Communication for Immunization
A Resource Pack

Strengthening demand promotion for routine immunization

New vaccines introduction

Crisis, emergency and risk communication

Addressing vaccine hesitancy

Front line workers' capacity building

Communication for Immunization
A Resource Pack

Developed by:

Sergiu Tomsa, Regional C4D Specialist, with contributions from Mario Mosquera Vasques, Regional C4D Adviser and Svetlana Stefanet, Regional Immunization Specialist

UNICEF Regional Office for Europe and Central Asia

October 2018

Contents

Introduction

This resource pack was compiled by UNICEF ECARO to support immunization programme specialists, EPI managers, communication experts to design, implement, monitor and evaluate programmes and activities to improve immunization coverage, reach un- and under-immunized groups, strengthen preparedness for and response to immunization-related outbreak and crises, build and strengthen partnerships through comprehensive and evidence-based advocacy, communication for behavior and social change, social and community mobilization programmes.

The pack is designed to provide quick and easy access to various types of materials: guidelines, toolkits, journal articles etc., helping immunization programme specialists identify the right set of resources to support their immunization efforts. We acknowledge that well-planned, evidence-based and adequately funded strategic communication, as part of national and sub-national immunization programmes can help achieve immunization goals, improve coverage, strengthen trust in vaccines and immunization and increase demand for immunization.

About the resource pack

The resource pack covers five main chapters:

- Strengthening demand promotion for routine immunization;
- New vaccines introduction;
- Crisis, emergency and risk communication;
- Addressing vaccine hesitancy; and
- Front line workers' capacity building.

It contains various materials aiming to strengthen immunization and communication professionals understanding of the specific area of concern, but also to support them design and implement immunization activities. Most of these resources contain step-by-step guidance and offer sample tools to use in conducting situation analysis or research on immunization, developing communication strategies or crisis and outbreak communication plans, designing plans to outreach to vulnerable groups or rolling out supplementary immunization, mobilizing communities or advocating for resource allocations for immunization. The scientific journals articles present reflections on challenges faced by immunization programmes, the latest evidence in terms of what works and what does not, along with lessons learned in different contexts and parts of the world. Several web pages and portals included in this pack offer sample materials, tools and messages.

The *Addressing vaccine hesitancy* chapter provides resources to help better understand and investigate vaccine hesitancy and its determinants, but also how to address caregivers concerns and fears and reinforce trust in health professionals, health system, vaccines and the immunization process. The chapter *on Front line workers' capacity building* contain training modules, packages and materials to strengthen health professionals' capacities to proactively engage with caregivers and communities, engage with vaccine deniers, address vaccine hesitancy and promote immunization.

Each resource contains the following information: title, author, year, a short description of what it contains and offers, and the link to the webpage where it can be found and downloaded.

Strengthening demand promotion for routine immunization

This chapter contains resources which help better understand the global and regional immunization priorities, challenges, good practices and lessons learned. They are design to provide support in strengthening routine immunization programmes through better identification of immunization gaps, local needs, opportunities to strengthen and/or expand partnerships and design evidence-based communication programmes and campaigns. The chapter contains easy to follow recommendations how to design and implement robust communication initiatives as part of the national and sub-national routine immunization programmes.

Title	Description
Global Vaccine Action Plan 2011-2020 World Health Assembly 2012	The Global Vaccine Action Plan (GVAP), endorsed by the 194 Member States of the World Health Assembly in May 2012, is a framework to prevent millions of deaths by 2020 through more equitable access to existing vaccines for people in all communities. http://www.who.int/immunization/global_vaccine_action_plan/GVAP_doc_2011_2020/en/
The European Vaccine Action Plan 2015–2020	The European Vaccine Action Plan 2015–2020 (EVAP) is a regional interpretation of the Global Vaccine Action Plan developed to address the specific needs and challenges related to immunization in the WHO European Region. http://www.euro.who.int/__data/assets/pdf_file/0007/255679/WHO_EVAP_UK_v30_WEBx.pdf
CDC's Strategic Framework for Global Immunization, 2016-2020 CDC 2016	This framework explains the US Centers for Disease Control and Prevention's (CDC) goals and objectives, and guides the development of the global immunization action plan. The framework is built around five interconnected goals to improve the health impact of vaccines; increase reach through strong, country-owned immunization programs; and provide evidence for informed policy and effective program implementation. https://vaccineresources.org/details.php?i=2285
Global Routine Immunization Strategies and Practices (GRISP) WHO 2016	The purpose of GRISP is to reassert routine immunization as the foundation for sustained decreases in morbidity and mortality from vaccine-preventable diseases across the life-cycle of all individuals. GRISP contains two components namely *nine transformative investments to achieving better immunization outcomes* and *a comprehensive framework of strategies and practices for routine immunization*. http://apps.who.int/iris/bitstream/handle/10665/204500/9789241510103_eng.pdf?sequence=1
DEMAND FOR HEALTH SERVICES. Filed Guide UNICEF	The Demand for Health Services resources introduce the human-centred design as an approach to address challenges related to community demand for basic health services such as immunization. Human-centred design is a problem-solving process that begins with understanding the human factors and context surrounding a challenge. The approach provides a structured process for working directly with users (i.e. caregivers) to address demand-related challenges associated with the acceptability, responsiveness and quality of services. https://drive.google.com/file/d/1y57wVFRfzp2CiyTxT5zZXcnobh8WkfOK/view https://drive.google.com/file/d/1yt3Wrj-G8OEUUgElBn_2x2qqvBxY6Kij/view https://drive.google.com/file/d/190hmpBccoZYil-oCLULXxd60h2QVCWCf/view

Systematic literature review of the evidence for effective national immunisation schedule promotional communications: Insights into health communication European Centre for Disease and Prevention Control (ECDC) 2012	This systematic review of the evidence aims to: collate and map the types of promotional communication that have been used; assess the quality of the evaluative research reporting on these promotional communications; and assess the applicability of this evidence to immunisation policy, strategy and practice priorities. The analysis and findings are intended to provide a current status report on the evidence, and evidence gaps for good practice in national immunisation promotional communications, thus supporting countries in their communication activities for the prevention and control of communicable diseases. https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/Literature-review-national-immunisation-schedule-promotional-communications.pdf
Why Invest in Communication for Immunization: Evidence and Lessons Learned Silvio Waisbord, Heidi J. Larson 2005	This report makes a case for revitalizing investments in communication for immunization. It considers communication in a broad sense, including advocacy, social and community mobilization, and information, education, and communication (IEC) activities. It identifies communication challenges that affect the success of immunization services; offers evidence of the contributions of communication activities; identifies lessons learned, and suggests ways in which communication can continue to strengthen immunization programs. http://www.who.int/immunization/hpv/communicate/why_invest_in_communication_for_immunization_unicef_healthcommunicationspartnership_path_usaid.pdf
The elements of a strong immunization programme - and why we need to invest in them WHO 2015	This document is intended to support immunization program managers and staff in their efforts to secure sustainable funding for immunization. You can use these messages when preparing for a meeting with stakeholders or when submitting your budget requests. Define your funding gap and the expected output of investments in concrete terms. Adjust the text and use it so that it fits your funding needs. http://www.euro.who.int/__data/assets/pdf_file/0008/281528/Elements-of-a-strong-imm-prgm.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0008/292760/Elements-of-a-strong-imm-prgm-ru.pdf?ua=1 (Rus)
Realizing the Full Potential of Childhood Immunization: How Health Professionals Can Make a Difference PATH 2000	This eight-page paper on local advocacy was written with doctors, nurses, and health educators in mind. It contains many practical suggestions for grassroots initiatives supporting immunization. An Africa-specific version was published in the November 1999 issue of Africa Health magazine. This international version incorporates the insights of co-author Dr. Robert Aston, an immunization advocate from the UK. http://www.vaccineresources.org/files/CVP_Occ_Paper1.pdf http://www.vaccineresources.org/files/CVP_occ_paper1_r.pdf (Rus)
Advocacy for Immunization PATH and the GAVI Alliance 2001	This manual provides information on how to generate and maintain support for vaccination programs, including how to create messages and materials, engage policymakers, and work with the media. http://www.vaccineresources.org/files/GAVI-AdvocacyHandbook.pdf http://www.vaccineresources.org/files/GAVI-AdvocacyHandbook-Russian.pdf (Rus)

