



Funded by  
the European Union

## **Reducing Inequalities in Vaccine uptake in the European Region – Engaging Underserved communities.**



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# Presentation

**Reducing Inequalities in Vaccine uptake in the European Region – Engaging Underserved communities** (RIVER-EU) is a 5-year (2021-2026) project funded by the Horizon 2020 Research Programme.

The main goal of RIVER –EU is to collect evidence on health system determinants of high and low vaccine uptake in eight specific contexts.

This evidence will be used to identify and/or **develop interventions to reduce barriers to vaccine uptake** in underserved communities and **increase trust in the health system.**

# Consortium partners

14 partners working together to reduce barriers to vaccine uptake in underserved communities.

University Medical Center Groningen (UMCG), the Netherlands

- The UK Health Security Agency (UKHSA), United Kingdom
- Prolepsis institute, Greece
- EuroHealthNet ASBL, Belgium
- Connaxis Servicios de Marketing S.L., Spain
- Vaccine Safety Initiative, Germany
- Universiteit Maastricht (UM), the Netherlands
- European Academy of Paediatrics (EAP), Belgium
- Uniwersytet Zielonogorski (UZG), Poland
- Univerzita Pavla Jozefa Safarika v Kosiciach (UPJŠ), Slovakia
- London School of Hygiene & Tropical Medicine (LSHTM), United Kingdom
- Bar Ilan University (BIU), Israel
- Terveystieteiden tutkimuskeskus (THL), Finland
- European Public Health Association (EUPHA), the Netherlands



## Our mission

**To design, implement and evaluate** interventions that improve access to vaccination for underserved communities using a co-creative and collaborative approach.

**To capture the lessons** learnt in a set of evidence-based guidelines.

**To disseminate these guidelines** to healthcare professionals supporting the European workforce to improve the performance of vaccine programs and to address health inequalities.

## Our vision

**To increase vaccine uptake and coverage in Europe** by reducing health inequalities and improving access to vaccination services among underserved European communities (children and adolescents), thereby improving low vaccine uptake.

# ➤ How?

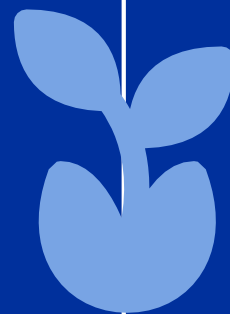
## REDUCING INEQUITY IN

Measles, mumps,  
rubella (MMR) and  
human papillomavirus  
(HPV) vaccines.



## LIFE COURSE APPROACH

Focus on MMR  
(children) and HPV  
(adolescents)



## Identifying and removing health system barriers to increase access to vaccination

- ▶ Tailor made and improved vaccination services
- ▶ Capacity building of health professionals to better serve underserved communities
- ▶ Evidence-based vaccination guidelines for health professionals by inferring general approaches from specific examples
- ▶ Improved trust in health sector

# ➤ Who?

## Specify vaccinations in empowering communities:

MMR in Somali children in Finland

MMR+HPV in Arab children and teenagers in Israel

MMR vaccination in Bangladeshi children in London UK.



## TARGET GROUP

Four underserved communities:



The Ukrainian migrant community in Poland (focus on MMR and HPV)



Turkish and Moroccan adolescent females in the Netherlands (focus on HPV)



The migrant and refugee community in Greece (focus on MMR and HPV vaccines)



The marginalized Roma community in Slovakia (focus on HPV)

# Health system enablers for vaccination

Based on WHO's health system building blocks

1. Service Delivery	2. Health Workforce	3. Health Information Systems	4. Medical Products	5. Financing	6. Leadership and Governance
<p>1.1 Vaccines are universally accessible and available</p> <p>1.2 High trust in the healthcare system</p> <p>1.3 Availability of tailored, multilingual information</p> <p>1.4 Vaccine delivered in schools (HPV)</p> <p>1.5 Early introduction to vaccines</p> <p>1.6 Respect for religious beliefs</p> <p>1.7 Welcoming environment</p>	<p>2.1 Culturally competent workforce/ health professionals from the same culture</p> <p>2.2 Are well-trained and professional in delivering the vaccination programme</p>	<p>3.1 Effective call and recall system.</p> <p>3.2 Effective digital health information system.</p> <p>3.3 Universal provision of a Personal Child Health Record</p>	<p>4.1 Long track record of vaccine</p> <p>4.2 Belief in the value of vaccines</p>	<p>5.1 All vaccinations are available free of charge to the population</p>	<p>6.1 Effective governmental collaboration and coordination in promoting the childhood immunisation programme across institutions</p> <p>6.2 Equality and services</p>

# Health system enablers for vaccination

Based on in-depth interviews with 66 parents, 16 teenagers and 54 health care workers in the UK, Israel, and Finland.

