



# Advancing Vaccination Equity in Europe

Stopping the spread of vaccine-preventable disease in Europe amongst people experiencing poverty and social exclusion

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Despite being a ‘high-income’ region globally, Europe has large pockets of health disparity and inequity, particularly in urban populations experiencing poverty.

This report seeks to explore the complex relationship between poverty, social exclusion and under-vaccination and provide practical recommendations to advance vaccination equity.

# Key definitions

**Equality** means each individual or group of people is given the same resources or opportunities.

**Equity** recognizes that each person has different circumstances and allocates the exact resources and opportunities needed to reach an equal outcome<sup>1</sup>.

**Vaccination equity** is defined as 'A world where everyone, everywhere, at every age, fully benefits from vaccines for good health and well-being' (WHO Immunization Agenda 2030). It differs from vaccine equity which tends to only refer to the equitable distribution of vaccines.

## Poverty measures used in the EU (Eurostat):

**Material deprivation:** Share of population experiencing an enforced lack of 5 of the 13 items deemed desirable or necessary to lead an adequate life.

**Severe material deprivation:** Share of population experiencing an enforced lack of at least 7 of the 13 items deemed desirable or necessary.

**At risk of poverty:** The threshold for at risk of poverty is set at 60% of the national median equivalised disposable income (after social transfers).

**Social exclusion:** In the *EU context*, a situation whereby a person is prevented (or excluded) from contributing to and benefiting from economic and social progress<sup>2</sup>.

**Life-course approach:** The life-course approach to immunisation recognizes the role of immunisation as a strategy to prevent disease and maximise health over one's entire life, regardless of an individual's age.

A life-course approach requires that immunisation schedules and access to vaccination respond to an individual's stage in life, their lifestyle and specific vulnerabilities/risks to infectious disease that they may face<sup>3</sup>.

**Available vaccines:** Each EU/EEA country is responsible for its own national public health policy, including its national immunisation programme and vaccination schedule. Information on the national vaccination schedules in EU/EEA countries can be found in the [ECDC Vaccine Scheduler](#). There are between 16–18 vaccinations available to European citizens, including COVID-19, measles, mumps, rubella, diphtheria, tetanus, pertussis (whooping cough), poliomyelitis, *Haemophilus influenzae* type B, human papillomavirus (adolescent/pre-adolescent girls and boys), hepatitis A, influenza, invasive disease caused by *Neisseria meningitidis*, invasive disease caused by *Streptococcus pneumoniae*, rotavirus, tuberculosis, varicella (chickenpox).

**A note on language.** Using collective terms to describe diverse individuals is inherently complex and can affect power dynamics between patients and health providers. For example, the term Black Asian Minority Ethnic (BAME) can help maintain an explicit focus on inequalities experienced by those people, but the term can leave others feeling stigmatised or judged<sup>4</sup>. In this report, we have sought to maintain a focus on the underlying inequalities experienced by different groups, e.g., racialised minorities – acknowledges the process by which a person becomes a minority as opposed to accepting it as a matter of fact. Similarly, people experiencing poverty are not inherently 'vulnerable', rather they experience multiple vulnerabilities.

# 01. Foreword

The COVID-19 pandemic brought home the reality of our human interdependence like never before and reminded us all of the power of vaccinations to prevent life threatening diseases.

But it also reminded us of how far we still have to go. COVID-19 uncovered and exacerbated health inequities across Europe. More people from black and minority ethnic groups died, poverty increased and more women than men were made jobless. Even pre-COVID, coverage rates for routine vaccinations in Europe had been falling, threatening lives and livelihoods across the continent. Oft-cited reasons for this overall decrease include complacency (old diseases don't need a vaccine), confidence (growing misinformation and mistrust in politics and institutions) and convenience (the convenience and ease of accessing vaccination).

Perhaps less often cited is the fact that the large pockets of under-vaccinated groups in Europe tend to be those living in states of vulnerability, be it due to poverty, migration status or belonging to a particular racialised or religious group. The highest proportion of people currently at risk of poverty in the European Union are women. And, younger women in particular are more hesitant of vaccines. Women also represent the

majority of healthcare workers – many of whom are leaving the sector in their hundreds due to low pay and overly intense working conditions during the pandemic. In some EU countries, nurses have been forced to use food banks<sup>5</sup>. All these trends raise serious questions given the pivotal role women play in supporting vaccination of children and the elderly.

At Business Fights Poverty, we describe this era of great global uncertainty as the [poverty tsunami](#) – where a confluence of COVID, conflict and climate change are crashing into the lives of vulnerable people and communities around the world. Currently, 20% of Europeans are at risk of poverty, and Russia's war in Ukraine is sending food and energy prices sky high, creating a cost of living crisis.

Migration to the region continues to be fuelled by conflict and economic instability, including from Syria and Afghanistan<sup>6</sup>. Income inequality is also widening within countries creating both health and wealth divides.

We are urging business and governments to focus on equity and resilience as two of the most concrete things they can do to support people that are feeling the impacts of the poverty tsunami. We cannot allow those experiencing poverty, migration or social exclusion to continue to experience the disproportionate impacts of vaccine-preventable disease and simultaneously see herd immunity continue to decrease. It is about everyone's right to health and all our security.



*We are increasingly aware that the health of every single person is interconnected and that to protect everyone's health, no-one can be left behind.*

—Mariano Votta, Active  
Citizenship Network, Europe

We urgently need more investment in hyper-localised and targeted interventions to achieve greater vaccination equity in Europe, and we need more resilient (and trusted) health and social systems to underpin it.

Initiatives like the GAVI Vaccine Alliance exist for good reason – to reach the millions of people in low and middle income countries that remain under-vaccinated. But no such major effort focussed on overcoming vaccination inequity exists in Europe. We hope this report acts as a catalyst to bring more organisations and individuals together to build a stronger movement for change.

All our futures depend on it.



**Zahid Torres Rahman**, CEO  
Business Fights Poverty



**Professor Jeffery Lazarus**,  
Professor of Global Health,  
CUNY SPH and Associate  
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ISGlobal, Barcelona, Spain

## 02. Introduction

Vaccination across the life-course remains one of the most relevant public health inventions in history.

Estimates suggest 4 million deaths worldwide are prevented by childhood vaccination every year<sup>7</sup>. Vaccines bring significant social and economic benefits, with one study showing that every 1 euro invested in adult vaccinations could yield €4 of future economic revenue in return<sup>8</sup>. Vaccines also remain vital to addressing ongoing and future health threats, including antibiotic resistance<sup>9</sup> and as yet unknown diseases that threaten global health security as COVID did.

However, even before COVID-19 interrupted vaccination schedules across the world, vaccination rates across Europe had been stalling. Severe measles outbreaks in 2017 and 2019 further highlighted the risks of sub-optimal vaccination rates in many countries, with WHO recommended coverage rates of 95% for herd immunity frequently being missed<sup>10</sup>. Indeed, in 2021, 95% coverage for measles was not achieved in France, Germany, Italy, Spain and the UK<sup>11</sup>. Existing underutilised vaccines such as HPV, whose coverage rates remain lower than other routine immunizations, impede public health goals, including cancer prevention across the region.

Some have argued that there has been a tendency in recent years to attribute decreasing vaccination uptake to

parental concerns about vaccines or increasing hesitancy, but this is only part of the problem. According to others, 'evidence shows that the reasons for suboptimal coverage are multifactorial, and social determinants and systems-related barriers can play an equally or more important role, depending on the context'<sup>12</sup>.

This report seeks to explore the complex relationship between poverty, social exclusion and under vaccination. Despite being a 'high-income' region globally, Europe has large pockets of poverty and inequality, particularly in urban areas (see pg. 12). These cities often correlate with lower vaccination rates – for example, overall childhood MMR rates in the UK hover between 86–92%, but London is a notable outlier, with only 77% of children vaccinated by their fifth birthday<sup>13</sup>.