Workbook – Advocacy for sustainable funding of immunization programmes WHO 2017	WHO/Europe developed a workbook on resource mobilization to support immunization programmes in their effort to ensure sustainable funding for immunization. The workbook is accompanied by a set of immunization advocacy documents and a training package. http://www.euro.who.int/__data/assets/pdf_file/0009/276660/Workbook-ENG.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0006/291516/Workbook-RUS.pdf?ua=1 (Rus)
"A" Frame for Advocacy Johns Hopkins Center for Communication Programs	A document defining key components of public policy advocacy. https://www.k4health.org/sites/default/files/A%20Frame%20for%20advocacy%20color.pdf
Strengthening Immunization Programs: The Communication Component BASICS II, USAID 2004	46-page manual presents a comprehensive overview of the key elements of immunization communications. There also is an interesting annex focusing on an excellent project in Madagascar. https://www.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=10277&lid=3
Communication for Polio Eradication and Routine Immunization: Checklists and Easy Reference Guides WHO, UNICEF, USAID 2002	This document provides a collection of checklists that serve as a quick-reference communications and social mobilization guide on aspects of routine immunization and disease surveillance, in addition to supplementary immunization for polio eradication. The checklists are grouped into the following three sections: planning and strategies; messages and media; and monitoring and supervision. They are designed for individual countries and programs to adapt in line with their current strategies, plans, and resources. http://apps.who.int/iris/bitstream/handle/10665/67220/WHO_POLIO_02.06.pdf?sequence=1
Communication Handbook for Polio Eradication and Routine EPI UNICEF, WHO 2001	This comprehensive reference tool is intended to help program officers learn about, design, and implement effective research-driven communication programs. https://www.unicef.org/cbsc/files/polio.pdf
Preparing messages for decision-makers WHO	This document is intended to support immunization programme managers and staff in their efforts to secure sustainable funding for immunization. This document presents some guidance on what to take into account when developing messages. As inspiration, it also presents some potential motivators and barriers as well as some suggested messages. You can use the document as inspiration when developing your own messages. Be aware that you will need to tailor the messages to your national setting and context and to the stakeholder you are approaching. http://www.euro.who.int/__data/assets/pdf_file/0009/281529/Howtopreparemessagesfordecision-makers_2draft_June2016.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0011/292754/Barriers-enablers-how-respond-ru.pdf?ua=1 (Rus)
Messages: Why we need to invest in immunization WHO	This document is intended to support immunization managers and staff in their efforts to secure sustainable funding for immunization. The material consists of: • a list of good reasons to prioritize immunization; • one individual page for each good reason.

2015	http://www.euro.who.int/__data/assets/pdf_file/0003/281523/Why-need-invest-immunization.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0008/292751/Why-we-need-invest-immunization-ru.pdf?ua=1 (Rus)
Sustaining EPI: What Can Communication Do? Rasmuson M. 1990	This excellent, 17-page document explores ways that communication interventions can strengthen an Expanded Programme for Immunization (EPI). It also describes communication challenges common to immunization programs. Written in 1990, it is as relevant today as it was then. http://www.vaccineresources.org/files/Communication_for_EPI.pdf
Polio Endgame Toolkit WHO	The Polio Endgame Toolkit provides access to up-to-date information on polio endgame activities in the Western Pacific Region. The toolkit includes briefs, fact sheets, communications resources, poster infographics, training modules and recommendations. The toolkit will be updated as new information products become available. http://www.wpro.who.int/immunization/documents/polioendgame/en/
Building Trust in Immunization: Partnering with Religious Leaders and Groups UNICEF 2004	Religious leaders, with their tremendous authority at the grass roots, are key to garnering community support for broad immunization coverage. This workbook, designed for communication and programme officers and their immunization partners, provides guidelines on forging alliances on immunization with religious leaders and groups. It also offers advice on options that can be taken when confronting resistance to immunization, illustrated by success stories from three countries. https://www.unicef.org/publications/index_20944.html
Establishing and strengthening immunization in the second year of life. Practices for vaccination beyond infancy WHO, UNICEF 2018	This document provides practical guidance on establishing and strengthening immunization in the second year of life (2YL) and beyond. It also suggests ways that immunization visits during the 2YL can be used as a platform for delivery of other child health services. http://apps.who.int/iris/bitstream/handle/10665/260556/9789241513678-eng.pdf?ua=1
Communication on immunisation – Building trust European Centre for Disease Prevention and Control (ECDC) 2012	This guide highlights the importance of trust and credibility for public health organisations in order to communicate effectively on immunisation. The document aims at supporting Member States in planning and implementing communication initiatives on vaccination, by presenting an overview of the main issues that public health institutions need to consider in relation to building and maintaining trust. https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/TER-Immunisation-and-trust.pdf
Vaccine Safety Communication WHO 2016	This communication guide is intended to help expanded programme on immunization (EPI) programme managers, national regulatory authorities, health promotion personnel and healthcare providers in the Western Pacific Region, who are increasingly called upon to plan and respond to communication around vaccine safety. This guide enables planning and implementation of proactive communication actions to promote understanding of the importance of vaccines in preventing illness and preventable deaths, and raises awareness of vaccine risks and perceptions of risk. The guide also covers prompt and effective communication in response to an adverse event following immunization (AEFI) or

	any other vaccine safety concerns that threaten public trust in a vaccine and compliance with the immunization programme. http://iris.wpro.who.int/bitstream/handle/10665.1/12621/9789290617464_eng.pdf?ua=1
CIOMS Guide to Vaccine Safety Communication CIOMS 2018	The CIOMS Guide to Vaccine Safety Communication provides an overview of strategic communication issues faced by medicines regulators, those responsible for vaccination policies and programmes and other stakeholders including: (1) the launch of newly-developed vaccines for the first time to market, (2) the introduction of current or underutilized vaccines into new countries, regions, or populations, and (3) the handling of any new safety issue arising during the life-cycle of a vaccine. It presents information and examples with colour-coding for quick access to three levels of guidance and offers a CIOMS template to use to create Vaccine Safety Communication Plan. Template for strategic vaccine type- and situation-specific vaccine safety communication plans (VacSCPs) (p. 36, but also available separately *here*) https://www.wma.net/wp-content/uploads/2016/11/WEB-CIOMS-Guide-to-Vaccines-Safety-Communication-Guide-2018-2.pdf
Let's talk about protection: Enhancing childhood vaccination uptake ECDC 2016	The focus of this guide is on behaviour-related communication. Its aim is to identify ways to help healthcare providers encourage all parents to want and get their children protected by vaccination as a desired behavioural goal and outcome, particularly those in population groups whose children are currently un- and under-vaccinated. The development of the guide has included both primary and secondary research. We contacted people who are making decisions, studying, writing and advising on protective vaccinations. We interviewed them, organised focus groups, questionnaires and used other data gathering methods in an attempt to better understand their decision-making processes. We explored issues related to access to and understanding of relevant health information about vaccine-preventable diseases and risks. We sought clarity on where people obtain information, who they trust and who and what influences their vaccine-related decisions. https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/lets-talk-about-protection-vaccination-guide.pdf
HPV Vaccination: Special considerations for a unique vaccine WHO 2016	This guide offers guidance in three main areas: the first is advice on basic communication planning and implementation for immunization; the second discusses specific considerations for HPV vaccine; and the third on crisis communication. The basic elements of an immunization communication plan include: • building a cross-sectoral team; • clear programme and communication objectives; • understanding community knowledge, attitudes and practices; • SMART objectives and sensible strategies; • defined target audiences with activities and messages for each that use appropriate channels and materials; • a crisis communication plan to manage problems including adverse events following immunization; • and a monitoring and evaluation plan. http://apps.who.int/iris/bitstream/handle/10665/250279/WHO-IVB-16.02-eng.pdf?sequence=1

