



# REPORT OF GENERAL SESSION OF TRAINING OF TRAINERS WORKSHOP

UANTWERPEN - DELIVERABLE 5.1



*This project is co-funded by the European Union's Health Programme 2014-2020.*

**Project no.** 101018210  
**Project acronym:** IMMUNION  
**Project title:** Improving IMMunisation cooperation in the European UNION  
**Instrument:** European Union 3rd Health Programme  
**Start date of project:** 1 April 2021  
**Duration:** 24 months  
**Deliverable/milestone title:** D5.1  
**Due date of deliverable/m:** 31 August 2022 (M17)

**Organisation name of lead contractor for this deliverable/m:** University of Antwerp

**Author list:**

Name	Organisation
Greet Hendrickx	University of Antwerp
Sara Valckx	
Pierre Van Damme	
Aur�lie De Waele	



Dissemination level		
PU	Public	×
CO	Confidential, restricted under conditions set out in Model Grant Agreement	
CI	Classified, information as referred to in Commission Decision 2001/844/EC	



## DOCUMENT HISTORY

VERSION	DATE	NOTE	ISSUED BY
0.1	14 July 2022	First version	University of Antwerp
1.0	22 August 2022	Reviewed	University of Antwerp, EuroHealthNet
1.1	26 August 2022	Submitted	EuroHealthNet
1.2	27 September 2022	Re-submitted	EuroHealthNet

### Disclaimer

The content of this publication represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the European Commission and/or the European Health and Digital Executive Agency (HaDEA) or any other body of the European Union. The European Commission and the Agency do not accept any responsibility for use that may be made of the information it contains.

While the information contained in the documents is believed to be accurate, the authors(s) or any other participant in the IMMUNION consortium make no warranty of any kind about this material including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Neither the IMMUNION Consortium nor any of its members, their officers, employees, or agents shall be responsible or liable in negligence or otherwise howsoever in respect of any inaccuracy or omission herein. Without derogating from the generality of the foregoing neither the IMMUNION Consortium nor any of its members, their officers, employees, or agents shall be liable for any direct or indirect or consequential loss or damage caused by or arising from any information advice or inaccuracy or omission herein.

### Copyright message

©IMMUNION Consortium, 2021-2023. This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both. Reproduction is authorised provided the source is acknowledged.



## Table of Contents

<b>1</b>	<b>Train the Trainer session on vaccine confidence and communication ...</b>	<b>4</b>
1.1	Introduction .....	4
1.2	Train the Trainers session.....	5
1.2.1	Objective .....	5
1.2.2	Target audience .....	5
1.2.3	Practical information .....	5
1.2.4	Programme .....	5
1.2.5	Summary .....	6
<b>2</b>	<b>Content of the training and additional resources.....</b>	<b>8</b>
2.1	Introduction .....	8
2.2	Role of the HCP in the vaccination process and the importance of communication ..	8
2.3	Vaccine hesitancy in Europe .....	9
2.4	How to improve health literacy .....	10
2.5	Communication about vaccines.....	11
2.6	Tips and tricks for teaching .....	12
2.7	Questions and answers.....	12
<b>3</b>	<b>Pre- and post-training surveys .....</b>	<b>13</b>
3.1	Pre-training survey .....	13
3.2	Post-training survey.....	16
3.3	Conclusion.....	17
<b>4</b>	<b>Annexes.....</b>	<b>18</b>
4.1	Annex 1 - Attendance list .....	18
4.2	Annex 2 - Curriculum.....	20

# 1 Train the Trainer session on vaccine confidence and communication

## 1.1 Introduction

Earlier research has confirmed that healthcare providers are the most trusted source of information about vaccines for the general public ([Special Eurobarometer](#); [Wellcome Global Monitor](#)). Therefore, healthcare providers play a major role in supporting vaccination campaigns and reaching a good vaccination coverage. However, research performed under the umbrella of the EU Joint Action on Vaccination, as well as the related IMMUNION WP4 survey, has stressed that many healthcare providers do not feel confident to answer questions about vaccines and/or lack specific knowledge about vaccines.

The vast majority of healthcare providers indicate that they are willing to follow extra courses on vaccinology and would benefit from extra support (such as FAQ modules, trustworthy websites, support from the government etc.). To meet the needs of healthcare providers, WP5 of the IMMUNION project focuses on providing vaccinology training in different formats.

Specifically, WP5 lead, the University of Antwerp (UAntwerpen), has developed a **Train the Trainers Workshop** to improve vaccine confidence, focusing on knowledge and communication about vaccines. The workshop, organised online on 21 June, was held in English and open to participants from across the EU. This report summarises the outcomes and content. The EU train-the-trainers workshop will serve as the basis for 3 more tailored **country sessions** in Greece, Latvia and Romania, which will be organised in the autumn of 2022.

In parallel, UAntwerpen has also delivered/will deliver three special **vaccinology sessions** during international events, organised by members of the Coalition for Vaccination, which also aim to increase confidence and knowledge of healthcare providers on vaccines and vaccination, including healthcare providers who are not necessarily administering vaccines or confronted with vaccination/vaccine hesitancy issues on a daily basis. During these sessions, special attention is given to tailoring the session to the needs of the audience by an extended Q&A module. A report bringing together key outcomes of these sessions will be made available in early 2023, and all recordings will be published on the [Coalition website](#).

These workshops and sessions are based on an **all-in curriculum** (IMMUNION Milestone 5.1). The curriculum contains information about vaccines that (future) healthcare providers need in terms of knowledge, practical skills and communication. The curriculum was initially drafted under the EU-JAV (4.3 - UAntwerp), but has then further been revised by the IMMUNION Scientific Advisory Board, which consists of members from the Coalition for Vaccination, further improving the curriculum with a special focus on the communication module. The curriculum, also added as an annex to this report, was used to **tailor** the general/country sessions and the special vaccinology sessions at international events to the needs of the targeted healthcare providers.