Studies also show that certain groups experience more outbreaks than others. For example, in the last 20 years, there have been 47 distinct vaccine-preventable disease outbreaks across 13 countries in Europe involving migrants<sup>14</sup>. This does not mean that migrants import infectious diseases, sometimes diseases spread amongst them due to the conditions they are



living in or even passed to them by under-vaccinated refugee support staff. Indeed, the WHO argue that almost all cases of vaccine-preventable diseases in Europe, such as measles, continue to result from domestic acquisition following importation of the virus or bacteria by host country residents returning from outbreak or endemic areas – so the problem is by no means just about migrants<sup>15</sup>. Another systematic study assessing under vaccinated groups in Europe found five underserved groups repeatedly being involved in outbreaks of vaccine-preventable diseases, these included: Orthodox Protestant communities, Anthroposophists, Roma, Irish Travellers and Orthodox Jewish communities<sup>16</sup>.

The EU Vaccine Action Plan (2015–2020) secured commitment from member states to try to improve vaccination coverage rates across the region. However, progress towards achieving equity in immunisation remained elusive<sup>17</sup>. The revised European Immunization Agenda 2030 has rightly put increasing equitable access to new and existing vaccines for everyone regardless of age, identity and geographic location as one of its

top 3 objectives for the next decade. Similarly, the EU's 'Beating Cancer Plan' has rightly highlighted the urgent need to address disparities<sup>18</sup>. However, existing spending on vaccination equity by the EU appears to be low. Under the last EU health budget (2014–20), we have estimated **that a total of €12 million out of €449 million was spent on projects that specifically aimed to reach excluded and under vaccinated groups – i.e., only around 2%**<sup>19</sup>.

This report aims to help advance the equity goals of the EU Immunization Agenda 2030 and offers practical recommendations to advance vaccination equity. It has been written based on extensive desk research, expert interviews and an online written discussion with practitioners from **France, Italy, Germany, Spain and the UK**, and a focus group with community health ambassadors in London.

It focuses its attention on 3 key areas:

- the need for improved disaggregated **data by key determinants of inequalities**
- enhanced **access** to services at hyper local levels, or rather 'taking the services to people rather than expecting them to come'
- overcoming the **trust deficit** that poor and socially excluded groups feel towards health and social institutions, which, for some, have been or are structurally racist.

It argues that the social determinants of health remain a critical underpinning on which all 3 of these areas depend and makes recommendations for action to address the challenge of inequity.

# Poor, socially excluded and under-vaccinated

**21.7%** of Europeans live in poverty  
or 95.4 million



*Young women are more at risk of poverty than men. Child poverty is high and the risk of poverty is also higher for those with low education and unemployment.*

*(Eurostat 2021)*

## Factors

**Social factors determine health outcomes:**

- Income and employment
- Geographical location
- Housing
- Education status of parents
- Ethnicity and migration status

## At-risk groups

**People at risk of falling outside formal health system:**

### Transient

- Newly arrived migrants
- Refugees and asylum seekers

- Displaced, undocumented migrants, unaccompanied children, those in temporary accommodation

Roma/Travellers

### Settled

- Racialised minorities
- Religious minorities
- Urban poor
- Single-parent families

- Disabled
- Homeless
- Prisoners
- Those with mental health vulnerabilities

*When poverty intersects with other dimensions, such as age, sex, ethnicity, religion or geography it can disproportionately impact certain groups and has impacts on vaccination uptake.*

## ILLUSTRATIVE STATISTICS

The following examples have been selected to illustrate the extent to which poverty affects vaccination uptake and how different socio-economic groups experience vaccination inequity across a range of range of different vaccine-preventable diseases.



### Women and children

- The risk of poverty or social exclusion in the EU was, in 2021, higher for women than for men (22.7% compared with 20.7%) Over one fifth (22.5%) of the EU population living in households with dependent children was at risk of poverty or social exclusion in 2021<sup>23</sup>.

## Poverty and under-vaccination in Europe

*The disproportionate impacts of poverty on those with intersecting characteristics*



### Migrants

- The risk of poverty or social exclusion in 2021 was almost twice as high for foreign-born persons (36.1%) as it was for native-born persons (19.0%) and was particularly concentrated among those born outside of the EU (41.0%)<sup>20</sup>.



### Urban populations

- In 2014 there were 34 million people living in EU cities who were at risk of poverty or social exclusion. There were 7 EU Member States where the share of the population that was at risk of poverty or social exclusion was highest among those living in cities: the Netherlands, France, Germany, the United Kingdom, Belgium, Denmark and Austria. Although cities in Western Europe were generally more affluent, they were also characterised by a greater risk of poverty or social exclusion and considerable income inequality<sup>24</sup>.



### Racialised and religious minorities

- There are an estimated 10–12 million Roma living across the EU member states, 80% of whom live below the poverty line<sup>21</sup>.
- In the UK, over 8 in 10 black households and households with mixed ethnicity, and Bangladeshi and Pakistani households, reported going without essentials in 2022 or experienced food insecurity in the last month, compared to 69% of white households (Joseph Rowntree Foundation)<sup>22</sup>.



**Poor health and poverty do go hand-in-hand. But research shows that high levels of inequality negatively affect the health of even the affluent, mainly because inequality reduces social cohesion, a dynamic that leads to more stress, fear, and insecurity for everyone.**

—Inequality.Org

## The links between vaccination uptake and poverty and exclusion statistics

In the last 20 years, there have been 47 distinct vaccine-preventable disease outbreaks across 13 countries in Europe involving migrants. Most reported outbreaks involving migrants were of measles, followed by varice hepatitis A, rubella and mumps. 40% of outbreaks, predominantly varicella and measles, were reported in temporary refugee camps or shelters.

A study that looked at the links between social deprivation as a risk factor for invasive meningococcal disease found that the poorest households have the highest risk of getting the disease and the lowest vaccination rates, even in countries with successful vaccination programs<sup>26</sup>.

A systematic review of 28 studies found low socio-economic status to be a key barrier to human papillomavirus vaccine uptake in Europe<sup>27</sup>.

A study carried out in **France** concerning the influence of the socio-economic environment on the incidence of cancer shows that the 20% of the least socially advantaged women have a 1.6 times greater risk of developing cervical cancer than the 20% most socially advantaged women<sup>28</sup>.

In one **Italian** study, around 20% of the Cagliari population was seen to be living in disadvantaged conditions. Flu vaccination uptake rates were low: 27%. Coverage proved to be lower in the two extreme categories and higher in the medium deprivation ones<sup>29</sup>.

In Italy, **rubella vaccination among immigrant women** was nearly half that of Italian women (25.2% vs. 40.4%)<sup>30</sup>.

One study amongst irregular migrants in Madrid found that nearly 12% of females were potentially at risk for rubella, with the consequent congenital infection risk implications for women of childbearing age<sup>31</sup>.

## The links between vaccination uptake and other characteristics:

- All ethnic groups in the UK had lower age-standardized rates of COVID-19 vaccination compared with white British people<sup>32</sup>.
- A systematic study assessing under vaccinated groups in Europe found 5 underserved groups repeatedly being involved in outbreaks of vaccine-preventable diseases, these included: Orthodox Protestant communities, Anthroposophists, Roma, Irish Travellers and Orthodox Jewish communities<sup>33</sup>.
- Vaccination levels within Roma communities across Europe rate very poorly in comparison with general population coverage, and a number of measles and hepatitis outbreaks over the past 10 years have included Roma communities<sup>34</sup>.
- Children in Germany with insecure residence status are twice as likely to be incompletely vaccinated<sup>35</sup>.

### 03.

## Why are those affected by poverty and social exclusion under-vaccinated?

Poverty and health are inextricably linked and health outcomes will vary greatly depending on people's experience of the social determinants of health – such as income, working conditions, housing, employment, education, social inclusion, discrimination and access to health and social care. A number of studies have shown that the lower someone's socio-economic position, the worse their chances are for good health<sup>36</sup>. Immunisation across the life-course is recognised as a key intervention that can help narrow health inequities, in that it can enable everyone to have the same opportunity to avoid vaccine-preventable diseases, in all age groups.

Different frameworks have evolved over time to explain the complex web of individual (attitudes and beliefs, community and culture) and external factors (legislation, institutions, structures) that can contribute to under vaccination<sup>37</sup>. The 3 C's, for example, emphasise that among those affected by poverty and social exclusion in large European countries, it is less likely for them to seek vaccination for their family because of:

**Confidence** – a person's trust in the effectiveness and safety of vaccines, the systems that deliver them, and the decision about who should receive vaccines and when. Community factors such as religious and cultural norms can also affect confidence, as can interpersonal actors such as peer or parental views and resources.