Vaccines for Children - A Guide for Parents and Caregivers US Food and Drug Administration	This online guide for parents and caregivers provides information on the benefits and risks of vaccination, the types of routinely administered vaccines for children, steps to take when your child is vaccinated, and common questions about vaccines. https://www.fda.gov/BiologicsBloodVaccines/ResourcesforYou/Consumers/ucm345587.htm
Template Terms of Reference for a vaccine communication working group WHO 2017	This document outlines a suggested structure and proposed contents of a Terms of Reference (TOR) for a national vaccine communication working group. Example texts for each of these elements are also provided for inspiration. Establishing a national vaccine communication working group allows you to build strong working and collaboration relations with your allies, strengthen routine communication for immunization and ensure well-coordinated and immediate response from all involved authorities to any safety event. Use the document as a starting point for discussions and for inspiration when developing a TOR for your working group. http://www.euro.who.int/__data/assets/pdf_file/0005/337496/02_WHO_VaccineSafety_SupportDoc_TOR_Proof7.pdf
Websites	
Rhizome: a collection of guidance and tools from the GPEI to help eradicate polio. *Website*	Rhizome is a collection of guidance and tools from the GPEI to help you eradicate polio. It contains tools & guidance to help you design data-driven communication strategies that help vaccinate every child. It provides hands-on guidance on: • getting to know the problem, the risk groups and their perceptions, and how to use research to refine objectives; • defining the target audience and barriers to change, developing messages and choosing channels to reach your audience; • integrating communications tactics and understanding their strengths and weaknesses, then evaluate performance. A set of templates and a how-to manual for the art and science of maximizing immunization rates through communication provides the guidance and resources you need to reach your target audience with creative and effective communication, providing guidance in three scenarios: Outbreak, Enduring Outbreak and Maintenance. https://poliok.it/
Immunization Advocacy Library World Health Organization *Website*	This web page provides links to several publications related to immunization advocacy. It includes documents on a variety of topics including how to respond to concerns about vaccination, myths and facts about immunization, and messages on cost effectiveness, vaccine safety, and why immunization investment is important. http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/communication-and-advocacy/immunization-advocacy-library
Vaccination and trust library World Health Organization	*Background document: How concerns arise and the role of communication in mitigating crisis* *Supporting documents: programme planning and coordination* *Supporting documents: crisis preparedness and response capacity*

Website	*Supporting documents: media – ongoing relations and crisis response* *Supporting documents: messaging and reaching out to the public* http://www.euro.who.int/en/health-topics/disease-prevention/vaccines-and-immunization/publications/vaccination-and-trust-library
Links to regional and global immunization data *Website*	The details of government expenditure on immunization can be used to advocate for further investment. When comparing with expenditure in other countries this argument may be further strengthened. This document provides links to regional and global immunization data which you can compare with the data from your own country. Use this document when preparing a financial profile of your immunization programme (please refer to "How to prepare a financial profile of your immunization programme" on www.euro.who.int/immunization-advocacylibrary) http://www.euro.who.int/__data/assets/pdf_file/0008/276812/Links_regional_global_immunization_data.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0004/292756/Links-regional-global-immunization-data-ru.pdf?ua=1 (Rus)
Communication toolkit on immunisation: How to increase immunisation uptake ECDC *Website*	The **materials** provided in this toolkit aim at helping healthcare providers involved in immunisation services in their conversations with parents, caregivers and patients in general. These materials, can be adapted and translated, for example, to use as hand-outs for patients to inform them on the importance of immunisation, prevention of vaccine-preventable diseases, and to address common questions and concerns they may have. https://ecdc.europa.eu/en/publications-data/communication-toolkit-immunisation-how-increase-immunisation-uptake
For Immunization Partners: Educational and Promotional Resources for Partners US Centers for Disease Control and Prevention *Website*	This web page provides educational resources and materials to help supplement vaccine conversations and outreach with parents, pregnant women, and adults, as well as healthcare professionals. Resources are divided into five categories—childhood immunization, adolescent immunization, maternal immunization, adult immunization, and influenza immunization—and include toolkits, articles, videos, fact sheets, and more. https://www.cdc.gov/vaccines/partners/
For Parents: Vaccines for Your Children US Centers for Disease Control and Prevention *Website*	This web page offers a variety of resources for parents seeking to learn more about childhood immunizations and the diseases that can be prevented with vaccines. Topics include age-specific vaccine information, immunization records and requirements, vaccine safety, and information on the 16 diseases that vaccines prevent, among others. https://www.cdc.gov/vaccines/parents/
The Value of Vaccination Parents of Kids with Infectious Diseases *Website*	This website provides information on a movement of individuals and groups who find value in vaccination, and who aim to draw attention to the benefits vaccines bring to every community. The site encourages users to share personal stories about vaccination, features videos and graphics demonstrating the positive impacts of vaccination, and provides easy-to-understand guides to the science behind vaccines and the immune system. http://valueofvaccination.org/
Voices for Vaccines	This organization advocates for sound vaccine policies and practices. It aims to provide clear, accessible, science-based information about vaccines and vaccine-

Website	preventable diseases. This organizational website provides information about the impact of vaccines, the organization, and how to support their work. https://www.voicesforvaccines.org/Home/
Vaccinate Your Family Every Child by Two *Website*	This awareness campaign is a program of Every Child by Two, an organization devoted to raising awareness of the critical need for timely immunization and to foster a systematic way to immunize all of America's children by age two. In 2015, they expanded their mission to include the importance of ensuring timely vaccination of people of all ages. This campaign website features resources and news about vaccines for pregnant women, babies and young children, preteens and teenagers, and adults. http://www.vaccinateyourfamily.org/
Vaccine Information You Need Immunization Action Coalition *Website*	This website is a comprehensive and user-friendly source of scientifically accurate and easily navigable immunization information. The site offers parents, other adults, legislators, the media, and others a one-stop shop for learning about vaccines and their importance. Much of the information on the site is organized into sections based on four age groups: infants and children; preteens; teens; and adults. It also contains a section on "Vaccine Basics" containing answers to common questions about vaccines, as well as a section providing information and resources on a range of specific diseases. http://www.vaccineinformation.org/
CDC Digital Media Toolkit: 2018-19 Flu Season *Website*	CDC's seasonal flu vaccination campaign materials are available to assist partners in communicating about the importance of vaccination. This digital toolkit includes details on events/activities, sample social media and newsletter content, graphics, web assets, and media prep material. This material is downloadable, shareable, and some of the material is customizable. https://www.cdc.gov/flu/resource-center/toolkit/index.htm
Flu Information: Your Guide to Online Flu Resources National Public Health Information Coalition *Website*	This website provides resources to help healthcare professionals communicate about influenza. It includes pandemic and seasonal influenza communications resource libraries, containing materials created by public health agencies across the United States. The libraries provide materials on prevention, vaccination, and advice for pregnant women, parents, and other targeted audiences. They include links to materials such as news releases, brochures, fact sheets, radio and television public service announcements, and websites. https://www.nphic.org/fluinfo
Articles	
Reasons Related to Non-Vaccination and Under-Vaccination of Children in Low and Middle Income Countries: Findings from a Systematic Review of the Published Literature, 1999–2009 Rainey JJ, Watkins M, Ryman TK, Sandhu P, Bo A, Banerjee K 2011	Despite increases in routine vaccination coverage during the past three decades, the percent of children completing the recommended vaccination schedule remains below expected targets in many low- and middle-income countries. This literature review of 202 relevant articles, published in Vaccine, abstracted reasons associated with under-vaccination and non-vaccination. Specifically, the authors identify immunization system issues and parental attitudes and knowledge as the main contributing factors. https://www.sciencedirect.com/science/article/pii/S0264410X11013661