## 1.2 Train the Trainers session

### 1.2.1 Objective

The objective of the Train the Trainer session is to support trainers of healthcare providers and health students by offering training on vaccine confidence and communication. The training is designed to provide knowledge and tools to trainers, who can then carry this content forward in their trainings of healthcare providers and/or healthcare students, which will result in better knowledge and confidence of (future) healthcare providers to communicate about vaccines and to deal with questions about vaccination.

### 1.2.2 Target audience

The target audience for the training are trainers who are involved in teaching (future) healthcare providers, specifically:

- Teachers who are currently training any type of (future) healthcare provider who are or will be involved in the vaccination process (nurses, midwives, pharmacists, GPs, pediatricians...)
- On the topic of vaccines/vaccination
- From all EU member states

### 1.2.3 Practical information

Language: English

Timing: 21/06/2022, 13-16h CEST

Format: online meeting

Registration was free of charge, but required

### 1.2.4 Programme

**Chairs : Sara Valckx & Aurélie De Waele, University of Antwerp**

**Introduction (10min)**

Alison Maassen

*EuroHealthNet*

**Role of the HCP in the vaccination process and the importance of communication (20min)**

Brett Craig

*WHO Euro*

**Vaccine hesitancy in Europe (20min)**

Greet Hendrickx

*University of Antwerp*

**How to improve health literacy (20min)**

Pierre Van Damme, including materials from ECDC & WHO

*University of Antwerp*

**Communication about vaccines (75min)**

- How to communicate about vaccines (45min)
- Communication exercises (30min)



Philipp Schmid  
*University of Erfurt, JITSUVAX*

**Tips and tricks for teaching** (20min)

Max Willie Georgi  
*EPSA training coordinator*

**Q&A** (15min)

**Closing**

## 1.2.5 Summary

An invitation campaign was set up to invite trainers to the Train the Trainers session, using different networks (Coalition for Vaccination, academia, associations, cross-project working groups) and outreach tools (email, newsletter, website, social media). An extra effort was made to invite trainers from the countries that will organize a country session (Greece, Latvia, Romania). We reached 106 registrations, of which 66 trainers actually attended the training (i.e. 66 accounts logged into the meeting, not accounting for people who were following together from one account). At least 39 participants originated from Greece (13), Latvia (14) and Romania (12).

The session started with an introduction by Project coordinator Alison Maassen, situating the Train the Trainers initiative within the broader scope of the IMMUNION project.

Brett Craig (WHO Euro) explained the role of the healthcare provider in the vaccination process, emphasizing that healthcare providers are the most trusted source for information about vaccination and that a recommendation from a healthcare provider is a strong facilitator of vaccine uptake.

Greet Hendrickx (UAntwerp) explained the definition of vaccine hesitancy, the concept of the vaccine hesitancy continuum and the determinants of vaccine hesitancy. It was further stressed that vaccine hesitancy is not new and is a universal health threat. After that, data on vaccine confidence in Europe were discussed. Finally, the impact of misinformation and social media was discussed.

Pierre Van Damme (UAntwerp) provided data on how healthcare providers influence vaccine uptake and what difference they can make. The need for training of healthcare providers was discussed based on data from two EU JAV surveys, showing that (1) many healthcare providers do not feel confident to answer questions about vaccines, (2) there is a lack of vaccinology in their basic training and (3) the vast majority of healthcare providers is willing to follow extra training. The all-inclusive curriculum, developed in a cross-project collaboration (EU JAV – IMMUNION) was discussed and ways to increase vaccine literacy were suggested (including two videos from WHO and ECDC, detailing where healthcare providers can find useful information).

The largest part of the training was taken up by the module on communication about vaccines, given by communication specialist Philipp Schmid (University of Erfurt, JITSUVAX). This session consisted of theory, many practical examples and some live exercises. The session first focused on **countering science denialism**, making a distinction between the general public or private interactions as a target group. Techniques such as topic rebuttal and technique rebuttal were explained and exercised. The second part of the session explained **debunking** as a way to combat misinformation by using for example the sandwich technique (fact – warn about myth – explain fallacy – fact) and highlighting the importance of the sender.

The third part of the session discussed **pro-active prevention**, as a way to decrease vulnerability to misinformation (inoculation). In the last part, **motivational interviewing** was discussed as the most important technique to improve vaccine confidence in private interactions (scientific consensus, recommendations of the doctor, community protection).

Max Willie Georgi (EPSA) provided tips and tricks for teaching, by using 3 different models: (1) to set learning goals, (2) to have a structured session and (3) to engage the audience.

Many participants actively took part in the exercises provided by Philipp Schmid (not available in the recording). After the session, a Q&A was organized. Several issues were discussed, such as the limited time healthcare providers have to look up information, communication about vaccines being a team effort, how to respectfully debunk misinformation from other healthcare providers and how to use storytelling to support data.

The pre- and post-training surveys showed that overall, the training was perceived very positively. The right target audience attended the training. A total of 96,88% of the attendees felt more confident to train other healthcare providers after participating in the training. Specifically, participants on average recorded an increase in confidence of 22,53% (confidence before the training – 62.19%; confidence after the training – 84.72%). Please note that not all participants filled out the pre- and post-training surveys. For more information about the pre- and post-training survey, see section 3.

*All presentations and materials are available on the website of the Coalition for Vaccination: [Education and Reports / IMMUNION \(coalitionforvaccination.com\)](https://coalitionforvaccination.com)*

## 2 Content of the training and additional resources

All speakers consented to sharing their presentation and video footage as training materials.

After the training, all participants have been provided with access to a **background document**. The purpose of this background document is to provide information about the training and other resources that may be used by the trainers when preparing for a future training. All speakers were also asked to provide additional resources that they deemed interesting for the participants.