- measures that benefit the immunisation programme as a whole:
  - call/recall,
  - free vaccines,
  - ease of access
- measures that specifically benefit the populations of interest:
  - All three settings: availability of tailored, multilingual information and services.
    - ❖ Finland: access to interpretation services.
    - ❖ UK: provision of information on childhood vaccinations in a multilingual verbal and written format, the provision of interpreters (in person or via telephone), translated information leaflets, and HCPs who speak Bengali/Sylheti in their respective practices.
  - UK: effective coordination in promoting the childhood immunisation programme
  - UK: culturally competent workforce, diverse workforce that reflects the population they serve
  - all three populations: showed high trust in the healthcare system and healthcare workers.



# Health system barriers to vaccination

Based on WHO's health system building blocks

1. Service Delivery	2. Health Workforce	3. Health Information Systems	4. Medical Products	5. Financing	6. Leadership and Governance
<p>1.1 Insufficient access to services</p> <p>1.2 Insufficient resources to deliver all vaccines</p> <p>1.3 Lack of, insufficient or inadequate delivery of information (especially on the relevance of HPV vaccination)</p> <p>1.4 Unpredictable vaccine supply</p> <p>1.5 Language barriers</p> <p>1.6 Incompatible vaccine schedules</p>	<p>2.1 Insufficient training and skills to provide tailored information about vaccination</p> <p>2.2 Lack of interpreter training</p> <p>2.3 Discrimination against target populations</p>	<p>3.1 Incomplete, incorrect or uncoordinated vaccine records</p>	<p>4.1 Lack of trust in the quality of vaccines</p>	<p>5.1 Cost to the system</p> <p>5.2 Direct and indirect out of pocket costs</p>	<p>6.1 Inadequate coordination between stakeholders engaged in vaccination</p> <p>6.2 No national level awareness raising of HPV</p> <p>6.3 Lack of government intervention to address the influence of anti-vaccination movements</p> <p>6.4 Unresponsiveness and passivity of the system</p>

# Health system barriers to vaccination

Based on 18 focus groups and 80 interviews with (grand)parents, teenagers and health care workers in the Netherlands, Greece, Poland, and Slovakia.

Barriers reported by all countries in relation to communication and dissemination:

- Lack of or insufficient delivery of information
- Lack of awareness raising initiatives
- Language difficulties
- Insufficient training and skills on different issues
- Important to signal:
  - Greece: interpreters not having received relevant training on translating medical terms and medical advice.
  - Poland and Slovakia: inappropriate ways of communication and differential treatment among healthcare workers (HCWs) towards target group patients. As a result people avoid accessing health care.
  - Greece, the Netherlands and Slovakia: lack of coordination within the system
  - Netherlands, Poland and Slovakia: Anti-vaccination messaging, eroded trust in vaccinations post COVID-19

# Specific issues in Greece among migrants and refugees

- Government level problems with the registration system of migrants in particular their right to access healthcare services including vaccinations.
- Parents worried about their children's health, aware of the benefits of vaccination but often confused and overwhelmed due to information overload and misinformation.
- Many feel uncomfortable with the HPV vaccine due to sexual connotations.
- Migrants and refugees are generally unaware of the administrative steps in the vaccination process, more specifically:
  - At what age and in which cases each vaccine should be administered;
  - Where they can have the vaccine(s);
  - If the vaccine(s) is free or not;
  - What documentation is necessary;
  - Where to seek help in case of side effects;
  - Transport to reach health care services.

The problem of vaccine rejection is not widespread, vaccination barriers usually have to do with the health system.

Migrants and refugees in Greece are willing to vaccinate their children, nevertheless issues related to their legal status can pose important barriers in obtaining free vaccinations.