**Convenience** – limited access to health services and information about vaccination, often due to literacy and digital gaps. Opportunity and time costs to travel to vaccination centres and a lack of culturally specific services or access.

**Complacency** – competing and often higher priorities other than vaccination, such as work, house or food



*People affected by poverty and socially excluded groups are a dynamic population and cannot be viewed as homogeneous.*

insecurity. Complacency also refers to the idea that some people believe preventable diseases to be 'old diseases' that no longer require vaccination or that vaccine-preventable diseases pose little risk to health.

For migrant groups, additional challenges include: language, literacy and communication barriers, and legal barriers to accessing and delivering vaccination services.

Overall, however, people affected by poverty and socially excluded groups are a dynamic population and cannot be viewed as homogeneous. They have unique experiences based on gender, age, disability, whether or not that person is also a caregiver to a child or elder, their race or religion. Therefore, the barriers each individual faces are multifaceted and evolving and responses need to be tailored and context-specific.



## SPECIAL FOCUS: *The role of women and vaccination equity among those living in poverty and social exclusion*

Women play a critical role in ensuring human well-being – they still undertake the majority of care-giving across the world and that can include taking young children and older adult relatives to get vaccinated. Greater vaccination uptake by girls and women can also help to achieve greater equality throughout the life-course, improving their chances of staying healthy and partaking in the labour force. Furthermore, during the pandemic the role of informal community influencers such as church and community leaders, including women working within the community, has been critical to increasing vaccination uptake in communities which have been historically distrusting from institutions and government. The role of women as Change Agents are essential to promoting positive health behaviours, including vaccination throughout the life-course – not just paediatric and COVID-19 vaccination.

In Europe, currently more women than men are at [risk of poverty](#), and according to a recent European wide [study](#), they are also slightly more vaccine hesitant (particularly 18–34-year-olds). Women also make up the majority of healthcare workers and nurses in Europe. They are usually underpaid and undervalued and this is now resulting in ‘The Great Resignation’ whereby more women than ever before are leaving the health sector<sup>38</sup>. These trends raise serious questions for the future of vaccination uptake in the region.

Much of the research and resources available on gender and immunisation are drawn from lessons in low- and middle-income countries. How these relate to high-income

countries needs further exploration. According to the [Equity Reference Group for Immunisation](#), four broad areas have been identified as major challenges to ensuring gender equity in vaccination:

- Mothers are typically the primary care-givers for their children, but their lower status in the household and community limits their capacity to act on their own and their child’s behalf.
- Women are acutely affected by the physical and time barriers to accessing immunisation services.
- Lack of health literacy (which is often gendered) can lead to a limited understanding of immunisation, low motivation to vaccinate and weak capacity to negotiate the health system.
- Women’s experience of quality of service – encompassing responsiveness of services; range of services available; provider attitudes, skills and behaviour; availability of female providers – may deter them from attending health services.

More research is urgently needed to assess if these are the same challenges women from poor and socially excluded groups face in Europe or if they are different.



*Inequities are not resolved by providing the same immunisation services to all; they are resolved by providing different immunisation services that satisfy the needs of all.*

—Tammy Boyce, et al., ‘Towards Equity in Immunisation’, *Eurosurveillance*, 2019

## Key priority 1: Data

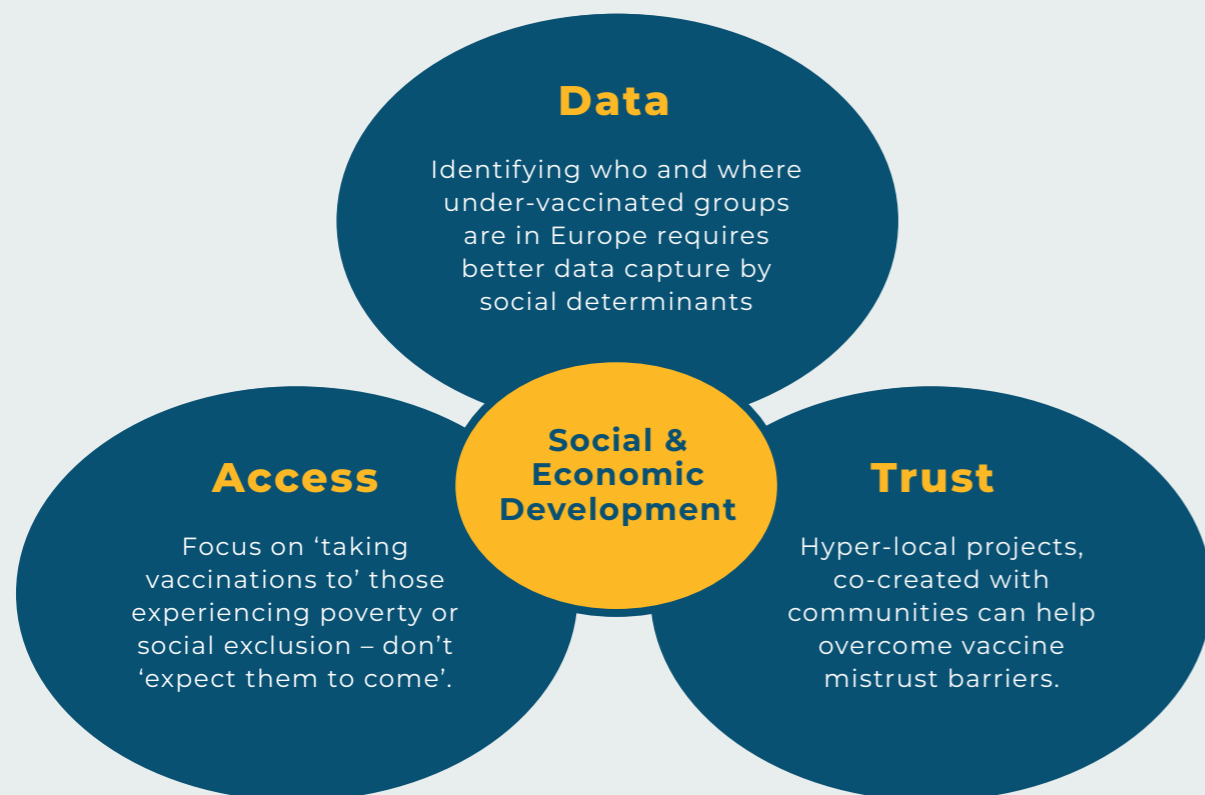
At a macro level, there does not appear to be a direct link between vaccination coverage rates and a country's overall levels of wealth. Although not comprehensive, a snapshot comparison of overall poverty rates and vaccination coverage for 2 vaccine-preventable diseases in 5 European countries – in fact – shows that whilst Germany has the lowest poverty rates, it also has lower vaccination coverage rates. And whilst Spain has higher poverty scores, it also scores well on vaccination uptake (see pg. 19).

In many ways, this highlights exactly why current data capture of vaccination coverage rates does not provide the level of detail required to

identify pockets of under vaccination that exist in all European countries. These pockets of under vaccination are well documented in individual studies about particular diseases or subpopulation groups, but very few exist that look at the reasons behind disparities across groups and vaccines collectively. One that does exist states that *'the most common external driver, especially for COVID-19 vaccine uptake was level of deprivation'*<sup>39</sup>.

Overall collection of data on vaccination uptake across Europe is fragmented, with some countries not having Immunisation Information Systems in place. For countries where data does exist, the results often

### ADVANCING VACCINATION EQUITY – KEY THEMES



## Poverty rates in five major European countries

### Poverty (material deprivation, severe material deprivation and at risk of poverty)

According to 2021 [statistics](#), Spain has higher levels of poverty across all 3 measures, and Germany the lowest. The UK uses different measures that estimate (5% population experience low income and material deprivation combined) placing it near France and Germany.

| Country | MD%  | SMD% | ARP% |
|---------|------|------|------|
| Spain   | 15.4 | 8.3  | 21.7 |
| Italy   | 11.3 | 5.9  | 20.1 |
| France  | 11.4 | 5.9  | 14.4 |
| Germany | 8.8  | 4.2  | 15.8 |

### Income inequality

According to 2018 data, Germany has higher income equality whilst the UK and Italy have the lowest. Germany, 68.1; France, 67.6; Spain, 65.3; UK, 64.9; Italy, 64.1. Gini coefficient measures how equal a country's distribution of income is. 0= very high levels inequality and 100 perfect equality. <https://www.worlddeconomics.com/Inequality/Gini-Coefficient/France.aspx>

### Any relationship between poverty & vaccine coverage rates?

Germany has lowest poverty and inequality scores but also lowest flu vaccination of elderly. Spain has higher levels of poverty and inequality but high vaccination rates.