### 2.1 Introduction

**Speaker:** Alison Maassen (EuroHealthNet)

#### **Speaker's information**

Alison Maassen is Project Coordinator of the IMMUNION project (2021-2023), and Programme Manager at EuroHealthNet. Alison supports EuroHealthNet's overall management activities, specifically the development and implementation of EuroHealthNet's operational objectives and business plan. Alison also leads EuroHealthNet's contributions to the RIVER-EU project ("Reducing Inequalities in Vaccine uptake in the European Region – Engaging Underserved communities") as the Communication and Dissemination Work Package lead. She holds an MSc in Public Health (Health Promotion) from the London School of Hygiene and Tropical Medicine. She previously worked for the Sabin Vaccine Institute in Washington DC, where she was a founding member of the Secretariat of the International Association of Immunization Managers (now the "[Boost Community](#)").

#### **Highlights**

Alison Maassen provided an overview of the IMMUNION project and its activities, with a specific emphasis on the training activities organized in WP5 of the project, in which the Train the Trainer session is situated.

#### **Resources**

- [IMMUNION \(coalitionforvaccination.com\)](https://coalitionforvaccination.com)
- [Vaccine communication toolbox | IMMUNION \(coalitionforvaccination.com\)](#)
- [Strengthening Education And Knowledge On Immunization \(SEKI\) - Home](#)
- [Council Recommendation of 7 December 2018 on strengthened cooperation against vaccine-preventable diseases \(europa.eu\)](#)

### 2.2 Role of the HCP in the vaccination process and the importance of communication

**Speaker:** Brett Craig (WHO Euro)

#### **Speaker's information**



Brett Craig is a technical officer in the Vaccine-Preventable Diseases and Immunization Programme in the WHO Regional Office for Europe, specifically working on vaccine acceptance and demand. He has been primarily coordinating in-country support on COVID-19 vaccine acceptance and demand activities for the Region. Brett has a background in social science research, social and behaviour change and communication and has experience with gathering insights and designing interventions, including trainings, in the areas of new vaccine introduction and provider-patient communication in primary healthcare settings.

### Highlights

Brett Craig explained the role of the healthcare provider in the vaccination process. It was explained that healthcare providers are the most trusted source for information about vaccination and that a recommendation from a healthcare provider is a strong facilitator of vaccine uptake. Trust in the healthcare provider, as well as tailored recommendations for the specific situation of the patient are important drivers. The continuum of vaccine hesitancy was explained, as well as what is needed to move individuals towards vaccine acceptance. The role healthcare providers play in communicating risks and benefits and the principles to do this were explained.

### Resources

- [Communicating with health workers about COVID-19 vaccination \(who.int\)](#)
- [Communicating with patients about COVID-19 vaccination \(who.int\)](#)

## 2.3 Vaccine hesitancy in Europe

**Speaker:** Greet Hendrickx (University of Antwerp)

### Speaker's information

Greet Hendrickx (Ir, MSc) has worked as a senior project coordinator at the University of Antwerp within the Centre for the Evaluation of Vaccination (VAXINFECTIO) since 2007. She is involved in several international projects on vaccine hesitancy, training and communication, such as the EU Joint Action on Vaccination, ECDC projects, IMMUNION and the Vaccine Confidence Project. She furthermore supports all activities of the Viral Hepatitis Prevention board ([www.vhpb.org](http://www.vhpb.org)).

### Highlights

Greet Hendrickx gave an overview of vaccine hesitancy in Europe. She first explained the definition of vaccine hesitancy, the concept of the vaccine hesitancy continuum and the determinants of vaccine hesitancy. It was further stressed that vaccine hesitancy is not new and is a universal health threat. After that, data were shown on the state of vaccine confidence in Europe over time (vaccine confidence project) and data on vaccine confidence in pregnant women. Finally, the impact of misinformation and social media was discussed.

### Resources

- [Strategic Advisory Group of Experts on Immunization \(who.int\)](#)
- [Ten threats to global health in 2019 \(who.int\)](#)
- Vaccine confidence project: [The Vaccine Confidence Project](#)
  - [State of Vaccine Confidence in the EU and the UK \(2020\)](#)
  - [The State of Vaccine Confidence in the EU: 2018](#)
- Larson HJ, Clarke RM, Jarrett C, Eckersberger E, Levine Z, Schulz WS, Paterson P. [Measuring trust in vaccination: A systematic review](#). Human vaccines & immunotherapeutics. 2018 Jul 3;14(7):1599-609.



- Sallam M. COVID-19 [Vaccine Hesitancy Worldwide: A Concise Systematic Review of Vaccine Acceptance Rates](#). Vaccines (Basel). 2021 Feb 16;9(2):160
- MacDonald NE; SAGE Working Group on Vaccine Hesitancy. [Vaccine hesitancy: Definition, scope and determinants](#). Vaccine. 2015 Aug 14;33(34):4161-4

## 2.4 How to improve health literacy

**Speaker:** Pierre Van Damme (incl. materials from ECDC & WHO Euro)

### Speaker's information

Prof. Dr. Pierre Van Damme is vice-dean and a full professor at the Faculty of Medicine and Health Sciences at the University of Antwerp. He is the director of the Centre for the Evaluation of Vaccination (CEV), and former chair of the Vaccine & Infectious Disease Institute (VAXINFECTIO) at the University of Antwerp. VAXINFECTIO is a consortium of four research groups within the university and is recognized as a 'Centre of Excellence' that functions as a WHO Collaborating Centre for the WHO European Region. The CEV is also the European Hub of the Vaccine Confidence Project. Besides clinical studies, Pierre's research interests focus on vaccine confidence and education. In that regard, Pierre is involved in many national and international vaccine educational assignments for health students and in-service healthcare providers and also in multiple international research projects on vaccine confidence and communication. A few examples are the yearly Valentine Symposium, the annual Summer School on Vaccinology, lectures for specific target audiences, being guest professor in several courses on vaccination across Europe and the Vaccine Confidence Project. He authored more than 400 peer reviewed publications.