# Specific issues in the Netherlands among people with Turkish or Moroccan background

- Lack of trust between communities and public services, advice coming from community members is more trusted.
- Importance of close collaboration with stakeholders experienced in working with target groups: connecting with key opinion leaders/ influencers as they are the “gatekeepers”.
- Heterogeneity within the target population
- Many feel uncomfortable with the HPV vaccine due to sexual implications.
- Important to demonstrate inequalities: vaccines helped Dutch people to reduce cervical cancer incidence and this incidence has not yet been reduced in their communities.
- Communication trends: most interactions occur in public spaces, information shared through conversation: effectiveness of personal messages telling real life stories.

# Specific issues in Poland among Ukrainian migrants and refugees

- Overall lack of trust in vaccines due to adverse conditions in which vaccines are stored and transported in Ukraine
- Presence of strong anti-vaccine movements in Ukraine resulting in negative attitudes of immigrants
- Discriminations against migrants and refugees, esp. by healthcare professionals
- Most of the Ukrainians in Poland do not have their vaccination record and many of them present false vaccination certificates.
- Ukrainians can understand basic Polish. Usually, it is not very difficult for them to pick up the language. Ukrainian mothers are usually willing to complete language courses if they are free of charge
- More effectiveness if messages came from Polish gynaecologists, who have a good reputation among the Ukrainian community.

# Specific issues in Slovakia among marginalised Roma communities

- Limited access to vaccination services
- Mistrust towards non-Roma individuals
- Sex and sexually transmitted diseases often considered as taboo
- Strong influence of the community on members' attitudes, beliefs, and values, limited contact with non-Roma.
- Importance of collaborating with “The Healthy Regions”, a national organisation tasked with addressing healthcare access in Slovakia for Roma communities: use of Roma health mediators.
- Using Roma health mediators is the best way to pass information as they live in the community and are trusted by the community.

# Recommendations to overcome health system barriers in underserved communities

- Have clear guidelines in place for completing vaccination in individuals with incomplete or uncertain vaccination records.
- Separate vaccination eligibility from the immigration process.
- Provide underserved groups with information about their health entitlements and how to use the healthcare system.
- Ensure information is available in a language the population understands, using a medium suitable for the population (e.g. video may be more suitable than text).
- Centralize data about immunization and avoid multiple health information systems working in parallel.
- Train the workforce to be culturally competent and up to date with vaccine knowledge.
- Have zero-tolerance policy for discrimination within the healthcare system.

# Recommendations to overcome health system barriers in underserved communities

- Consider both direct and indirect costs to the individuals when offering vaccines and avoid out of pocket payments.
- Build communication campaigns around the importance of vaccination in general, without a hierarchy of vaccines.
- Consider tailored, proactive approaches to vaccination.
- Focus on HPV as preventing cancer rather than being associated with sexual activity.
- Monitor and challenge anti-vaccination activities with trustworthy, accessible and up to date information about vaccines.



Increase MMR and HPV vaccine uptake in underserved communities thereby boosting herd immunity for all Europe



## ➤ Impact



### REDUCE

mortality and morbidity related to vaccine preventable diseases



### INCREASE

capacity among health professionals in Europe



### IMPROVE

general health system functioning and access to vaccination services.

# ➤ Interventions

## Country- and context-specific interventions:

- were developed by adapting existing promising interventions
- will be implemented, monitored and evaluated for months



The Ukrainian migrant community in Poland (focus on MMR and HPV)



Turkish and Moroccan adolescent females in the Netherlands (focus on HPV)



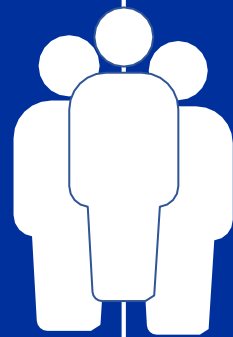
The migrant and refugee community in Greece (focus on MMR and HPV vaccines)



The marginalized Roma community in Slovakia (focus on HPV)

# ➤ Intervention Poland

The Ukrainian migrant  
community  
Parents and adolescents



MMR and HPV vaccines



## Pillar 1

Ukrainian General Practitioners (GPs) will educate and navigate Ukrainian migrants (with the support of Ukrainian health promoters):

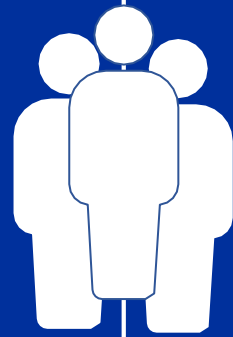
- education aimed at increasing their knowledge on HPV/MMR and HPV/MMR vaccination and on the organization of the National Immunization Program in Poland.
- training at improving communication skills to be able to answer parents' questions in a better way.