### 2021 VCR (WHO database)

| Country | Flu (elderly) | HPV (final dose) |
|---------|---------------|------------------|
| Germany | 38%           | (F) 47% (M) 5%   |
| France  | 56%           | (F) 37%          |
| Italy   | 65%           | (F) 32% (M) 26%  |
| Spain   | 67%           | (F) 77%          |
| UK      | 80%           | (F) 82% (M) 77%  |

mask exactly which groups are under vaccinated. Despite the development of harmonised monitoring systems for COVID-19 vaccination across the EU<sup>40</sup>, disaggregated data on routine vaccination uptake is sparse and not being effectively captured. E.g., some European countries report sex and age disaggregated data for HPV and flu respectively, and this can be seen via the WHO Immunization tracker, but there is room for much greater improvement<sup>41</sup>. One study has noted 'the goal should be for each country to analyse immunisation uptake data to identify presence or absence of inequities'. This requires immunisation uptake data to be disaggregated by key determinants of inequalities:

- (i) socio-economic status,
- (ii) geographical location,
- (iii) educational status of parents and
- (iv) ethnicity and migration status<sup>42</sup>.

Researchers have noted that they currently experience lots of challenges accessing local data on subpopulations, due both to poor data quality (e.g., not coded by ethnicity) and the right data not being collected, e.g., country of birth. Others cite the lack of data on length of residence makes it very difficult to measure immunisation rates among migrant populations. Challenges with capturing data amongst the urban poor have also been highlighted, including identifying caregivers and unimmunized children in crowded and highly mobile areas; and the fact that transient groups utilise fewer health services further complicates identification.

The Vaccine Safety Initiative, based in Germany, are developing a variety of digital tools that are helping to overcome some of the data collection challenges that exist by putting



more power into the patients' hands. These include the VaccApp, which patients use to record and understand their vaccination status and the Health Survey App – which was used in 2015 and 2016, during the peak of refugee arrivals in Europe, to allow young refugees to self-report health needs securely and anonymously in real-time<sup>43</sup>.

There is a growing body of research, including systematic reviews, showing that multi-component, locally designed interventions are most effective in reducing inequities in immunisation uptake. However, such interventions cannot be effectively designed without better data.

### **Promising actions to prioritise:**

- Establish or upgrade national immunisation information systems to capture social determinants of vaccination inequalities, including gender, income/employment, education of parents, geography, ethnicity and migration status and harmonise them across countries and regions..
- Local health authorities or agencies should undertake action orientated qualitative data capture with



***Often, nationally representative surveys miss marginalised groups. Surveys administered online or via phone don't always reach the people we may need to hear from most.***

—Rachel Eagan, The Vaccine Confidence Project, Online discussion, 2023

marginalised groups, using the WHO's Tailoring Immunization Programmes (TIP) approach, as has been done to understand the social and behavioural reasons for under vaccination with the Charedi Jewish community of North London<sup>44</sup> and other communities in Sweden, Lithuania and Bulgaria<sup>45</sup>.

- The EU should support the further development of digital innovations such as The Vaccine Safety Initiative's [VaccApp](#) to better enable patients to record their vaccination status. These could ultimately provide the basis for EU-wide digital vaccination passports.

## Key priority 2: Access

Despite universal healthcare being largely available for those affected by poverty and social exclusion in France, UK, Germany, Spain and Italy, time and cost constraints remain a challenge. For many, the cost of taking time off work to take a child to be vaccinated by a GP will be prohibitive, and they will not want to sacrifice vital income to get vaccinated. Vaccination centres and health services may not be located near people living in poverty. Transportation may be unaffordable or services may be in areas that don't feel welcoming. People affected by poverty also face competing priorities that can limit their ability to access vaccines. For example, one recent polio vaccination campaign found that time was a barrier, with booking vaccine

appointments often deprioritised in favour of work and childcare<sup>46</sup>.

Migrants and refugees with insecure citizenship status can face specific barriers in accessing vaccinations, particularly if the chance to assess their vaccination status and vaccinate them is missed when they are newly arrived and at reception centres. Many experience digital exclusion, language and health literacy barriers. A lack of interpreting services inhibits interactions as health/vaccination information is often provided in written and online formats and only in the local language.

Migrants also face numerous practical and legal barriers to accessing healthcare: insecure housing, lack of

### CASE STUDY: GERMANY

*Using intercultural mediators to educate migrants about health issues and the health system*

**Context:** Migrants living in Europe often face language, social and cultural barriers to accessing the health system, which in turn limits uptake of services like immunisation. For example, children from refugee and migrant families have lower vaccination rates than the general population. The Ethno-Medical Center (EMZ) in Germany has developed a programme known as MIMI to increase migrant access to the health system through health literacy and empowerment.

#### **Approach:**

- Development of comprehensive, easy-to-read, multilingual brochures on over 20 healthcare topics, including vaccines.
- Recruitment, training and support of intercultural mediators from migrant communities. These mediators are trained on both health topics and the German health system; training is ongoing so mediators build on their existing knowledge and deepen their expertise.

- Support for mediators to conduct health promotion and information sessions in their communities in a culturally sensitive manner and in their local language – including provision of teaching materials (slides, tools, translations).
- Working in partnership, including tandem training with healthcare providers and overall support for the program from partners from the social, health, education and integration sectors.

#### **Impact/outcomes:**

- MIMI now includes about 3,000 MIMI mediators across 16 German states who have been trained, having conducted about 17,500 information sessions/workshops – about 210,000 migrants have been reached directly, and over 740,000 migrants have been reached indirectly (through family members, etc.).
- Outcomes include improved health literacy and ability to access the local health system, resulting in improved vaccination rates among migrants.

a fixed address, uncertainty around legal entitlement to services – examples of this were cited in both Italy and Spain. Similarly, whilst in the UK vaccinations are available to all regardless of immigration status, most migrants are unaware of this and still fear repercussions of accessing formal health systems. Many doctors and other gatekeepers (e.g. practise staff or receptionists) are unaware of the catch-up vaccination guidelines for those with unknown or incomplete immunisation status or to check the vaccination history of migrants. Doctors Without Borders have developed a [Safe Surgeries](#) campaign specifically to help resolve this situation and educate doctors and healthcare professionals on their obligations to support migrants and refugees with vaccination.

Flexible and opportunistic immunisation programmes do appear to

improve vaccination coverage and reduce inequities<sup>47</sup>. During COVID-19, a number of innovative mobile and pop-up services evolved to reach different populations, including homeless groups<sup>48</sup>. Access barriers were recognised and extra effort was made to reach people that would have otherwise not been vaccinated. This same mindset – one that seeks to ‘take the vaccine to the community’ rather than expect them to come – needs to continue for routine vaccinations of poor and socially excluded groups. Many countries in the EU and beyond are seeking to replicate the benefits of mobile provision for other diseases – e.g., hypertension in the US<sup>49</sup>.

Evidence from UK school-based programmes (Influenza, HPV and MenACWY vaccines) has shown that there is a correlation between the age that children and young people



*We need to start with a really deep understanding of what community priorities are rather than making assumptions about marginalised groups and why they refuse vaccinations.*

—Dr Rochelle Burgess, Associate Professor in Global Health, UCL Interview, 2023

## CASE STUDY: ITALY

### *Mobile clinics for the “Invisible” population in Rome during COVID-19*

**Context:** COVID-19 showed that providing support for communities in situations of vulnerability is fundamental to collective public health. In Rome, [INTERSOS](#), an Italian humanitarian organisation set up two mobile clinics, visiting places frequented or inhabited by those that may be considered “invisible”. These included reception centres for Italian and foreign people in vulnerable conditions, including homeless, asylum seekers and unaccompanied foreign minors.

- Services provided: Two doctors, a nurse, two humanitarian workers with competence in linguistic and cultural mediation, and an expert social worker were present to provide consistent care for 1,583 people. Each patient received a medical examination and received a health education course that included best practices for prevention of the virus.