### Highlights

Pierre Van Damme further emphasized that healthcare providers indeed play an important role in vaccine confidence, by providing data on how healthcare providers influence vaccine uptake and what difference they can make. For example, during the COVID-19 pandemic, healthcare providers remained the most trusted source for reliable information on COVID-19 vaccination, and patients generally followed the advice of their doctor. However, healthcare providers can experience vaccine hesitancy themselves (due to little or conflicting information about vaccines), emphasizing the need of healthcare providers for correct information. Data from the EU JAV Vaccine Training Barometer showed that many healthcare providers do not feel confident to answer questions about vaccines, mainly due to a lack of vaccinology in their basic training (data from EU JAV student survey). Importantly, the vast majority of healthcare providers is willing to follow extra training. The all-inclusive curriculum, developed in a cross-project collaboration (EU JAV – IMMUNION) was discussed and ways to increase vaccine literacy were suggested. Two videos were shown from WHO and ECDC, detailing where healthcare providers can find useful information.

### Resources

- EU Joint Action on Vaccination : <https://eu-jav.com/>
- EU Joint Action on Vaccination leaflet : [EODY EU-JAV-Leaflet-2022.pdf](#)
- [Eurobarometer 488](#) – Europeans' attitudes towards vaccination (2019)
- [Eurobarometer 494](#) – Attitudes on vaccination against COVID-19 (2021)
- [Eurobarometer 505](#) - Europeans' attitudes towards vaccination (2022)
- [EU JAV - Curriculum | Centre for Evaluation of Vaccination | University of Antwerp \(uantwerpen.be\)](#)
- [ECDC Virtual Academy](#)



- European Center for Disease Prevention and Control (John Kinsman – expert social and behaviour change):
  1. <https://www.ecdc.europa.eu/en/publications-data/lets-talk-about-protection-enhancing-childhood-vaccination-uptake>
  2. [Let's talk about hesitancy. Enhancing confidence in vaccination and uptake. A practical guide for public health programme managers and communicators \(europa.eu\)](#)
  3. <https://www.ecdc.europa.eu/en/publications-data/vaccine-hesitancy-among-healthcare-workers-and-their-patients-europe>
  4. <https://vaccination-info.eu/en/about-us>
  5. [Questions and answers on COVID-19: Vaccines \(europa.eu\)](#)
- WHO Regional Office for Europe (Brett Craig – Technical officer vaccine preventable diseases and immunization program WHO Euro): [COVID-19 vaccines and vaccination explained \(covid19infovaccines.com\)](#)
- Dubé E, Laberge C, Guay M, Bramadat P, Roy R, Bettinger J. [Vaccine hesitancy: an overview](#). Hum Vaccin Immunother. 2013 Aug;9(8):1763-73. doi: 10.4161/hv.24657
- [Summerschool on vaccinology](#)

## 2.5 Communication about vaccines

**Speaker:** Philipp Schmid (University of Erfurt, JITSUVAX)

### Speaker's information

Dr. Philipp Schmid is psychologist and postdoctoral researcher working for the Horizon2020 project “Jitsuvax“ at the University of Erfurt, Germany. He studies the psychology of science denialism and health misinformation and aims to support people's informed decision making in health, for example, in vaccination decision making. He applies a persuasion psychology perspective to understand the impact of misinformation in health communication and to develop and evaluate promising interventions. He is the first author of the WHO guidance document on “How to respond to vocal vaccine deniers in public” and a co-author of the Debunking Handbook 2020 and the Covid-19 Vaccine Communication Handbook. Updates of his work can be followed at Twitter: @PhilippMSchmid

### Highlights

The largest part of the training was taken up by the module on communication about vaccines. This session consisted of theory, many practical examples and some exercises. Practical examples were cut from the video, to allow participants to actively engage in the exercise without holding back.

The session first focused on **countering science denialism**, making a distinction between the general public or private interactions as a target group. Techniques such as topic rebuttal and technique rebuttal were explained and exercised.

The second part of the session explained **debunking** as a way to combat misinformation by using the sandwich technique (fact – warn about myth – explain fallacy – fact) and highlighting the importance of the sender.

The third part of the session discussed **pro-active prevention**, as a way to decrease vulnerability to misinformation (inoculation).

In the last part, **motivational interviewing** was discussed as the most important technique to improve vaccine confidence in private interactions (scientific consensus, recommendations of the doctor, community protection).

### Resources



- WHO Guidance Document on How to respond to vocal vaccine deniers: [Vocal-vaccine-deniers-guidance-document.pdf \(who.int\)](#)
- Debunking Handbook: [Debunking Handbook 2020 | Center For Climate Change Communication](#)
- COVID 19 Vaccine Communication Handbook: [The COVID-19 Vaccine Communication Handbook - HackMD](#)
- Key scientific publication - The psychological drivers of misinformation belief and its resistance to correction: [The psychological drivers of misinformation belief and its resistance to correction | Nature Reviews Psychology](#)
- Key scientific publication - Effective strategies for rebutting science denialism in public discussions: [Effective strategies for rebutting science denialism in public discussions | Nature Human Behaviour](#)

## 2.6 Tips and tricks for teaching

**Speaker:** Max Willie Georgi (EPSA training coordinator)

### Speaker's information

Max Willie Georgi is a Pharmacist from Berlin Germany. He studied pharmacy in Jena from 2014 to 2019 and during his studies he became active in the national and international pharmacy students associations BPhD and EPSA. In 2018 he graduated from a Training New Trainers Event and has been active as a Soft Skill Trainer mostly for pharmaceutical and medical students in Europe. In 2021 he was training professionals as part of the CTIS Master Trainers Programme of EMA. He is currently working for the German Start Up Blue Health Group.

### Highlights

Max Willie Georgi presented tips and trick for teaching, by using 3 different models: (1) to set learning goals, (2) to have a structured session and (3) to engage the audience.