Journal Article	
Beyond vertical and horizontal programs: a diagonal approach to building national immunization programs through measles elimination Walter A. Orenstein and Katherine Seib 2016 *Journal Article*	An article arguing for investment in diagonal approaches in strengthening national immunization programmes. https://www.tandfonline.com/doi/full/10.1586/14760584.2016.1165614?scroll=top&needAccess=true
Qualitative focus groups with stakeholders identify new potential outcomes related to vaccination communication Kaufman J., Ryan R., Hill S. *Journal Article*	Communication interventions are widely used to promote childhood vaccination and sustain vaccine acceptance, but communication's role in changing people's beliefs and behaviours is not well understood. To determine why these interventions work or where they fail, evaluations must measure a range of outcomes in addition to vaccination uptake. As part of a larger project to develop a preliminary Core Outcome Set for vaccination communication, we conducted a qualitative focus group study exploring how parents and health professionals perceive and experience communication encounters and what outcomes are relevant to them. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6070264/

New vaccines introduction

This chapter provides specific considerations and guidance on actions to be undertaken to support introduction on new vaccines as part of national immunization schedule. These resources provide examples of tools to consider and case studies of approaches used by countries to introduce new vaccines.

Title	Description
Field guide to qualitative research for new vaccine introduction WHO Europe 2018	Step-by-step instructions to help immunization programmes understand their target audiences before communicating about the introduction of a new vaccine. http://www.euro.who.int/__data/assets/pdf_file/0004/359878/EIW2018_FieldGuide_VaccineIntro.pdf?ua=1
New vaccine introduction: Checklist for planning communication and advocacy WHO 2017	This document proposes a simple step-wise process for planning communication and advocacy for a new vaccine introduction. It includes suggested activities for four key stakeholder groups: Health care workers Influencers Media and Public. http://www.euro.who.int/__data/assets/pdf_file/0008/337490/02_WHO_VaccineSafety_SupportDoc_NewVaccIntro_Proof8.pdf?ua=1
HPV Vaccine Communication: Special Considerations for a Unique Vaccine World Health Organization 2016	This report presents communication guidance and specific considerations for countries that plan to introduce human papillomavirus (HPV) vaccine into their national immunization program. HPV vaccine is unique for many reasons, and the report aims to offer guidance on basic communication planning and implementation for immunization, as well as to discuss specific considerations for HPV vaccine.

	http://apps.who.int/iris/bitstream/handle/10665/250279/WHO-IVB-16.02-eng.pdf?sequence=1
How to present the wider societal benefits of immunization WHO 2015	The document describes how immunization has a positive influence on issues such as child health, Human Rights, Milleneum Development Goals and economic growth. Use it as a handout or to prepare messages. http://www.euro.who.int/__data/assets/pdf_file/0020/281522/How-present-wider-societal-benefits-immunization-.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0009/292761/How-present-wider-societal-benefits-immunization-ru.pdf?ua=1 (Rus)
New Vaccine Post-Introduction Evaluation (PIE) Tool World Health Organization 2010	This post-introduction evaluation (PIE) tool provides a systematic method for evaluating the impact of the introduction of a vaccine on the existing immunization system in a country. The PIE tool is designed for immunization managers in countries that have introduced a new or underutilized vaccine. This manual consists of an overview of the PIE, a description of what needs to be evaluated and what the evaluator should be looking for, and an explanation of how to synthesize the data and present the findings. http://apps.who.int/iris/bitstream/handle/10665/70436/WHO_IVB_10.03_eng.pdf?sequence=1
Rotavirus Disease and Vaccines: Key Messages PATH 2014	This document provides PATH's key messages on rotavirus disease and vaccines. They are intended to help frame conversations, presentations, speeches, and other advocacy and communications materials. http://www.vaccineresources.org/files/PATH-Rotavirus-Key-Messages-for-Web.pdf
HPV Vaccine Lessons Learnt PATH, London School of Hygiene and Tropical Medicine 2016 *Website*	This web page provides links to a package of resources from the first comprehensive review of human papillomavirus (HPV) vaccine delivery experiences across 46 low- and middle-income countries. Highlights include key findings and lessons learned from HPV vaccination experiences across five themes—preparation, communications, delivery, achievements, and sustainability. The resources include a video, webinar recording, an interactive map of country HPV delivery strategies, and thematic briefs. http://www.rho.org/HPVlessons/
Immunization Financing: A Resource Guide for Advocates, Policymakers, and Program Managers Immunization Financing *Website*	This resource guide contains a series of briefs and country case studies on topics related to the cost and financing of national immunization programs in low- and middle-income countries. Specific topics including strategic purchasing and procurement, immunization financing legislation and regulation, and how immunization fits in the context of broader health system financing. Intended for a variety of stakeholders, from immunization advocates to government decision-makers, the guide conveys practical immunization information to readers who may not have specific technical expertise. https://www.immunizationfinancing.org/en
IPV Introduction and the Polio Endgame International Vaccine Access Center *Website*	This web page provides summaries and links to new communications materials to support the introduction of inactivated polio vaccine (IPV) and to help communicate the need for IPV introduction. The resources include case studies on IPV introduction in Albania, Nigeria, and Tunisia; a short movie about global IPV introduction; a film series on IPV introduction in Albania, Nepal, Nigeria, and Tunisia; and a guide for developing case studies and human interest stories for vaccine introduction.

Title	Description
	https://www.jhsph.edu/ivac/
Accelerating introduction of new vaccines: barriers to introduction and lessons learned from the recent Haemophilus influenzae type b vaccine experience Hajjeh R 2011 *Journal Article*	This article examines recent efforts to accelerate the introduction of Haemophilus influenzae type b (Hib) vaccines in developing countries, which resulted in a significant surge in vaccine adoption by these countries. The author states that this experience provides a strategy for new vaccine adoption with a useful model to help accelerate the uptake of other life-saving vaccines. This strategy focuses on three major areas: communications to increase awareness about the various factors needed for evidence-based decisions that meet a country's health goals; research activities to answer key questions that support vaccine introduction and long-term program sustainability; and coordination with the various stakeholders at global, regional, and country levels to ensure successful program implementation. http://rstb.royalsocietypublishing.org/content/366/1579/2827.long
Chapter 25: Education, Training, and Communication for HPV Vaccines Sherris J, Friedman A, Wittet S, Davies P, Steben M, Saraiya M 2006 *Journal Article*	The authors of this article, which is a chapter in a monograph published in Vaccine, purport that as HPV vaccines come to market, they will face education and training challenges similar to those of other new vaccines, along with HPV-specific issues. The authors argue that pharmaceutical companies, public health advocates, medical trainers, and health educators need to understand their diverse audiences and respond appropriately to the needs of each. They also suggest that they must use research-based communication strategies to convey the need for an HPV vaccine and to manage expectations about how the vaccine can, and cannot, protect women and men. (ABSTRACT ONLY) https://www.sciencedirect.com/science/article/pii/S0264410X06007341

Crisis, Emergency and Risk Communication

These resources will guide development of preparedness plans to increase countries' resilience to immunization related crises and outbreaks. They define and describe risk, crises and emergencies situations and provide strategies, guidance and tools how to manage crises and better engage with various stakeholders.