#### Impact/outcome:

- 150 vulnerable people received care and were provided safe home isolation in coordination with

the local ASL (Local Health Company), another 250 entered the formal healthcare system, which up until then had been inaccessible to them for various social and legal reasons.

#### Key Lessons:

- This type of pilot experience shows that there is potential for more integrated health programmes (public–private social organisations working together), cross-cultural (involving both Italian and foreign populations in conditions of marginality) and multidisciplinary, and based on community involvement.
- Proximity of the doctor to the patient can be a redeeming element for public health – both in times of crisis (INTERSOS is now working with UNICEF in Roma to provide health support to Ukrainians) as well as offering potential solutions for ongoing public health challenges.

are offered the vaccine and vaccine coverage: the earlier a vaccine is offered, the greater the completion and coverage<sup>50</sup>. However, data on how far schools’ programmes can help overcome vaccination inequities requires greater research. There is also some evidence to suggest that telephone and postal reminders can increase uptake and that text messages can reduce inequities amongst adolescents<sup>51</sup>.

Pharmacies, too, can play an active role and are usually more accessible or closer to peoples’ homes and workplaces than doctors’ surgeries. They are often the ‘first and last point of contact between the patient and the health system’<sup>52</sup>. Pharmacies now play a vital role in delivering the flu vaccine in 8 European countries<sup>53</sup>. These services have demonstrated their potential to successfully reach people who had never been vaccinated for flu before and showed a high user satisfaction rate.

#### Promising actions to prioritise:

- Hyper-targeted, mobile vaccination clinics, developed with community organisations and healthcare providers.
- Increasing the role of pharmacies in the delivery of vaccinations across Europe.
- Equipping refugee and reception centres with necessary (fully vaccinated) support staff and resources to deliver vaccination assessment and delivery.
- Advancing universal health coverage across the EU regardless of people’s legal, social and housing status, e.g., in Italy and Spain (and others?), this would reduce the barriers to accessing healthcare for those seeking registered residence permits.

## CASE STUDY: SPAIN

*EU Project COMSAVAC – reducing liver cancer amongst West African Migrants in Spain*

**Context:** Chronic viral hepatitis infection caused by the hepatitis B and C viruses (HBV and HCV) is a major public health burden. In 2016, the WHO published a global strategy with the goal to eliminate viral hepatitis through improved outreach and testing. Europe's Beating Cancer Plan also seeks to prevent cancers caused by HBV and HCV infections.

**Approach:** The VH-COMSAVAC project (Multi-Country Viral Hepatitis Community Screening, Vaccination, and Care) is implemented by the Health System Research team at ISGlobal, led by Professor J Lazarus. In line with Europe's Beating Cancer Plan, the project aims to scale up HBV vaccinations. It is doing this by expanding existing community-based projects with established hospital-based connections to screen for HBV and HCV and anchor early detection of viral hepatitis as cancer prevention among vulnerable populations. This includes migrants and refugees living in three European countries: Greece, Italy and Spain. Migrants and refugees often have difficulties accessing the health system in their new country and may subsequently be diagnosed with chronic viral hepatitis too late. It is important to ensure people are diagnosed early to prevent progression to advanced liver disease or liver cancer.

### Impact/outcomes:

- The project started in November 2022 and will have a 2-year duration. It reached more than 600 people during its pilot phase in 2020.

### Key Lessons:

- Community-based interventions that work through local structures have proved essential for building trust (e.g., including collaborating with local Imams in raising awareness and building up trust).

### Challenges:

- Only a certain percentage of the project is funded by the EU, which carries a burden on the implementing organisation to find the remaining amount of the project funds. This challenge was repeated by other EU grant recipients.

Partners: Salud Entre Culturas (Spain). The project is also being implemented by partners in Italy and Greece, including: the Fondazione IRCCS Ca' Granada Ospedale Maggiore Policlinico, Milan; Università Cattolica del Sacro Cuore, Milan; Prometheus; Athens.

as many young females than males were hesitant due to safety fears<sup>55</sup>.

Reasons for overall mistrust include high levels of overall distrust in healthcare institutions in which marginalised groups have experienced discrimination, as well as the effects of structural racism and historical discrimination. Grievous crimes have been historically committed against people living in poverty and minority groups, including, for example, unethical clinical trials in Nigeria and the US. Experiences of kin networks are shared through community storytelling which can play into peoples' hesitations.

And these stories are much more trusted than institutions<sup>56</sup>.

Migrant populations have fear and distrust of health and other services due to the threat of legal repercussions, including arrest, detention or deportation. This was evidenced during COVID-19, despite governments making clear that vaccines would be available regardless of immigration status.

Trust is also key to understanding misinformation. Whilst some warn against overemphasising the threat from 'anti-vax' groups given that 'active refusal' in high-income countries is only 1–2%<sup>57</sup>, if people do not trust in

## Key priority 3: Trust (and misinformation) and the need for community responses

Overall trust in institutions and information is at an all-time low. A recent Edelman Trust Barometer survey showed that 1 in 2 respondents view government and media as divisive forces in society. Nearly 6 in 10 say their default tendency is to distrust something until they see evidence it is trustworthy. Another 64% say it is now to a point where people are incapable of having

constructive and civil debates about issues they disagree on<sup>54</sup>.

When it comes to trust and vaccinations, the most recent EU Vaccine Confidence Report illustrated that overall confidence has declined amongst the population compared to 2020 levels. Young people in particular are more hesitant. One study on young peoples responses to the COVID-19 vaccine in Europe found that twice

## CASE STUDY: LONDON

*Community Health Champions Programme*

**Context:** During COVID-19, thousands of Londoners volunteered to become Community Health Champions or Ambassadors. They acted as bridges between their communities and local government 'councils', National Health Service agencies and community organisations. Their objective was to form trusted relationships with underserved and marginalised communities to improve their health and well-being. Many of the networks remain in operation and are now focussing on different public health challenges.

### Approach:

- For example, in Newham borough, more than 500 COVID-19 Health Champions signed up to receive information via WhatsApp and email. Around 100 also joined a WhatsApp group, and a smaller group of around 30–40 came to weekly Zoom calls. The Champions reflect the diverse communities living in the borough. Champions were offered a one-hour induction to explain the programme and their role. Later, a subset of Champions trained as vaccine peer supporters, available for one-to-one conversations via a referral and matching process. A local government coordinator provides both day-to-day and strategic management, including fielding questions from Champions and co-creating infographics to share with communities via WhatsApp. The

Champions shaped the council's community outreach COVID-19 vaccine programme (including vaccine peer supporters, public Q and A sessions and community pop-up clinics). The programme continues and is supporting the council's response to the Ukraine crisis (Welcome Newham Champions) and the cost-of-living crisis.

### Key Lessons:

- **Crisis creates new opportunities but also brings resourcing challenges.** The use of WhatsApp and Zoom videos were harnessed by Champions, but this also requires new skills and resources, e.g., video-editing skills, digital access, and literacy.
- **Building trust takes time.** Trust often emerged when people acted outside of the usual roles, procedures, assumptions and scopes of interest – with this, long-held beliefs and biases were challenged. The question for the future is whether this trust can be leveraged to build more institutional trust or if it remains only amongst those individuals that communities have engaged with.
- (Case study adapted from [Transformations In Community Collaboration: Lessons from COVID-19 Champions across London](#))



**For me, the spread of misinformation is more about social isolation than it is about poverty.**

—Dan Paskins, Save The Children, Interview, January 2022

the scientists, healthcare professionals, governments, policy makers and vaccine manufacturers, they will look for alternative sources of information. And if people do not hear messages that resonate or are grounded in their own realities, there is a danger that they can backfire. Therefore, it is critical that accurate information is delivered

in ways that can reach people in a culturally relevant way and is from credible and trusted sources. For these reasons, many London boroughs established Community Health Champion networks during COVID-19 to establish two-way communication channels between local health services and under-vaccinated communities.

Overall, based on current evidence, the most impactful voice that can be leveraged to increase vaccination is the recommendation from a health worker<sup>58</sup>. 84% of people say they trust medical and health advice from medical workers, and 73% of people globally say they would trust a doctor or a nurse more than other sources for health advice, including family, friends, religious leaders and famous people. Increasing vaccination confidence

## CASE STUDY: FRANCE

**PAPRICA PROJECT – improving GPs' ability to recommend the HPV vaccination in France**

**Context:** In France, [vaccination coverage against HPV](#) has not exceeded 30% since the introduction of the vaccine in 2007. France is the only Western European country where GPs' recommendations for (and confidence in) HPV vaccine safety and importance remains particularly low.