### Resources

- [Home - EPSA \(epsa-online.org\)](#)

## 2.7 Questions and answers

The expert panel, consisting of the speakers, discussed the following topics raised by the audience:

- One of the challenges is that healthcare providers only have **limited time** to devote to look for information. An additional role of professional organizations could be to offer training materials, tailored to the needs of the first line healthcare providers (narrowing down information to most important issues, relevant for a specific target group, translated in the native language).
- Healthcare providers are the most trusted source of information about vaccines, but do patients actually ask their questions? Should healthcare providers **proactively speak about vaccines**? Being proactive is key in motivational interviewing, i.e. initiating a dialogue with people in which the recommendations can take place by asking open questions is key.
- Communicating about vaccines should not be done solely by the healthcare providers, but should be a **team effort**. In that regard, all members of the team should be properly trained. A lot of training materials, especially for communicating, are applicable to a wider audience and not only healthcare providers.



#	Answer	%	Count
1	Yes	75.00%	27
2	No	25.00%	9
	Total	100%	36

*Do you feel confident to train healthcare providers on the topic of vaccine communication?  
Y/N/sometimes*

#	Answer	%	Count
1	Yes	44.44%	16
2	No	19.44%	7
3	Sometimes	36.11%	13
	Total	100%	36

*On a scale from 0-100%, how confident do you feel?*



*Does your current knowledge about vaccination originate from your standard education, or from extra courses/workshops/experience that you attended after your standard education?*

- *Standard education*
- *Extra course or workshop*
- *Experience*
- *Other / None of the above*



## 3.2 Post-training survey

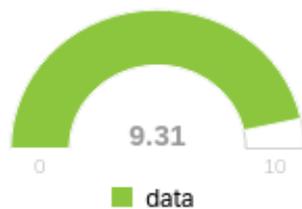
There was a total of 42 responses. The original data of the surveys can be made available upon request. Below, you find the questions of the survey and a summary of the answers by the participants.

*You recently joined us for the IMMUNION Train-the-Trainers workshop (21/06/2022). We hope you enjoyed the training and we would be very grateful if you could fill out the following questions to evaluate the workshop. Filling out the survey will take less than 1 minute of your time.*

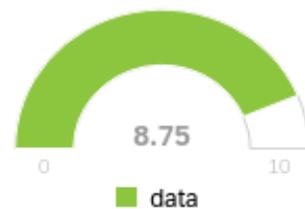
*On a scale from 1-10, how would you evaluate the following items with regard to the Train-the-Trainers workshop? (10 = best score)*

- *Content of the workshop*
- *Timing of the workshop (13-16h)*
- *Duration of the workshop (3h)*

Content of the workshop



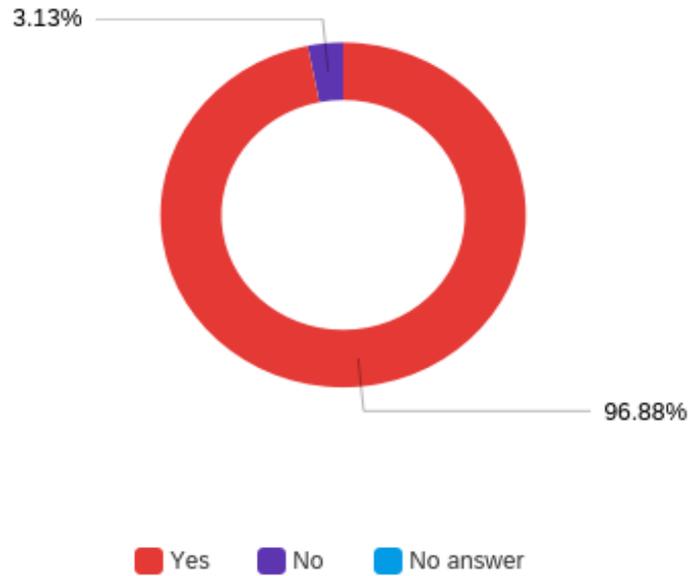
Timing of the workshop (13-16h)



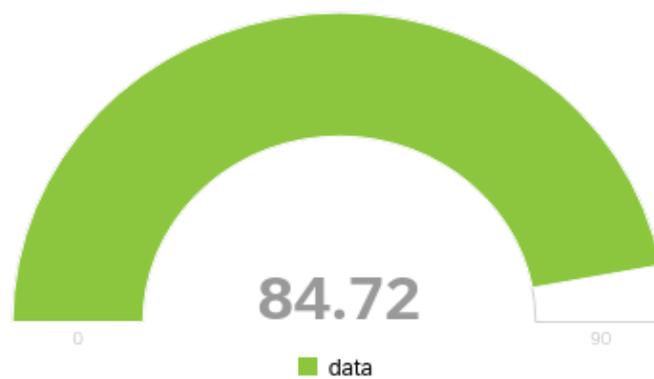
Duration of the workshop (3h)



*After following the Train-the-Trainers workshop, do you feel MORE confident to train healthcare providers on the topic of vaccine communication? Y/N/no answer*



On a scale from 0-100%, how confident do you feel?



Was there anything missing in this training to fully meet your expectations?

In Summary to this question: Overall, the participants were very positive about the training. Some participants indicated they would have liked more exercises, interactive practice questions, more practical examples and less theory.

Thank you for joining us during the Train-the-Trainers workshop and for filling out both the pre- and post-workshop survey. The recording of the workshop will be available soon at the Coalition for Vaccination website: IMMUNION ([coalitionforvaccination.com](http://coalitionforvaccination.com)).

### 3.3 Conclusion

Overall, the training was perceived very positively. The right target audience attended. Based on the pre- and post-training surveys, 96,88% of the attendees feel more confident to train other healthcare providers after participating in the training. Specifically, participants on average recorded an increase in confidence of 22,53% (confidence before the training – 62.19%; confidence after the training – 84.72%). Please note that not all participants filled out the pre- and post-training surveys.

## 4 Annexes

### 4.1 Annex 1 - Attendance list

A total of 66 trainers attended the training, of which 12 from Romania, 14 from Latvia and 13 from Greece (39 from the collaborating countries in total). Please note that the number of participants was likely higher: we were unable to include participants that were following the training ‘together’ in the same room but logging in with one account only, because we only have information from the account that logged into the meeting.