Title	Description
UNICEF communication for development support to public health preparedness and disaster risk reduction in East Asia and the Pacific: **A review** UNICEF EAPRO 2013	UNICEF commissioned in 2012 a review of its C4D programming in relation to DRR, preparedness, communicable disease control, institutional systems strengthening and community resilience, as well as programming strategies currently being shaped to reach the most-at-risk, vulnerable and marginalized communities. Structured, thematically focused and informal discussions were conducted around a range of issues linked to DRR, C4D and health systems challenges and priorities. https://www.unicef.org/cbsc/files/Communicatiln_for_development_support_to_public_health_preparedness.pdf
Communicating risk in public health Emergencies WHO 2017	A WHO guideline for emergency risk communication (ERC) policy and practice. The recommendations in these guidelines provide overarching, evidence-based guidance on how risk communication should be practiced in an emergency. The recommendations also guide countries on building capacity for communicating risk during health emergencies.

	http://apps.who.int/iris/bitstream/handle/10665/259807/9789241550208-eng.pdf?sequence=2 http://apps.who.int/iris/bitstream/handle/10665/272769/9789244550205-rus.pdf?ua=1 (Rus)
Emergency risk communication (ERC) 5-step capacity-building package WHO	WHO Regional Office for Europe launched a capacity-building package on ERC in five steps to support country development or strengthening of ERC under IHR. The five-step package is a unique, sustained, country-tailored capacity-building project in ERC. It comprises: Training; Capacity mapping; Plan writing; Plan testing; Plan adoption. The five steps engage European countries in an iterative process to develop, test and adopt national health ERC plans and to integrate them into new or existing national action plans for emergency preparedness and response under the IHR. http://www.euro.who.int/en/health-topics/emergencies/international-health-regulations/emergency-risk-communications/emergency-risk-communications-tools/national-health-emergency-risk-communication-training-package (En/Rus)
Crisis and Emergency Risk Communication CDC 2014	This manual introduces the reader to the principles and practical tools of crisis and emergency risk communication (CERC). Principles in this manual adapt (1) writings of classical rhetoricians; (2) a wealth of modern crisis, issues management, communication theory, and psychological theory; and (3) lessons learned from the real and often painful world of experience, old-fashioned trial and error. https://emergency.cdc.gov/cerc/resources/pdf/cerc_2014edition.pdf
Global Manual on Surveillance of Adverse Events Following Immunization World Health Organization 2014	Monitoring of adverse events following immunization (AEFI) is an essential strategy for ensuring the safety of vaccines. This manual provides guidance on improving the quality and efficiency of AEFI surveillance activities for managers of immunization programs, staff of national regulatory authorities, immunization service providers, staff of pharmacovigilance centers, and other stakeholders in immunization services. It shares information on the basic principles of immunization and vaccines and provides a clear understanding of the newer concepts of AEFI, establishing AEFI surveillance systems including the methodologies and tools of reporting, and investigating and performing causality assessment. For informed decision making, the manual outlines the process of making the best use of surveillance data and responding to crisis, including a communication strategy on immunization safety for the public and the media. http://www.who.int/vaccine_safety/publications/Global_Manual_on_Surveillance_of_AEFI.pdf
Vaccine Safety Events: Managing the Communications Response World Health Organization 2013	Managing a country's immunization program requires in-depth knowledge of the technical side of vaccination. Increasingly, however, program managers are also being asked to respond to communications issues caused by real or perceived vaccine-related events (VRE). This training manual provides practical, informative strategies and tools to help plan and manage a communications response following a VRE 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 VREs, including ways to support effective communication planning and management in response to vaccine safety events. http://www.euro.who.int/__data/assets/pdf_file/0007/187171/Vaccine-Safety-Events-managing-the-communications-response-final.pdf?ua=1

	http://www.euro.who.int/__data/assets/pdf_file/0010/191980/WHO0023-Vaccine_Safety_Russian_D03_FINAL.pdf?ua=1 (Rus)
Crisis and Emergency Risk Communication CDC 2002	The purpose of this is to introduce the reader to communication principles and tools as they relate to what we have called emergency risk communication. The principles in this course borrow from (1) font of classical rhetoricians, (2) wealth of modern crisis, issues management, communication and psychological theory and, (3) lessons learned from the real and often painful world of experience, old-fashioned trial and error. https://stacks.cdc.gov/view/cdc/6574/cdc_6574_DS1.pdf
Analysis of Risk Communication Strategies and Approaches with At Risk Populations to Enhance Emergency Preparedness, Response, and Recovery Meredith L., Shugarman L., Chandra A., Taylor S., Stern S., Burk E., Beckjord B., AndrewM., Parker A., Tanielian T. 2008	This one-year study presents the results of an assessment that involved review of the literature on emergency preparedness risk communication and public health messaging strategies; the compilation of educational and outreach materials for emergency preparedness communication with at-risk populations; and site visits in three states and the Washington, DC area to identify gaps in the practice of risk communication with at risk populations. https://www.rand.org/content/dam/rand/pubs/working_papers/2009/RAND_WR598.pdf
National health emergency risk communication: Capacity-mapping package - Four-core capacity method WHO 2018	ERC capacity-mapping can be considered a two-part process. The capacity-mapping tool can be used for a national "self-assessment", usually by a ministry of health and its partners. Following or in conjunction with a self-assessment, a mission to the country can further identify and link capacities in order to bridge gaps in a national ERC system. The target audiences for this capacity-mapping tool include national and subnational emergency response and communications officials in ministries of health, agriculture, emergencies, tourism and finance and responding partners in hospitals, community outreach, civil society and nongovernmental organizations (NGOs) and business sectors. http://www.euro.who.int/__data/assets/pdf_file/0004/380254/02a-erc-eng.pdf?ua=1
Risk Communication and Community Engagement for Zika Virus Prevention and Control IFRC, WHO, PAHO, UNICEF 2016	A Guidance and Resource Package for Country Offices for Coordination, Planning, Key Messages and Actions. https://www.unicef.org/cbsc/files/Zika_Virus_Prevention_and_Control_UNICEF_English.pdf
Behaviour change communication in emergencies: a toolkit UNICEF 2006	This toolkit is a resource for everyone working in emergency situations caused by natural disasters. It is designed to help programme managers from UNICEF, UN agencies, NGO partners and government personnel to prepare, plan, implement and monitor behaviour change communication initiatives supporting health, hygiene and child protection efforts in emergencies.

	https://www.unicef.org/cbsc/files/BCC_Emergencies_full.pdf
Outbreak Communication Planning Guide WHO 2008	The objective of this document is to help national authorities apply the WHO Outbreak Communication Principles to their outbreak planning and preparation activities. This document addresses specific public health objectives including: • ensuring at-risk populations have the information they need to make well-informed decisions and to take appropriate actions to protect their health and safety during an outbreak; • supporting coordination and the efficient use of communication resources among local, national and international public health partners; • providing relevant public health information to inform implicated non-health sectors; • minimizing social and economic disruption; • and, as an overarching goal before, during and after outbreaks, to maintain and build public trust in public health authorities. http://www.who.int/ihr/elibrary/WHOOutbreakCommsPlanngGuide.pdf
Outbreak communication guidelines WHO 2005	A shortlist of outbreak communication best practices to promote the public health goal of rapid outbreak control with the least possible disruption to society. http://www.who.int/csr/resources/publications/WHO_CDS_2005_28en.pdf
Effective Media Communication during Public Health Emergencies WHO 2005	The handbook describes a seven-step process to assist officials and others to communicate effectively through the media during emergencies. http://apps.who.int/iris/bitstream/handle/10665/43511/WHO_CDS_2005.31_eng.pdf?sequence=1
Seven Best Practices for Risk Communication Office for Coastal Management, NOAA, US	Best practices to improve your risk communication conversations and products. https://coast.noaa.gov/data/digitalcoast/pdf/risk-communication-best-practices.pdf
Risk Communication for Public Health Emergencies Workshop Facilitator's Guide PAHO/WHO Workshop 2010	Learning Objectives – at the end of the workshop participants will: • Understand how effective risk communication supports other public health emergency functions • Appreciate the risk communication complexity and challenge of the public health emergency environment • Understand the definition of risk communication for public health emergencies, its required core capacities, and the assessment criteria to measure and track progress in this area of work • Be able to develop a practical action plan for their organization to improve capacity for risk communication during public health emergencies https://www.unicef.org/influenzaresources/files/IHR_RC_Facilitators_Guide_SARS_PAHO_ENGLISH_Final_(1).pdf
Risk Communications for Public Health Emergencies: What to Learn from Real-life Events	Over the course of a 2-day workshop, the process to achieve the objectives included: • Presentations of cases of public health emergencies