## Pillar 2

Schools will be used to educate Ukrainian parents and legal guardians on MMR/HPV through an E-register platform.

# ➤ Intervention Poland

The Ukrainian migrant  
community  
Parents and adolescents



MMR and HPV vaccines



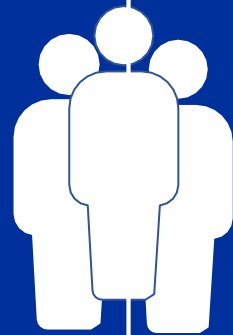
First steps of the implementation were already achieved during the first month of the intervention with success...

*“On February 24<sup>th</sup>, 2024, a Webinar was organized for Ukrainian GPs who work with Ukrainian migrants to train them in MMR/HPV vaccinations before the education cycle with eligible parents will begin... Six presentations were delivered by well-known speakers, academic professors experienced in oncology, vaccination, virology, pediatrics, epidemiology and infectious diseases. Forty five Ukrainian GPs and nurses from the vaccination points participated, as well as one Ukrainian health promotor who cooperates with Ukrainian GPs and parents and collects relevant data... The Ukrainian GP-parents 2 hour meeting took place on March 2<sup>nd</sup>, 2024... Fourteen mothers participated...Participants were satisfied with the presentation, catering and place. After the lecture some of them were eager to ask questions and enthusiastically participate in a post-lecture discussion.”*

**Poland's implementation team**

# ➤ Interventions Netherlands

The Turkish and Moroccan  
adolescent females  
Parents and adolescents



HPV vaccine



## Pillar 1

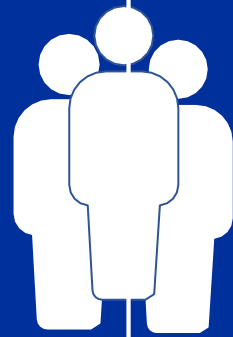
- Health mediators will provide parents or legal guardians of vaccine-eligible children with information on HPV and HPV vaccination through educational sessions.
- The educational sessions will be held with health professionals organized in community centers, schools, health centers, religious places, or NGOs.
- Health mediators will navigate community members through the vaccination process.
- Tools will be provided to participating parents and legal guardians on how to discuss HPV vaccination with their children.

## Pillar 2

Healthcare professionals will be provided with online education on HPV, HPV vaccination, and vaccine related-communication.

# ➤ Interventions Netherlands

The Turkish and Moroccan  
adolescent females  
Parents and adolescents



HPV vaccine



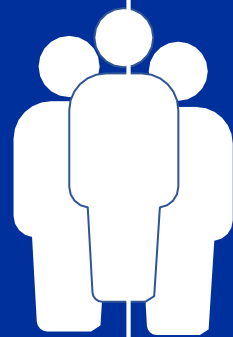
Preparations launched and the onset of the actual implementation is nearby...

*"...we have been collaborating with many stakeholders in order to gain comprehensive understanding of the health system barriers and the interventions that could potentially be implemented...we build relationships and have the opportunity to establish a network that is crucial...With a lot of input from stakeholders at different phases we could develop interventions that are tailored to the needs and the context...We are currently in preparation of the implementation and are reaching out to potential health promoters and healthcare professionals. As we could build relationships we are able to discuss with stakeholders about how to further prepare, where to precisely hold the trainings and to also logistically ensure that we can plan further...We are planning to start with the training in April/May."*

***Netherlands' implementation team***

# ➤ Interventions Greece

The migrant community  
Parents and adolescents



MMR and HPV vaccines



## Pillar 1

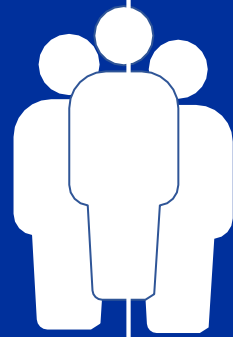
- Health professionals will be trained on culturally sensitive communication methods
- Health promoters will be trained on MMR and HPV vaccinations-related issues and on how to better communicate medical information.