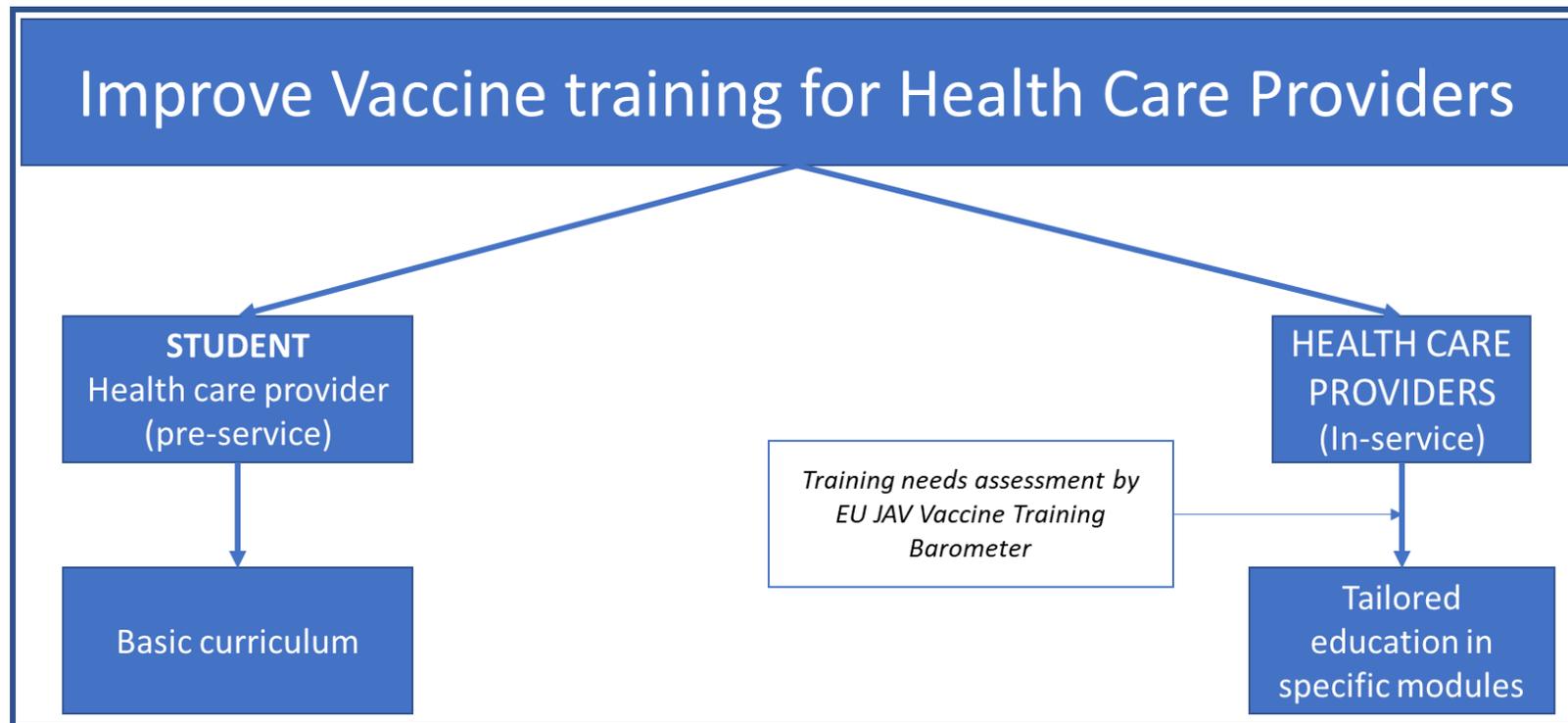


## 4.2 Annex 2 - Curriculum



# Curriculum Vaccines and Vaccination

Health Care Providers\* Heath care Students



Health Care providers\*: Nurses, Midwives, Pharmacists, Medical doctors and all other persons and involved in all facets of vaccination from the administering, counselling, to organising vaccination



This project is co-funded by the European Union's Health Programme 2014-2020.

# Curriculum Vaccines and Vaccination

## Health Care Providers \* Heath care Students

Module		Target group	Minimum Content Basic Curriculum	MAXIMUM content In depth Education	Learning outcome
	Topic	<b>STU</b> (student/ pre service) <b>HCP</b> (Health care provider/ In-service)	<i>This represents the minimum material that all trainers/curriculum managers should include in STU/HCP training, to be presented in the format and order most suitable to the students' existing knowledge and needs</i>	<i>This represents material which may be presented additionally to STU/HCP, depending on existing knowledge of students (based on assessment) and their anticipated role in delivering vaccines.</i>	
Rationale, context and history of	History	STU	Vaccines in their historical perspective		Learn from the past to better answer questions about vaccines and understand the context of vaccinology
		STU/HCP	historical impact of vaccine-preventable diseases		
	Context	STU/HCP	The rationale for implementing immunisation programmes		
		STU/HCP	Concepts of control, elimination and eradication related to vaccine-preventable diseases in historical		

			perspective, including the importance of herd immunity		
		STU/HCP		Long term implications of vaccine programmes	
		STU/HCP		“One Health” approach ( <u>One Health (who.int)</u> )	
	<b>Definitions</b>	STU/HCP	List of different key-words + explanation		Understand conversation about all topics of vaccines and vaccination
	Stakeholders	STU	Who is involved		Knowing all stakeholders and their role in the vaccination process
		STU/HCP	Role of all stakeholders in the vaccination process focusing on the health care providers		
		STU/HCP		National/region legislations, Professional guidelines and directives: <ul style="list-style-type: none"> <li>- CanMEDS Physician Competency Framework</li> </ul> EU directive 2013/55/EC (EFN Competency Framework)	
<b>Vaccine Immunology and</b>	<b>Immune system</b>	STU	Introduction to the Immune System		Explain what the role is of the immune system to people interested in vaccination
		STU/HCP	Compare innate and adaptive immunity		
		STU/HCP	State the functions of B-cells and T-cells		
	<b>Immune response</b>	STU/HCP	The role of antibodies and antigens		Explain the role of the immune system after vaccination
		STU/HCP	Vaccine-induced vs. naturally gained immunity		