Workshop report Asia-Europe Foundation (ASEF) 2015	• Working group discussions to analyse key elements of effective risk communications in the selected cases • A simulation exercise based on a fictional case of public health Emergency This report provides highlights of the workshop proceedings and the outcome of a simulation exercise developed by the participants of the workshop. https://www.asef.org/images/docs/150305_RiskCommsWorkshopReport_FINAL.pdf
Risk communication and public health Wuqi Qiu, Shannin Rutherford, Cordia Chu, Ayan Mao, Xiaohui Hou Global Journal of Medicine and Public Health 2016 *Journal Article*	In order to identify the role of risk communication in public health, this article will explore the literature for definitions of the terms: risk, communication and risk communication, describe the four development stages of risk communication and explain the role that risk communication plays in each stage, and will cover the principles, benefits of and barriers to effective risk communication, and the practices of risk communication in public health. http://www.gjmedph.com/uploads/VP1-Vo5No4.pdf
Risk Communication for Public Health Emergencies Glik D. 2007 *Journal Article*	This review defines crisis risk communication, traces its origins to a number of applied fields, and then shows how basic principles have become incorporated into emergency preparedness and risk communication for public health. Literature from four different disciplines that inform crisis risk communications are reviewed. These are (a) environmental risk communication, (b) disaster management, (c) health promotion and communication, and (d) media and communication studies. Current curricula and training materials are briefly reviewed. https://www.researchgate.net/publication/6579951_Risk_Communication_for_Public_Health_Emergencies
Crisis Communication in Public Health Emergencies: The Limits of 'Legal Control' and the Risks for Harmful Outcomes in a Digital Age Quinn A. 2018 *Journal Article*	More often than not seemingly applicable legal approaches are unlikely to be able to engage such methods. This is often because such measures represent activities that are purely expressive in nature and therefore not capable of imposing any binding legal or corporeal changes on individuals. Whilst some forms of soft law may pose requirements for public officials involved in such activities (e.g. codes of conduct or of professional ethics), they are not likely to offer potentially harmed individuals the chance to challenge particular communication strategies before courts or legal tribunals. The result is that public authorities largely have a free reign to communicate how they wish and do not have to have to comply with a range of requirements (e.g. relating to form and substantive content) that would in general apply to most forms of official administrative act. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5799154/
Emergency risk communication – early lessons learned during the pilot phase of a five-step capacity-building package	A pilot five-step ERC capacity-building package was launched by the Health Emergencies Programme of the WHO Regional Office for Europe in February 2017 under the IHR (2005) as a unique, sustained and country-tailored capacity-building project. The five-step package engages Member States in an iterative process to develop, test, adopt and implement national health ERC plans and integrate them into

Cristiana Salvi, Melinda Frost, Cory Couillard, Ute Enderlein, Dorit Nitzan WHO *Journal Article*	new or existing national action plans for emergency preparedness and response under the IHR (2005). http://www.euro.who.int/__data/assets/pdf_file/0009/364869/php-4-1-1207-emergency-risk-eng.pdf

Understanding and Addressing Vaccine Hesitancy

These resources help better define and understand vaccine hesitancy, understand the various determinants of vaccine hesitancy, but also how to measure them and design vaccine safety communication messages. A number of articles reflect about how to address vaccine hesitancy and strategies to engage with hesitant caregivers.

Title	Description
Responding to concerns about vaccination WHO	Just as anyone else, decision-makers may be influenced by anti-vaccination information on the internet and in the media. With this in mind, they may express concerns about vaccination, questioning its safety or necessity. You need to respond to this concern in such a way that you do not drive them away, but win them over. Below are a few tips. http://www.euro.who.int/__data/assets/pdf_file/0007/276811/Advocacy-library-Responding_to_concerns_about_vaccination.pdf?ua=1
Vaccine safety messages WHO	This document presents key messages concerning vaccine safety and adverse events following immunization (AEFI). Some supporting facts and data are also provided. http://www.euro.who.int/__data/assets/pdf_file/0007/281527/Vaccine-safety-messages.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0007/292759/Vaccine-safety-messages-ru.pdf?ua=1 (Rus)
Risk scales - fear the disease, not the vaccine WHO	This documents illustrates the risk of vaccines compared with the risk of diseases – AND the risk of the treatment used to alleviate the symptoms of diseases. Use it as a handout or to prepare messages. http://www.euro.who.int/__data/assets/pdf_file/0006/281526/Risk-Scales.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0003/292764/Risk-scales-ru.pdf?ua=1 (Rus)
Responding to myths about immunization WHO	This document provides suggested answers to some prevalent myths concerning immunization. http://www.euro.who.int/__data/assets/pdf_file/0004/281524/Advocacy-library-responding_to_myths.pdf?ua=1 http://www.euro.who.int/__data/assets/pdf_file/0005/292757/Advocacy-library-responding-to-myths-RUS.pdf?ua=1 (Rus)
How to respond to vocal vaccine deniers in public WHO	This guidance document provides basic broad principles for a spokesperson of any health authority on how to respond to vocal vaccine deniers. The suggestions are based on psychological research on persuasion, on research in public health, communication studies and on WHO risk communication guidelines.

	http://www.euro.who.int/__data/assets/pdf_file/0005/315761/Best-practice-guidance-respond-vocal-vaccine-deniers-public.pdf
Tracking Anti-Vaccine Sentiment in Eastern European Social Media Networks UNICEF 2013	This UNICEF working paper aims to track and analyse online anti-vaccination sentiment in social media networks by examining conversations across social media in English, Russian, Romanian and Polish. The findings support the assumption that parents actively use social networks and blogs to inform their decisions on vaccinating their children. The objectives of this research are: 1. To monitor social media networks, consolidate existing data and information from partners. 2. To categorize and analyse conversation themes, based on volume of discussion, influence, engagement and audience demographic as appropriate. 3. To identify influencers in the different language groups and platforms. 4. To contribute to a set of recommended strategies to address specific anti-vaccine sentiment around the various conversation themes. https://www.unicef.org/eca/sites/unicef.org.eca/files/2017-11/Tracking-anti-vaccination-sentiment-in-Eastern-European-social-media-networks.pdf
Let's talk about hesitancy: Enhancing confidence in vaccination and uptake ECDC 2016	This European Centre for Disease Prevention and Control (ECDC) Let's talk about hesitancy guide provides practical evidence-based and peer-reviewed advice for public health programme managers (PHPMs) and communicators involved with immunisation services. It identifies ways to enhance people's confidence in vaccination and addresses common issues which underlie vaccination hesitancy. PHPMs are the target audience for this guide, as they are uniquely positioned to initiate, coordinate and monitor the comprehensive system-wide action needed to address the many psychosocial determinants of hesitancy and provide support to healthcare providers in their efforts to enhance vaccination confidence and uptake. https://ecdc.europa.eu/sites/portal/files/media/en/publications/Publications/lets-talk-about-hesitancy-vaccination-guide.pdf
Vaccine hesitancy: Definition, scope and determinants MacDonald N., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	While high levels of hesitancy lead to low vaccine demand, low levels of hesitancy do not necessarily mean high vaccine demand. The Vaccine Hesitancy Determinants Matrix displays the factors influencing the behavioral decision to accept, delay or reject some oral vaccines. https://www.sciencedirect.com/science/article/pii/S0264410X15005009
Review of vaccine hesitancy: Rationale, remit and methods Schuster M., Eskola J., Duclos P., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	This paper summarizes the rationale for a SAGE review of the issue of vaccine hesitancy, its impact and ways to address it, and the convening of a Vaccine Hesitancy Working Group in March 2012 to prepare for the SAGE review. It describes the methods used and mode of operations, and advances in the relatively new field of research on vaccine hesitancy. It further elaborates and references the work conducted. https://www.sciencedirect.com/science/article/pii/S0264410X15004995
Diagnosing the determinants of vaccine hesitancy in specific subgroups: The Guide to	The Guide to Tailoring Immunization Programmes (TIP), an evidence and theory based behavioral insight framework, issued in 2013, provides tools to (1) identify vaccine hesitant population subgroups, (2) diagnose their demand- and supply-