## Pillar 2

- Adolescent boys and girls, as well as their parents or legal guardians will be informed about HPV and HPV vaccination.
- Adolescent boys and girls with younger siblings, as well as their parents or legal guardians will be informed about MMR and MMR vaccination.
- Health professionals will be supported by health promoters.
- Navigation will be provided by health professionals through the health system to book vaccination appointments.
- Locations: multicultural schools and migrant associations.

# ➤ Interventions Greece

The migrant community  
Parents and adolescents



MMR and HPV vaccines



First round of trainings has initiated and dates for the educational sessions with migrant adolescents and parents are set...

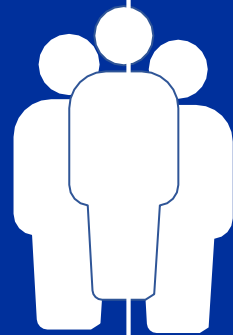
*“previous work on the project (FGs) facilitated us to adapt the intervention according to the needs of the target population...we have been collaborating with many stakeholders in order to gain comprehensive understanding of what migrants in Greece need...we build relationships with key persons from the migrant community...Both health professionals and trusted people from the community who participated in the trainings were very satisfied and gained new knowledge...highlighted the fact that there is a need in both health professionals and promoters for such trainings...worth to say that health professionals who participated were really engaged and willing to “support” as much as possible...with health promoters giving us a much more deep understanding of the beliefs and behaviors that may be a challenge during the educational sessions...important that the educational sessions with parents will be carried out with the presence of a person talking at least the spoken language of the parents...and the school principal welcomed us with real enthusiasm and excitement...”*

**Greece’s implementation team**



# ➤ Interventions Slovakia

The marginalized Roma  
community  
Parents and adolescents



HPV vaccine



## Pillar 1

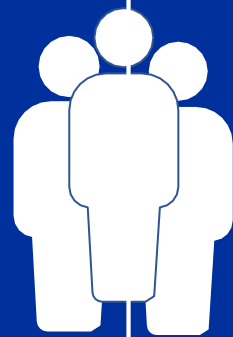
- Roma health mediators will be trained to provide parents or legal guardians and vaccine-eligible children from marginalized Roma communities with information on HPV and HPV vaccination.

## Pillar 2

- Educational sessions for parents or legal guardians and vaccine-eligible children
- Navigation through the vaccination process.
- Extra educational components such as video materials
- Discussions with health professionals to address questions and concerns people commonly have regarding vaccination.
- Locations: Community centers and schools.

# ➤ Interventions Slovakia

The marginalized Roma  
community  
Parents and adolescents



HPV vaccine



First round of trainings has initiated and now reaching health professionals and the Roma community is in progress...

*“We have learned from our experiences when developing and implementing the intervention so far that people from MRCs are very interested in information about HPV vaccination...very limited knowledge of HPV and its association with cancer, most of them know someone who has experience with cervical cancer...we already know that overcoming fear and mistrust towards vaccines in general will be a challenge...Vaccination before the COVID-19 pandemic was never as questioned as it is today. People are primarily afraid of side effects ... We had to devote significant time to discussing how to address such concerns and communicate these issues ... we can say that Roma health mediators are ready now to put in maximum effort ...Another issue – problem: pursuing the cooperation of several primary care providers from catchment areas of target communities who are entitled to vaccinate children...lack of willingness to cooperate ...lack of capacities and the fact that they are overloaded with caring for sick patients and mandatory check-ups and vaccinations. ... or have prejudices about the lack of interest on the side of Roma parents.”*

**Slovakia’s implementation team**

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The RIVER-EU project is studying in detail and from relevant interdisciplinary perspectives an essential and meaningful question:

How should the health system be adapted in order to make vaccination services equitable, accessible and of good quality for underserved communities?





Reducing Inequalities in  
Vaccine uptake in the European  
Region - Engaging  
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communities.

You can find our published and soon-  
to-be-published articles on our  
website:

[www.river-eu.org](http://www.river-eu.org)

**Get in touch!**

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