identifying what is known about:</p> <ul style="list-style-type: none"> • Who the hesitant populations are • What the enablers and barriers are to vaccination uptake for these hesitant populations • What is known about successful interventions targeting these populations; especially, interventions provided for and by healthcare providers. 	<p>Research / measurement support</p>	<p>EU and EEA countries</p>	<p>All</p>
<p>Responding to Myths about Immunization</p> <p><i>WHO Regional Office for Europe</i></p>	<p>http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2015/responding-to-myths-about-immunization</p>	<p>The purpose of the document is to support immunization program managers and staff in their efforts to secure sustainable funding for immunization. The document provides suggested ways to respond to decision-makers who may have heard some prevalent myths concerning immunization.</p> <p>Guide also available in Russian.</p>	<p>Communication support</p>	<p>Europe</p>	<p>All</p>
<p>The State of Vaccine Confidence 2015</p> <p><i>The Vaccine Confidence Project™, London School of Hygiene & Tropical Medicine</i></p>	<p>https://static1.squarespace.com/static/5d4d746d648a4e0001186e38/t/5d75156b63cb4f265725de12/1567954291535/VCP_The-State-of-Vaccine-Confidence-2015.pdf</p>	<p>This report analyses a number of vaccine confidence issues between 2005-2015 and the paths to their resolution. It also presents options for monitoring and measuring public confidence to detect waning confidence early and identify issues of concern, as well as reporting on strategies that have had positive impacts in engaging populations to build trust and confidence.</p>	<p>Research / measurement support</p>	<p>Global</p>	<p>All</p>
<p>The State of Vaccine Confidence: 2016</p> <p><i>The Vaccine Confidence Project™, London School of Hygiene & Tropical Medicine</i></p>	<p>https://www.vaccineconfidence.org/research-feed/the-state-of-vaccine-confidence-2016</p>	<p>This is an interactive tool which enables individual country data to be viewed on vaccine confidence for 65,819 individuals surveyed across 67 countries using the Vaccine Confidence Index™, a survey tool designed to measure vaccine hesitancy.</p>	<p>Research / measurement support</p>	<p>Global</p>	<p>All</p>
<p>The State of Vaccine Confidence in the EU: 2018</p> <p><i>The Vaccine Confidence Project™, London School of Hygiene & Tropical Medicine</i></p>	<p>https://www.vaccineconfidence.org/research-feed/the-state-of-vaccine-confidence-in-the-eu-2018</p>	<p>This is an interactive tool which enables individual country data to be viewed on vaccine confidence for 28,782 individuals surveyed across 28 EU member states using the Vaccine Confidence Index™, a survey tool designed to measure vaccine hesitancy.</p>	<p>Research / measurement support</p>	<p>All 28 EU member states</p>	<p>All</p>

<p>The Vaccine Confidence Project™ website</p> <p><i>The Vaccine Confidence Project™, London School of Hygiene & Tropical Medicine</i></p>	<p>https://www.vaccineconfidence.org/</p>	<p>The Vaccine Confidence Project™ website includes a collection of resources from around the world that can be used to gain further information about vaccines and their recommended usage, including:</p> <ul style="list-style-type: none"> • A monthly blog on global news and events relating to vaccine confidence. • Interactive tools which enable individual country data to be viewed on vaccine confidence in 2016 (EU) and 2018 (Global). • A video on why vaccine confidence is currently in crisis. • A video explaining the work of the Vaccine Confidence Project and on what needs to be done to restore vaccine confidence around the world. 	<p>Network resources</p>	<p>Global</p>	<p>All</p>
<p>Vaccine Confidence Scale</p>	<p>https://www.sciencedirect.com/science/article/abs/pii/S1876285915002156</p> <p>https://www.sciencedirect.com/science/article/pii/S0264410X14012444</p>	<p>Measure of vaccination confidence about adolescent vaccination using a large, nationally representative sample of parents.</p>	<p>Research / measurement support</p>	<p>Canada</p>	<p>Tdap, meningococcal and HPV</p>
<p>Vaccine Safety and False Contraindications to Vaccination. Training Manual.</p> <p><i>WHO Regional Office for Europe</i></p>	<p>http://www.euro.who.int/_data/assets/pdf_file/0009/351927/WHO-Vaccine-Manual.pdf?ua=1</p>	<p>This training manual presents “state-of-the-art”, authoritative, scientifically valid advice to counter common misperceptions of vaccination.</p>	<p>Communication support</p>	<p>Europe</p>	<p>All</p>
<p>Vaccine Safety Communication Library</p> <p><i>WHO Regional Office for Europe</i></p>	<p>http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/vaccine-safety-communication-library</p>	<p>The online WHO Vaccine Safety Communication Library offers guidance to national health authorities and others who communicate about vaccine safety. The guidance in this library was developed based on lessons learned in countries, as well as scientific evidence and research in the fields of psychology, social and behavioral science, and communication to manage safety events and concerns. It includes guidance on:</p> <ul style="list-style-type: none"> • Crisis preparedness • Crisis response • Ongoing communication to build trust <p>Materials also available in Russian.</p>	<p>Network resources</p>	<p>Global</p>	<p>All</p>