Tailoring Immunization Programmes (TIP) Butler R., MacDonald N., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	side immunization barriers and enablers and (3) design evidence-informed responses to hesitancy appropriate to the subgroup setting, context and vaccine. https://www.sciencedirect.com/science/article/pii/S0264410X15005022
Measuring vaccine hesitancy: The development of a survey tool Larsona H., Jarrett C., Schulz W., Chaudhur M., Zhou Y., Dube E., Schuster M., MacDonald N., Wilson R., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	The SAGE Working Group developed a matrix of the determinants of vaccine hesitancy informed by a systematic review of peer reviewed and grey literature, and by the expertise of the working group. The matrix mapped the key factors influencing the decision to accept, delay or reject some or all vaccines under three categories: contextual, individual and group, and vaccine-specific. These categories framed the menu of survey questions presented in this paper to help diagnose and address vaccine hesitancy. https://www.sciencedirect.com/science/article/pii/S0264410X15005010
Strategies for addressing vaccine hesitancy – A systematic review Jarrett C., Wilson R., O'Leary M., Eckersbeger E., Larson H., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	The purpose of this systematic review is to identify, describe and assess the potential effectiveness of strategies to respond to issues of vaccine hesitancy that have been implemented and evaluated across diverse global contexts. https://www.sciencedirect.com/science/article/pii/S0264410X15005046
Strategies intended to address vaccine hesitancy: Review of published reviews Dube E., Gagnon D., MacDonald N., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	In this paper, the findings of 15 published literature reviews or meta-analysis that have examined the effectiveness of different interventions to reduce vaccine hesitancy and/or to enhance vaccine acceptance are presented and discussed. From the literature, there is no strong evidence to recommend any specific intervention to address vaccine hesitancy/refusal. https://www.sciencedirect.com/science/article/pii/S0264410X15005058
Addressing vaccine hesitancy: The potential value of commercial and social marketing principles and practices Nowak G., Gellin B., MacDonald N., Butler R., the SAGE Working Group on Vaccine Hesitancy 2015	This review examines how social and commercial marketing principles and practices can be used to help address vaccine hesitancy. It provides an introduction to key marketing and social marketing concepts, identifies some of the major challenges to applying commercial and social marketing approaches to immunization programs, illustrates how immunization advocates and programs can use marketing and social marketing approaches to address vaccine hesitancy, and identifies some of the lessons that commercial and non-immunization sectors have learned that may have relevance for immunization. https://www.sciencedirect.com/science/article/pii/S0264410X15005034

Journal Article	
Health communication and vaccine hesitancy Goldstein S., MacDonald N., Guirguis S., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	In the past two decades, several lessons learnt about effective health communication from other fields, as well as a few from immunization, have highlighted cautionary points that need to be considered as communication plans concerning vaccination and vaccine hesitancy are formulated. These points are elaborated in the article. https://www.sciencedirect.com/science/article/pii/S0264410X1500506X
How to deal with vaccine hesitancy? Eskola J., Duclos P., Schuster M., MacDonald N., the SAGE Working Group on Vaccine Hesitancy 2015 *Journal Article*	the Strategic Advisory Group of Experts (SAGE) on Immunization Working Group on Vaccine Hesitancy [1], carried out a review, and proposed a set of recommendations directed to the public health community, to WHO and its partners, and to the World Health Organization (WHO) member states. https://www.sciencedirect.com/science/article/pii/S0264410X15005071
Addressing the Vaccine Confidence Gap Larson HJ, Cooper LZ, Eskola J, Katz SL, Ratzan S 2011 *Journal Article*	This article, published in The Lancet, discusses some of the characteristics of the changing global environment that are contributing to increased public questioning of vaccines, and outlines some of the specific determinants of public trust. The authors claim that public decision making related to vaccine acceptance is neither driven by scientific nor economic evidence alone, but is also driven by a mix of psychological, sociocultural, and political factors, all of which need to be understood and taken into account by policy and other decision makers. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2811%2960678-8/fulltext
Anti-immunization Scare: The Inconvenient Facts Basser S. 1999 *Journal Article*	Dr. Steve Basser analyses the "quality of science of one particular, very public, opponent of immunisation--Dr. Vera Scheibner." Dr. Basser finds that "the gaps in her research...call into question her objectivity and cast doubts on her ability to speak as an expert witness. It should be a matter of great concern that material such as Dr Scheibner's is being promoted by groups who ostensibly argue for the right of parents to make up their own minds. How can parents be expected to do this when they are being denied access to so much information?" http://www.geocities.ws/issues_in_immunization/fearmongers/scheibner_expose.htm
A Broken Trust: Lessons from the Vaccine–Autism Wars Gross L. 2009 *Journal Article*	This article, published in PLoS Biology, discusses Sharon Kaufman's investigation into the forces fueling the growing divide between scientists and citizens, with the vaccine–autism link as her example. Kaufman aimed to understand what parents thought about risk and experts, how these attitudes shaped parents' decisions about vaccination, and what the vaccine wars might teach us about the long-term erosion of public trust in science. https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1000114
How to Manage Parents Unsure About Immunization	Guidance on addressing parents' concerns and educating them on the benefits of childhood immunization. From the *Canadian Journal of CME*.