**Approach:** A team of researchers developed an innovative approach to better understand GPs' behaviours and influences. In 2021, they conducted a [systematic review](#) of all the available evidence in France using the reasoned action approach (RAA) theory to (i) report GPs' cognitions and beliefs, and (ii) examine the impacts of these cognitions on GPs' behaviours. They found:

- Although 73% of GPs report recommending HPV vaccination, up to 50% would not recommend it in reality because of unsupported concerns, including changes in patients' health behaviours and doubts about safety and/or efficacy.
- High variability in the rate of GPs who considered the socio-cultural characteristics of patients and their parents (e.g., religion and personal conviction) to be important barriers to recommendation (17.5–25%).

- GPs' injunctive norms, i.e., trust in institutional information, were shown to be associated positively with GPs' willingness to recommend HPV vaccination.
- Parents' fears, girls' age, and potential connection with sexuality do not seem to affect GPs' recommendations.

### Key Lessons:

These results have informed the development of a professional educational intervention targeting GP's in France, known as the Paprica project. The project is piloting the training programme in Lyon. Early indications suggest that the training is effective in increasing GPs' perceived ability to inform patients about the safety and usefulness of HPV vaccination.

The Paprica project is coordinated by the IARC (International Agency for Research on Cancer – WHO). Cancéropôle Lyon Auvergne Rhône-Alpes (Clara) is also committed to supporting this project, which mobilises teams from public health (HESPER) and social psychology (GRePS) laboratories from the University of Lyon Saint-Étienne.

## SPECIAL FOCUS: Key ingredients for successful community approaches that build trust and can increase vaccination uptake amongst those experiencing poverty and social exclusion

- **Make no assumptions** about why certain groups are vaccine hesitant. Instead, establish a dialogue and listen to people's reasons. Ask what is important to them and what challenges they see in particular behaviours.
- **Messengers do not have to be peers.** What is important is that it is someone who is in a position to support a change to the existing system, and someone who is willing to spend time with, take negative feedback from and return to a community. There is fatigue with traditionally 'extractive' relationships with regard to community engagement and research. As COVID-19 showed, trust can also emerge from new ways of working in times of crisis. *'When people act outside of the usual roles, procedures, assumptions and scopes of interest, long-held beliefs and biases can be challenged'*<sup>61</sup>.
- **Mapping.** As part of the dialogue, identify key assets, capabilities and resources within the community and marshal these in ways that work for the community. Don't assume you need to 'give people things' and tell people how to be healthy. Rather, find ways for 'self directive action'.
- **Co-production** is known as the 'gold standard' approach for community engagement. It involves breaking down historical approaches which have been much more based upon 'top down', often authoritative and/or racialised healthcare experiences for marginalised groups, to a 'more equal partnership' approach, where services are designed together with community groups and other relevant stakeholders.
- **Micro grants and minimal reporting.** Community groups need 'micro grants' of around 10,000 euros, with very few reporting requirements attached. Whilst measuring impact is important for funding and accountability, it also requires substantial resourcing to collect and analyse the data, which can put disproportionate pressure on the smallest chains in the system. The act of measurement can also change the relationships it is intending to observe.

*These insights were drawn from an interview with Dr Rochelle Burgess, a leading practitioner on participatory community responses, and from a focus group discussion with Community Healthcare champions from the London Borough of Southwark.*

amongst healthcare workers has been recognized as a priority by the EU and the Vaccination Coalition<sup>59</sup>.

It is particularly important when it comes to vaccinating marginalised groups. As one interviewee from France noted, bias comes into play. Some healthcare workers assume that certain people, if they are poor or an ethnic minority, won't want to be vaccinated, so they do not share the information with them. The latest Vaccine Confidence Project report notes that confidence is generally high amongst healthcare professionals

but variations do exist. For example, the likelihood to recommend HPV vaccine shows high variability between countries. Healthcare providers need more support and training to manage the quickly evolving vaccine environment as well as how to engage with those who are reluctant or refuse vaccination<sup>60</sup>.

Throughout the research for this report, experts emphasised the importance of developing hyperlocal and targeted community responses to address both access and trust barriers to vaccination.

# 04. Recommendations for action

## At EU Level:

- 1. In line with the European Immunisation Agenda 2030, improve attention to vaccination equity as part of EU-funded programs.** The European Union should, via its different funding programs, better integrate equity considerations as part of current and future initiatives on vaccination. Either as specific programs or as new features within on-going ones. The intersections between poverty, social exclusion and vaccination must be better mapped at the EU level.
- 2. Integrate vaccination equity as a core workstream with existing vaccination stakeholders in Europe.** Despite the immense variety of organizations and stakeholders promoting vaccination in Europe, little attention is given to equity factors. Equity should be a key pillar of any vaccination promotion activity in Europe. Learnings and best practices from the various EU funded projects on the topic should be integrated in a single portal to ensure dissemination.
- 3. In line with Sustainable Development Goal 3, advance universal health coverage across the EU regardless of people's legal, social, and housing status.** Universal health coverage is critical in reducing the barriers to accessing healthcare, including for those with registered residence permits.

- 4. Focus research and support on young women.** Young women can play a critical role in improving vaccination uptake in Europe as mothers, health workers and influencers. Governments and healthcare organisations must focus on developing interventions that are specifically designed to engage young women in vaccine campaigns. These efforts should seek to highlight the benefits to women and ensure compensation for their time and contribution. This will help to ensure that vaccination campaigns are effective in reaching populations that are living in poverty and social exclusion.

## At National Level:

- 1. Enhance data collection on vaccine equity.** Data collection on vaccine equity must be enhanced at national levels so that it captures socio-economic determinants of inequity consistently across Europe. This will help to ensure that policies and interventions can be developed that are effective in addressing vaccine inequities. The EU can then begin to improve overall data coordination, collection, and harmonisation across the region, as it has begun to do with COVID-19.
- 2. Develop hyper-targeted vaccination hubs.** Hyper-targeted, mobile vaccination clinics should be developed

in partnership with community organisations and healthcare providers. This will help to reach populations that are affected by poverty and social exclusion, where access to healthcare services may be limited due to transportation and cost constraints.

- 3. Foster trust-building among healthcare providers.** Healthcare providers play a critical role in building trust in vaccinations. Governments and healthcare organisations must invest in training and support for healthcare workers to ensure that they have the knowledge, skills and confidence to engage in vaccine confidence-building activities. This will help to ensure that healthcare providers can engage effectively with vaccine-hesitant communities and build trust in vaccines.
- 4. Increase the role of community pharmacies in vaccine delivery.** Pharmacies are often more accessible than doctors' surgeries, and they can play an active role in delivering vaccinations. Governments and healthcare organisations must increase the role of pharmacies in vaccine delivery to ensure that vaccinations are accessible to populations that are affected by poverty and social exclusion.
- 5. Equip refugee and reception centres for vaccine delivery amongst adolescents and adults.** Refugees and migrants with insecure citizenship



status face specific barriers to accessing vaccinations. Governments and healthcare organisations must equip refugee and reception centres with the necessary support staff and resources to deliver vaccine assessment and delivery for newly arrived migrants. Emphasis must also be placed on ensuring that patients know what they are receiving and are given vaccination records or cards to facilitate onward movement or referral to future care. This will help to ensure that migrants and refugees can access vaccinations and are not excluded from vaccine campaigns.

- 6. Provide micro grants for community groups.** Community groups require micro grants that are flexible and do not require extensive reporting. This will help to ensure that community groups have the resources they need to engage in vaccination campaigns that are effective in reaching populations that are living in poverty and social exclusion.

# Annex 1: Key resources

## France

A recent, detailed look at the reasons for under vaccination in this low-uptake area of France and examples of effective community responses.

**Source:** De Champs, C. M., et al., 2022. [A Regional Study of the levers and barriers to HPV Vaccination in the Auvergne-Rhône-Alpes region](#). La Région.