<p>Vaccine Safety Events: Managing the Communications Response</p> <p><i>WHO Regional Office for Europe</i></p>	<p>http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/2013/vaccine-safety-events-managing-the-communications-response</p>	<p>This training manual provides practical, informative strategies and tools to help plan and manage a communications response following a vaccine-related event in local communities, at a national level, or beyond. It explains how to use communications strategies and tools to increase public trust and confidence in vaccines and to minimize the negative impact of vaccine-related events, including ways to support effective communication planning and management in response to vaccine safety events.</p> <p>Guide also available in Russian.</p>	<p>Communication support</p>	<p>Global</p>	<p>All</p>
<p>Wellcome Global Monitor</p> <p><i>Wellcome; Gallop World Poll Survey</i></p>	<p>https://wellcome.ac.uk/reports/wellcome-global-monitor/2018</p>	<p>The Wellcome Global Monitors is the world's largest study into attitudes towards science and health. The survey asks how much science interests people and how much they trust it. It asks about specific areas of science that are important to improving global health, including vaccinations. The report features a special chapter on public attitudes and trust in vaccines which reports on survey results using the Vaccine Confidence Index™ in 144 countries (Chapter 5, pages 102-125).</p>	<p>Research / measurement support</p>	<p>Global</p>	<p>All</p>

Summary of tools available and resource gaps

We present a summary of resources available to assess and address vaccine hesitancy. As highlighted above, given the complexity of vaccine hesitancy, and how context specific it is, varying across time, place and vaccine, there is no silver bullet, or single intervention to addressing vaccine hesitancy. Identified strategies should be carefully tailored according to the target population, their reasons for hesitancy, and the specific context. It is key to identify the susceptible populations, explore the underlying reasons for non-vaccination, and to address those reasons.

Although there are a number of tools to assess and address vaccine hesitancy, there are still some gaps:

- There are a number of tools which focus purely on the European region. For example, the Guide to Tailoring Immunization Programs (TIP), the guide “Let’s talk about hesitancy: Enhancing confidence in vaccination and uptake”, the guide “How to respond to vocal vaccine deniers in public”, and the guide “Addressing misconceptions on measles vaccination”. However, it is possible to adapt these tools and guidance, and apply them within other countries and contexts, where relevant, as there is some generalizability of the recommendations and lessons learned. For example, the ECDC recommendations (Let’s talk about hesitancy) for HCWs to address parents’ hesitancy about vaccination can be applied in contexts beyond the European region. Also, the TIP tool has been used in Australia, Mauritania and South Africa.
- An analysis of vaccine coverage rates between and within countries is a helpful indicator of the disparities of vaccine acceptance, however the Vaccine Confidence Index (VCI™), which measures attitudes towards vaccine importance, safety and effectiveness, captures spatio-temporal trends in vaccine confidence at national and global levels. The VCI™ has been applied in LNCT member countries Armenia, Georgia, Ghana, Indonesia, Lao PDR, Moldova, Nigeria, Uzbekistan and Vietnam. It has not yet been applied in the LNCT countries **Angola, São Tomé e Príncipe, Sudan, and Timor-Leste.**
- There is a clear need for more attention to understanding and addressing hesitancy at the community and social network level, as well as in building and maintaining public trust in vaccination.
- Social media analytics allow valuable insight into public sentiments and signals of emerging issues. There is currently a gap in media monitoring guidance specifically tailored to tracking vaccine hesitancy.
- Although some tools and guidance have been translated into multiple languages, most documents are only available in English.
- Although a considerable amount of information can be found in these resources, the process of assessing and addressing vaccine hesitancy involves a lot of time and work. Linking the formative research or diagnostic phase to the subsequent steps of implementation, adjustment and evaluation is crucial and the time it needs is important for accurately tailoring the needed intervention(s).

However, there are future resources being developed, such as quantitative survey tools, qualitative interview tools and practical guidance to measure and address reasons for under-vaccination, being developed by a global expert group ‘Measuring Behavioral and Social Drivers of Vaccination’ (BeSD), established by WHO, to be published in Q4 2020

(https://www.who.int/immunization/programmes_systems/vaccine_hesitancy/en/).

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