Halperin S. 2000 *Journal Article*	https://www.ucalgary.ca/paed/files/paed/4-halperin-article3.pdf
Is Immunisation Child Protection? Finn A., Savulescu J. 2011 *Journal Article*	This article, published in The Lancet, argues that the failure of parental acceptance of safe and effective vaccination could be the biggest hurdle to realization of successful development and implementation of vaccines in the coming decades. The authors present the ethical issues related to parents refusing vaccinations for their children, with the underlying principle that children's interests need to be protected. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)60695-8/fulltext
Risk Perception Nicolai Bodemer and Wolfgang Gaissmaier 2015 *Journal Article*	We start with a definition of the concept of risk and how it differs from the concept of uncertainty. We then outline major theories, models, and mediators that influence our perception of risk. Although the models stem from different research programs, highlight different mechanisms, and are often discussed in isolation from each other, they serve as psychological explanations for how we perceive risks in our daily life https://kops.uni-konstanz.de/bitstream/handle/123456789/30875/Bodemer_0-287262.pdf?sequence=1&isAllowed=y
Strategies to increase vaccine acceptance and uptake: From behavioral insights to context-specific, culturally-appropriate, evidence-based communications and interventions Thomson A., Vallée-Tourangeau G., Suggs S. 2018 *Journal Article*	This Editorial highlights the key points from the contributing articles and their implications for designing effective communication and intervention strategies to increase vaccine acceptance and uptake. https://www.sciencedirect.com/science/article/pii/S0264410X1831140X
What is 'confidence' and what could affect it?: A qualitative study of mothers who are hesitant about vaccines Mendel-Van Alstyne J., Nowak G., Aikin A. 2018 *Journal Article*	Assessing parents' confidence in childhood vaccination and the ways in which educational materials affect confidence is needed, we sought to (1) learn how mothers who are hesitant about vaccination characterize confidence in health-related products for young children, including the recommended vaccines; (2) gain insights on what influences vaccine confidence beliefs; and (3) assess whether short, education materials affect parental confidence in childhood vaccinations. (Abstract only) https://www.sciencedirect.com/science/article/pii/S0264410X17312227
Vaccine decision-making begins in pregnancy: Correlation between vaccine concerns, intentions and maternal	Amongst pregnant Australian women we aimed to ascertain vaccine information received, maternal immunisation uptake and attitudes and concerns regarding childhood vaccination. We also aimed to determine any correlation between a) intentions and concerns regarding childhood vaccination, (b) concerns about pregnancy vaccination, (c) socioeconomic status (SES) and (d) uptake of influenza

vaccination with subsequent childhood vaccine uptake Danchin M., Costa-Pinto J., Attwell K., Willaby H., Wiley K., Hoq M., Leask J., Perrett K.P., O'Keefe J., Giles M.L., Marshall H. 2018 *Journal Article*	and pertussis vaccines during pregnancy and routine vaccines during childhood. (Abstract only) https://www.sciencedirect.com/science/article/pii/S0264410X17310691
Sharing knowledge about immunisation (SKAI): An exploration of parents' communication needs to inform development of a clinical communication support intervention Berry N., Danchin M., Trevena L., Witteman H., Kinnersley P., Snelling T., Robinson P., Leask J. 2018 *Journal Article*	The SKAI (Sharing Knowledge About Immunisation) project aims to develop effective communication tools to support primary health care providers' consultations with parents who may be hesitant about vaccinating their children. (Abstract only) https://www.sciencedirect.com/science/article/pii/S0264410X17314858
Hearts, minds, nudges and shoves: (How) can we mobilise communities for vaccination in a marketised society? Attwell K., Smith D. 2018 *Journal Article*	This commentary provides a framework for thinking aboutcommunities and vaccination. The concept of 'herd' or 'community immunity' – and hence the rationale behind mass vaccination – arises from communal interaction. Conceptions of community, therefore, are at the heart of vaccination policy and practice. Advocates of vaccination often employ 'community immunity' as a persuasive message, but this might fail to appeal to the specific target audience they are trying to reach. Different understandings of community, and different values associated with parenting, can determine whether appeals to community are compelling or fall on deaf ears. (Abstract only) https://www.sciencedirect.com/science/article/pii/S0264410X17310721
Motivational interviewing: A promising tool to address vaccine hesitancy Gagneur A., Gosselin V., Dube E., 2018 *Journal Article*	Traditional educational methods, on the other hand, have not been shown to be effective in addressing VH. Worst, some studies have shown that trying to convince vaccine hesitant parents to vaccinate their child by giving them more facts can backfire and make them even more hesitant. The need for effective strategies to tackle VH is therefore critical. We suggest that motivational interviewing (MI) is one of the most promising avenues to address the complex issue of VH. (Abstract only) https://www.sciencedirect.com/science/article/pii/S0264410X17314573

Front line workers' capacity building

This chapter contains several resources which will help build front line workers capacities to engage and communicate with caregivers and community, promote immunization, understand and address vaccine hesitancy, address rumours about vaccines and improve demand for immunization.

Title	Description
Interpersonal Communication For Immunization. Training package UNICEF Regional Office for Europe and Central Asia 2018	Research shows that the quality of the interaction between health workers and caregivers is a key factor in ensuring completion of the vaccination schedule. Frontline health workers (FLWs) are among the most influential sources of information in vaccine behavior. Health care providers, community health workers, and community-based volunteers are all part of the frontline workforce and are a crucial bridge between the communities they serve and the health services they provide and support. In this role and position, FLWs practicing good interpersonal communication (IPC) is a key to improving immunization coverage. UNICEF ECARO has developed a training package on interpersonal communication for immunization. The evidence-based training package contains a facilitator's guide, participant manual and resource materials address front line workers' bias and negative attitudes, builds their capacities to understand, identify and address vaccine hesitancy, including in vulnerable and marginalized groups and strengthens their communication and community engagement skills to increase demand for immunization. https://www.unicef.org/eca/reports/interpersonal-communication-immunization-facilitator-guide https://www.unicef.org/eca/reports/interpersonal-communication-immunization-participant-manual https://www.unicef.org/eca/reports/interpersonal-communication-immunization-presentation
Interpersonal Communication For Immunization. Global resources UNICEF	A global package of tools and resources designed to support FLWs in their immunization work, with a focus on improving their capacity to effectively use IPC to address barriers to immunization uptake and completion was developed by UNICEF HQ. The primary audience for the interpersonal communication for immunization (IPC/I) package is frontline health workers (FLWs) who provide immunization services. https://ipc.unicef.org/
Increasing Interpersonal Communication Skills for the Introduction of Inactivated Polio Vaccine (IPV) UNICEF	This manual has been designed for use in trainings to increase Interpersonal Communication skills (IPC) and knowledge related to IPV for social mobilizers and frontline health workers. https://www.unicef.org/cbsc/files/IPC-curriculum_manual-2014pdf.pdf
Roleplay: Rumours About Vaccines WHO 2002	A 20-minute exercise providing practice tools for responding to rumors about vaccines from the WHO Global Training Network. http://www.vaccineresources.org/files/Rumors_About_Vaccine_Role_Play.pdf

Training manual: Vaccine safety and false contraindications to vaccination WHO 2017	Health professionals are the single most important influence on whether individuals decide to have themselves or their children vaccinated. Therefore, information and education for health professionals are essential. The aim of this training manual is to present "state-of-the-art", authoritative, scientifically valid advice to counter common misperceptions about vaccination. http://www.euro.who.int/__data/assets/pdf_file/0009/351927/WHO-Vaccine-Manual.pdf?ua=1
The WHO course on vaccine safety basics WHO	**Module 6** of this course will help you to understand public fear and concerns, and how you can improve your communication skills on the subject of vaccine safety. https://vaccine-safety-training.org/getting-started.html
Vaccine Safety Basics: E-Learning Course WHO	This online training course aims to establish a shared understanding among professionals whose work is linked to vaccine safety issues. This may include nurses/midwives/community health workers, as well as pharmacists, medical doctors, and program or technical officers. The course covers a wide range of issues including: background information on vaccine safety issues and types of vaccines, understanding adverse events following immunization and pharmacovigilance, and the critical importance of communication to explain the risks and benefits of vaccines. https://vaccine-safety-training.org/
E-learning course: Influenza vaccination among health care workers - assess and communicate to improve uptake ECDC	This e-learning course targets people who are responsible for planning, designing, monitoring and evaluating seasonal influenza vaccination or other vaccination campaigns targeting HCWs. The first part of this e-learning course explains why influenza is a serious disease and why prevention of influenza among HCWs is important. The evidence on the benefits of influenza vaccination is important for public health decision making. The second part of the course focuses on how to assess the uptake and barriers to vaccination and practical help on how to plan a vaccination campaign. https://ecdc.europa.eu/en/news-events/e-learning-course-influenza-vaccination-among-health-care-workers-assess-and