## Germany

This report looks at whether comprehensive schools' programmes can adequately reach children of parents who refuse the vaccine. The country continues to experience low-uptake rates for full HPV vaccination at 47.2% among 15-year-old girls and 5.1% among 15-year-old boys at the end of 2019. **Source:** Robert Koch Institut, 2022.

[School vaccination programs as a solution to increase HPV vaccination rates in Germany?](#)

## Italy

This paper outlines how the Immunion programme will develop a schools-based programme in Lazio to help overcome vaccination inequities. The pilot programme is being led by the National Institute of Health in Italy (ISS). **Source:** De Castro, P., 2021. [Co-Creating/Co-Selecting Tools For Piloting](#). Immunion.

## Spain

*'The Impossibility of curing without understanding'*. This article explains the work of a leading cultural mediation organisation working in Spain, including how they help overcome language and health literacy barriers amongst migrant populations. **Source:** López Trujillo, M., 2019. [La imposibilidad de curar sin entender](#). Newtral.

## UK

Excellent overview and series of recommendations about how the UK can better track and monitor inequities in vaccination uptake. **Source:** Roberts, D., et al., 2021. [National Immunisation Programme: Health Equity Audit](#). Public Health England.

## General

One of the very few overall studies on this issue, written by some of the team running the [ImmuHubs](#) EU funded project to increase vaccination uptake among disadvantaged and isolated groups in 6 European countries. Led by German think tank, the Vaccine Safety Initiative.

**Source:** Ekezie, W., Awwad, S., & Krauchenberg, A., et al., 2022. [Access to Vaccination among Disadvantaged, Isolated and Difficult-to-Reach communities in the WHO European Region: A Systematic Review](#). Vaccines.

The most recent overview, which highlights the decline in confidence since 2018. Includes age and gender analysis as well as individual country analysis. **Source:** De Figueiredo, A., Egan, R., & Larson, H. J., et al., 2022. [State of Vaccine Confidence in the EU 2022](#). European Commission.

This guide offers countries a process through which to identify vulnerable groups and diagnose barriers and motivations to vaccination uptake, including using the COMB-behavioural insights model. It has been used in 13 EU countries since 2013. **Source:** WHO European Regional Office, 2019. [Tailoring Immunisation Programmes \(TIP\)](#)

An invaluable database that provides global, regional and country level data on vaccination coverage, cases and vaccine schedules. It also includes links to subnational data and the UNICEF WHO estimates of national immunisation

coverage for each country (WUENIC).

**Source:** [WHO Immunization Data Portal](#).

Designed for policymakers – this guidance outlines best practise to support policy and programme development of vaccination for refugees and migrants in the European Region. It includes priority actions, challenges and recommendations. **Source:** WHO European Regional Office, 2019. [Delivery of immunization services for refugees and migrants, Technical Guidance](#).

## About Business Fights Poverty

Business Fights Poverty is a global business-led network that partners with companies to support the lives, livelihoods and access to learning of the most vulnerable people and communities. We have 17+ years' experience coordinating rapid collaborations that drive action, curating meaningful convenings to deepen relationships and harnessing the collective learning of our 30,000+ community to unlock insights. At our centre, is a group of leading global companies and a network of content partners from across the international development community.

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- Carole Martin de Champs, Director, Observatoire Régional de la Santé Auvergne-Rhône-Alpes
- Ciara O'Rourke, Global Public Policy Director – Vaccination Confidence & Equity, MSD
- Dan Paskins, UK Impact Director, Save The Children

- Gustav Ando, Managing Director, Healthcare Economics and Market Access, Global Data
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- Dr Rochelle Burgess, Associate Professor in Global Health, Deputy Director, University College London Centre for Global Non-Communicable Diseases
- Roopa Dhatt, Executive Director, Women in Global Health
- Stefan Swartling Peterson Health Expert Advisor, Swedish Committee, UNICEF.

## London Borough of Southwark, Community Health Ambassadors

|                    |                            |
|--------------------|----------------------------|
| Alison Blackwood   | Monsurat Oyenuka           |
| Enduement Adiohwo  | Nurudeen Kallon            |
| Ernest Nkrumah     | Patricia K Cuenca          |
| Ese Anabui         | Patricia Kanneh-Fitzgerald |
| Franklin Akpomuwwe | Saidat Oketunde            |
| Gary Dixon         |                            |



# Annex 2: Examples of EU-funded projects

To assess how much the EU health budget spent on vaccination equity we reviewed projects funded under the Third Health Programme 2014–2020, listed in the CHAFAEA health programme database. The programme had a total budget of EUR 449.4 million and comprises 23 priority areas. We have not assessed how much has been funded on vaccination equity under the new 5 billion euro [EU4Health Budget](#) (2021–2027) which has allocated large sums to health crisis preparedness since COVID.

Out of the total budget, **12,388,235.75** euros were contributed to projects related

to vaccination equity. This is only **2.75%** of the total budget. In 2018, the [Joint Action on Vaccination](#) was launched to address vaccine hesitancy and seeks to increase vaccination coverage in the EU. The EU Health Programme provided 3.55 million euros of funding. If we were to include this to our total budget =  $3.55 \text{ million} + 12,388,235.75 = 15,938,235.70 / 449.4 \text{ million} \times 100 = 3.54\%$ . **The final vaccination related funding is equal to 3.5% of the total budget.** The examples of projects funded provide useful links to resources and institutions working to support vaccination equity.

| Duration & EC Contributions   | Title   | Description   | Relevance to UK, France, Germany, Italy, Spain   |
|---|---|---|--|
| 2021–2026<br>€3,299,750.00 from separate Horizon 2020 Research Budget so not included in total) | <a href="#">RIVER-EU</a>  | 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 whose main goal is to address uptake amongst specific ethnic, religious and cultural minority groups. The focus will be on MMR and HPV vaccination in selected underserved communities (migrants in Greece, Turkish and Moroccan women and girls in the Netherlands, Ukrainians in Poland and Roma in Slovakia). By shedding light on the health system determinants of low vaccine uptake, the project will develop strategies to increase vaccination rates.   | UK Bangladeshi community to be part of study. Part of this project is led by <a href="#">ViVi</a> and <a href="#">SEKI</a> .   |
| 01/05/2021 – 30/04/2024<br>€951,120.03  | <a href="#">Reaching the hard-to-reach: Increasing access and vaccine uptake among prison population in Europe [RISE-Vac] [101018353]</a> – Project | RISE-Vac aims at improving the health of the prison population in Europe by promoting vaccine literacy (VL), enhancing vaccine offer and increasing vaccine uptake (VU). Using state-of-the-art methodologies, RISE-Vac will gather existing evidence on vaccination strategies and services, targeting people in prison and combining it with prospectively collected data on (i) attitude and VL among prison population and staff; (ii) vaccination status and VU during incarceration. By upholding the principle that prison health is public health, the RISE-Vac project will provide tools and data-driven, evidence-based options to guide European countries in improving the health status of people in prison and the European population at large. | Italy: UNIVERSITA DI PISA [ <a href="#">UNIPi</a> ], AZIENDA SOCIO-SANITARIA TERRITORIALE (ASST) SANTI PAOLO E CARLO [ SPH ] + Health Without Barriers – European Federation for Prison Health (HWBs) [ Health Without Barriers – European Federation for Prison Health (HWBs) ]<br>Germany: <a href="#">FRANKFURT UNIVERSITY OF APPLIED SCIENCES [ ISFF ]</a><br><br>UK: Department of Health [ UK PHE ]<br><br>France: <a href="#">CENTRE HOSPITALIER UNIVERSITAIRE MONTPELLIER [ CHRU ]</a> |