		STU/HCP	Immune response to a vaccine	Immune response to innovative vaccines (incl Therapeutic vaccines)	
		STU/HCP	List conditions that affect the immune response		
		STU/HCP	Assessment of the capacity of the immune system		
		STU/HCP	Primary and secondary immune response (booster)		
		STU/HCP	Vaccines and immunological memory; how long does a vaccine protect against a vaccine-preventable disease		
		STU/HCP		Immune system of new-borns, pregnant women and elderly	
		STU/HCP		The role of maternal antibodies	
		HCP		Immunology and cancer	
		HCP		Mucosal immunity	
		HCP		Interactions between the immune system and microbiota	
		STU/HCP	Key words/ key abbreviation list		

<b>Key aspects</b>	<b>safety,</b>	Vaccine	STU	Definition of a vaccine		Explain the different types of vaccines and their composition – the importance of intervals of schedules
			STU/HCP	Prophylactic and Therapeutic vaccines		
			STU/HCP	The components and composition of vaccines, incl. vaccine adjuvants, and explain their function		
			STU/HCP		In dept, the role of the different adjuvants	
			STU/HCP	different types of vaccines		

		STU/HCP	Co-administration of vaccines and importance of intervals between vaccines/schedules		
		HCP		Switching between vaccines of different manufacturers	
Side-effects and limitations		STU/HCP	Expected side-effects per type of vaccine, limitations and non-specific effects		Identify and explain possible side effects and contra indications of the different vaccines
		STU/HCP	Assessment of causal relationships between vaccines and side-effects		
		STU/HCP	Contraindications for each type of vaccine		
		STU/HCP	Vaccination before pregnancy (child wish), during pregnancy and during breastfeeding		
Vaccine development		STU/HCP	<p>The stages in vaccine development, including quality management:</p> <ul style="list-style-type: none"> <li>○ discovery,</li> <li>○ preclinical testing,</li> <li>○ process development,</li> <li>○ manufacturing,</li> <li>○ clinical development,</li> <li>○ immune response analysis,</li> <li>○ regulatory affairs,</li> <li>○ activity outsourcing</li> <li>○ GMP, ICH Guidelines of Good Clinical Practice</li> </ul>		You can answer questions of patients (laymen) on the development of vaccines
		STU/HCP	Clinical Vaccine trials – Why, When, how		

	HCP		difference between pharmaco-vigilance (after authorisation) and clinical trial information	
	STU/HCP		Funding sources for vaccine development and research	
	STU/HCP		Criteria of the vaccine industry for the choice of developing a new vaccine; Go / no-Go in the vaccine development process	
	STU/HCP	The role of animal science in vaccine development		
Vaccine safety and quality	STU/HCP	Procedures of safety control and monitoring of efficacy: difference between pharmaco-vigilance (after authorisation) and clinical trial information		Explain how safety of vaccines can be secured
	STU/HCP	Role of regulatory agencies in vaccine testing and licensure		
Vaccine manufacturing	STU/HCP	List Vaccine manufacturers		Explain the role of industry in the vaccination process
	STU/HCP		The importance of GMP in production of vaccines	
	STU/HCP		Role of vaccine industry for meeting global needs; Globalisation of vaccine production	
	HCP		Vaccine Manufacturing	
	STU/HCP		Explain procedures related with emergency use authorization	
	STU/HCP		Vaccine availability issues -out of stock issues	

<b>Vaccine preventable diseases</b>	Disease epidemiology	STU/HCP	the epidemiology and pathology (nature, frequency, infection, transmission, effects, incubation, symptoms, complications, surveillance, mutations), incidence, prevalence, burden of disease, degree of endemicity for each disease		Explain the severity of the vaccine preventable disease (in your country)
		STU/HCP		Pathogen variability and host-pathogen interactions	
		STU/HCP	The current prevalence and/or incidence of each disease (in your country)	The current prevalence and/or incidence of each disease, in Europe and on a global scale	
			Disease prevention and management (outbreak management) – how to prevent spread of disease		
	Vaccine strategy	STU	The importance of pathogens for vaccination strategies		Explain why vaccines are recommended or mandatory for certain people in your country (region)
		STU/HCP	The population at risk for each disease; elaborate on immune compromised individuals, travellers, healthcare personnel, different age groups, pregnant women, occupational risk groups, patient risk groups, ...		
		HCP		Preventive measures can be taken for each disease	
		STU/HCP	Historical impact of vaccination on the epidemiology and the burden of disease of the relevant diseases.		

	Source of information	STU/HCP	sources of information about the diseases, epidemiology and their vaccines / list (local) reliable sources for vaccine information		Know where to find information on vaccine preventable disease and vaccines
Immunization policy and schedules	Infection Control	STU/HCP	infections spread; outbreaks and control		Explain how prevention can stop the spread of a disease and why prevention activities including vaccines are installed.
		STU/HCP	Herd immunity and its importance		
		HCP (STU)		why mathematical modelling of diseases is used and how it is a tool in analysing vaccine policy options	
		STU/HCP		The role of economic evaluation of a vaccination programme	
		STU/HCP		Funding of vaccination programs and vaccines , including cost-effectiveness/cost-benefit	
	Vaccine policy	STU/HCP	The different factors and stakeholders involved in evidence based policy decisions		You can explain which stakeholders are involved in the vaccination policies that affects the person who asked the question and how decisions are taken
		STU/HCP	How national schedules are defined; which vaccines are part of routine immunization schedules and which vaccines are recommended additionally		
		STU/HCP		Country specific immunization program management	

	STU/HCP	The organisation and role of disease surveillance systems		
	STU/HCP	Legislation – ethical issues on mandatory vs voluntary vaccination; Should we enforce mandatory vaccination?		
	STU		How to develop a new program of immunization	
Vaccination coverage/ monitoring	STU/HCP	Vaccination monitoring – Immunization reporting system		Explain the success or failure of the vaccination program
	STU/HCP		Why and how to document a vaccination correctly in all relevant records	
	STU/HCP	The role and importance of vaccination coverage data		
	STU/HCP	Name factors that influence immunisation coverage		
	STU/HCP		Success stories in under-served populations (migrants, prison, special religious groups ...) and how to follow up migrant populations (tailored immunization programs)	
	STU/HCP		Historical changes in national vaccination programs	
	STU/HCP		Differences in access to vaccination in different countries and on a global level	
STU/HCP	How immunisation programmes are monitored and evaluated (importance of post-vaccination surveillance, how to record vaccine related adverse effects)			

		STU/HCP		How to Access and use current vaccine schedules, deal with variations and find their updates	
		STU/HCP		Catch-up campaigns, vaccine registration, outbreak response and vaccination policy towards special populations	
		HCP	Vaccination coverage by age for vaccine-preventable-diseases such as measles, flu, HPV and COVID-19		
<b>Future perspectives</b>	New Vaccines	STU/HCP	List new target diseases		Explain what vaccines can be expected in the future
		STU		Processes of early clinical development	
		STU/HCP	Which vaccines are in the pipeline		
		STU/HCP		New Therapeutic vaccines	
	New administration techniques	STU/HCP	New ways of administration		Knowing which new techniques will be available soon.
		HCP		Current research on components and techniques, eg. Vaccinomics: the future of vaccinology?	
		HCP		Current developments for HIV, dengue, malaria, hepatitis C, ...	
		HCP		Fighting co-infection by vaccination	
		STU		Education and formation in vaccinology: new methods	

<b>Understanding, active listening and communication</b>	<b>Understanding behaviour and barriers &amp; active listening</b>	STU/HCP	Determinants of vaccine hesitancy/acceptance: Understand issues that affect and influence potential vaccinees, parents and caregivers in their decision-making and acceptance of vaccination		Listen and understand public/vaccinee perceptions that affect vaccination acceptance
		STU/HCP	Understand the importance of public perception		
		STU/HCP	Understand provider-patient negotiation		
				Respect differing views through listening	
		STU/HCP	Listen non-judgmentally to health beliefs and research parents do about vaccination		
		STU/HCP	Acknowledge the anxiety of individuals		
		HCP	Gain insight in the perceptions and attitudes of the different population and of health care workers towards (specific) vaccines (how do concerns vary in the different groups and how should communication should be adapted)		
		STU/HCP	Understand the difference between vaccine hesitancy and antivax sentiments. the need to avoid 'categorising' people: every case is different and requires a different approach. Adapt Languages/words		
		STU/HCP		Insight in current anti-vax and vaccine hesitancy (data)	

		HCP	Understand the relation between vaccine hesitancy and vaccine refusal/acceptance		
		STU/HCP	Acknowledge the role of the health care worker in vaccine acceptance. How to build a relation based on trust		
<b>Communication Theory and practice</b>		STU/HCP	Principles of communication on vaccination <ul style="list-style-type: none"> <li>○ Monitoring &amp; research,</li> <li>○ content of the message,</li> <li>○ formulation of the message,</li> <li>○ messenger, receiver (target group)</li> <li>○ channels</li> </ul>		Possess the communication skills to improve vaccine acceptance
		STU/HCP	Be committed to offer the best professional advice on vaccination		
		STU/HCP	How to communicate about vaccine effects and the role of vaccination among other preventive measures		
		STU/HCP	State key facts, advantages and risks that need to be communicated		
		STU/HCP	Understand behavioural science principles to influence and change behaviour on vaccination; risk communication. communicating about uncertainty in science, side effects		
		STU/HCP	Myths/ misconceptions and facts relating to (current) immunisation controversies		

		STU/HCP	How to communicate and combat/debunk myths and misconceptions		
		STU/HCP		Critically evaluate media reporting of vaccine issues, understand the impact of social media & how to respond	
		STU/HCP	How to talk to the media (media training)		
		STU/HCP	How to deliver vaccinology-related messages to different subgroups / underserved populations		
		STU/HCP	List key points for responding to parents' fear		
		STU/HCP		Respond to objections raised by anti-vaccine movements, with careful consideration of the potential impact	
		HCP	Direct others to reliable and appropriate sources of trustworthy vaccine information		
		STU/HCP		Lessons learnt from the previous pandemic (COVID-19, Flu) – the defining role of Communication in this period	
<b>Practical skills</b>	<b>Administration – theory</b>	STU/HCP	Description of a correct immunisation site		Knowing the theoretical approach of all steps that will be necessary to administer vaccines. It may help to explain the vaccinee what will happen and why (vaccine confidence).
		STU/HCP	Different immunisation techniques + perform		
		STU/HCP	cold chain and the importance of its maintenance		
		HCP		Specify minimum/maximum temperatures for vaccine storage	

	STU/HCP	Identify vaccine sensitivity to light, heat and freezing		
	STU/HCP	Differences between vaccination of children, newborns and adults		
	STU/HCP	Correct dose and site of administration of all vaccines for each age group		
	STU/HCP	Overview of contraindications and side effects to be monitored		
	STU/HCP	Anaphylactic shock (Distinguish between anaphylaxis and fainting)		
Administration Practice	STU/HCP	Check if all material/ safety concerns are available in the vaccination room/place		You know how to administer correctly a vaccine and you can perform is independently and correctly
	STU/HCP	Prepare and dispose vaccination equipment; waste management		
	STU/HCP	Assess if a patient is fit to receive safe and effective vaccination (assess contraindications/previous adverse reactions )		
	STU/HCP	Prepare vaccines, Reconstitute vaccines correctly		
	STU/HCP	Correct Administration (practice theory)		
	STU/HCP	Monitor possible side effects (inclusive anaphylactic shock) Early identification of signs and symptoms of occurrence of adverse reactions and anaphylactic reactions	Repeat if needed: interventions to coop side effects and anaphylactic reaction (life support)	
	STU/HCP		Communication tips to limit fear and build vaccination trust	
	STU/HCP	Vaccine and side effect registration		