|  |  |  |   |
|--|--|--|---|
| 01/05/2021 – 30/04/2024<br>€994,393.00   | <a href="#">Increased Access To Vaccination for Newly Arrived Migrants [AcToVax4NAM] [101018349]</a> – Project | Increased Access to Vaccination for Newly Arrived Migrants (NAM) – AcToVax4NAM aims to improve vaccination access for NAM making access conditions equitable and guaranteed. The project responds to 2020 WP’s specific topic, “Increased access to vaccination for newly arrived migrants in first-line, transit and destination countries”. Objectives: (1) Describe immunisation guidance, reception and vaccination offer systems for NAMs (2) Characterise system barriers hindering immunisation of NAMs & identify possible solutions   | Italy: <a href="#">ISTITUTO SUPERIORE DI SANITA [ ISS ]</a> , <a href="#">UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA [ UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA ]</a><br><br>Spain: <a href="#">FUNDACIO HOSPITAL UNIVERSITARI VALL D’HEBRON - INSTITUT DE RECERCA [ VHIR ]</a><br><br>Germany: <a href="#">ETHNO-MEDIZ-INSCHES ZENTRUM EV [ EMZ ]</a> (MiMi) |
| 01/05/2021 – 30/04/2024<br>€989,104.39   | <a href="#">Innovative Immunisation Hubs [ImmuHubs] [101018282]</a> – Project                                  | The Innovative Immunisation Hubs ('ImmuHubs') project will (1) Establish proactive partnerships with citizen groups, public health agencies, key stakeholders and the general public to improve access to vaccination in disadvantaged, isolated and difficult to reach population groups in 8 European countries, according to best practices for community partnerships. (2) Create innovative immunisation actions, which will increase vaccine uptake across borders, generations and population groups. (3) Develop sustainable solutions for vaccine protection of EU citizens, including during and after the COVID pandemic.   | Germany: <a href="#">ViVi</a> coordinates and the European Academy of Paediatricians AISBL (EAP) in Italy are one of 8 partners.<br><br>Italy: <a href="#">EUROPEAN ACADEMY OF PAEDIATRICS AISBL [ EAP ]</a>  |
| 01/04/2021 – 31/03/2023<br>€999,338.00   | <a href="#">Improving IMMunisation cooperation in the European UNION [IMMUNION] [101018210]</a> – Project      | IMMUNION's consortium aims to increase stakeholder collaboration to address issues of access to accurate information about vaccination and to improve education and training opportunities for health professionals and students. Activities include the development of a dedicated Coalition for Vaccination website with integration to the existing SEKI Platform, a Training-of-Trainers Workshop, developing National Toolboxes of vaccination communication best practices and improving the visibility of the Coalition for Vaccination.  | <a href="#">SEKI</a> & <a href="#">ViVi</a> .<br><br>Italy: <a href="#">ISTITUTO SUPERIORE DI SANITA [ ISS ]</a>  |
| 01/08/2018 – 31/03/2022<br>€3,511,177.02 | <a href="#">European Joint Action on Vaccination [EU-JAVI] [801495]</a> – Joint Actions                        | The Joint Action on Vaccination proposes to address several important issues, common to many countries such as establishing a sustained cooperation of relevant Member State authorities, defining basic principles for vaccine demand forecasting, developing a concept and prototype for a data warehouse for EU-wide sharing of vaccine supply and demand data. Developing a concept and prototype for a vaccine R&D priority setting framework, defining structural, technical and legal specifications as regards data requirements for electronic vaccine registries/databases/immunisation information systems To achieve these ambitious concrete actions, the project gathers 20 partners from 20 different countries as well as international organisations and relevant stakeholders. | France: <a href="#">INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE [ INSERM ]</a><br>Italy: <a href="#">ISTITUTO SUPERIORE DI SANITA [ ISS ]</a><br>Spain: <a href="#">FUNDACION PUBLICA MIGUEL SERVET [ FMS ]</a>   |
| 01/01/2018 – 31/12/2018<br>€584,206.40   | <a href="#">EPHA SGA 2018 [EPHASGA2018] [824205]</a> – Operating Grant   | EPHA is Europe's leading civil society alliance working to protect and improve public health for all and reduce health inequalities. Together with our 88 member groups, EPHA works toward policy change to tackle the root causes of health problems and barriers to achieve the best possible state of health, well-being and equity.  | Interesting report in <a href="#">Outputs section</a> : D6.2 Inputs to vaccination consultation lead by EPHA  |

|   |  |  |  |
|---|--|--|--|
| 01/01/2018<br>– 31/12/2018<br>€292,714.00   | <a href="#">EUPHA Operating Grant [EUPHA] [811123]</a> – Operating Grant   | EUPHA seminar in Brussels on vaccine confidence. The 4 country case studies (Italy, Poland, UK and Albania) showed that there are national and local factors that have an effect on vaccine confidence.  | Report in <a href="#">Outputs</a> : Seminar report, Vaccine confidence in Europe: time for action  |
| 01/01/2017<br>– 31/12/2017<br>€323,015.00   | <a href="#">Cancer Leagues Collaborating in Cancer Prevention and Control at the National and European Level [ECL_SGA_2017] [747456]</a> – Operating Grant | The Youth Ambassadors group organised a first “twitter chat” to discuss HPV vaccination, and produced a video to commemorate the 30th anniversary of the European Code Against Cancer, which has been viewed over 20,000 times.  |  |
| 01/04/2016<br>– 31/03/2017<br>€1,689,045.11 | <a href="#">Common Approach for Refugees and other migrants' health [CARE] [717317]</a> – Project  | The aim of the CARE project was to promote and sustain a good health status among migrants and local populations in 5 Member States experiencing strong migration pressure: Italy, Greece, Malta, Croatia and Slovenia. An inclusive survey on vaccinations offered to newly arrived migrants in the CARE participating countries was also conducted, based on primary data collection.  | Italy: <a href="#">ISTITUTO NAZIONALE PER LA PROMOZIONE DELLA SALUTE DELLE POPOLAZIONI MIGRANTI ED IL CONTRASTO DELLE MALATTIE DELLA POVERTA [INMP]</a> + <a href="#">ENTE STRUMENTALE ALLA CROCE ROSSA ITALIANA [ASSOCIAZIONE ITALIANA DELLA CROCE ROSSA]</a> + <a href="#">MINISTERO DELLA SALUTE [IT MINSAL]</a> + <a href="#">ISTITUTO SUPERIORE DI SANITA [ISS]</a> + <a href="#">AZIENDA OSPEDALIERO-UNIVERSITARIA ANNA MEYER [AOUMEYER]</a> + <a href="#">OSPEDALE PEDIATRICO BAMBINO GESU [OPBG]</a> + <a href="#">OXFAM ITALIA ONLUS [OXFAM ITALIA]</a> |
| 01/01/2016<br>– 31/12/2016<br>€332,539.00   | <a href="#">Cancer Leagues Collaborating in Cancer Prevention and Control at the National and European Level [ECL_SGA_2016] [709864]</a> – Operating Grant | This project aimed better link EU policy makers with information from cancer societies/associations on the ground. It also aimed to foster closer cooperation between cancer societies and relevant stakeholders to tackle common challenges arising from the growing chronic disease burden.  |  |
| 01/01/2015<br>– 31/12/2015<br>€487,440.00   | <a href="#">EPHA 2015: Protecting and improving public health and well-being in all policies. [EPHA] [671370]</a> – Operating Grant                        | EPHA is a leading NGO advocating for better public health for everyone living in Europe. Their key role is to promote health in the European Union at the highest levels of policy making across the European Commission, the European Parliament and the European Council.  |  |
| 01/01/2015<br>– 31/12/2015<br>€314,971.80   | <a href="#">Cancer Leagues Collaborating in Cancer Prevention and Control at the EU and National Level [ECL_OG_2014] [671365]</a> – Operating Grant        | This grant enabled the cancer leagues to monitor EU cancer prevention and control legislation and actions at the EU; Work towards a tobacco free Europe; Through the Patient Support Working Group (PSWG), explore patient issues among the member leagues for areas where ECL is able to formulate recommendations for use by leagues and at the EU level; Communicate and promote implementation of the European Code Against Cancer among member leagues and across Europe. |  |

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| 23/12/2014<br>– 22/12/2017<br>€315,272.00 | <a href="#">Cancer Leagues Collaborating in Cancer Prevention and Control at the EU and National Level [ECL_OG_2014] [664682]</a> – Framework Partnership Agreement | The Association of European Cancer Leagues (ECL) is an NGO leading on cancer control actions at the European level since 1980. Represented by members in the EU and non-EU countries at the national level, leagues are often the main resource for the public for cancer control information and services. |  |
| 01/09/2011<br>– 01/09/2014<br>€603,900.00 | <a href="#">Promotion of Immunization for Health Professionals in Europe [HProImmune] [20101102]</a> – Project  | A project that targeted health care workers as an ‘at risk group’ and provided education, training, and information exchange on seasonal influenza and vaccination.   | Germany: Technische Universität Dresden [ Technische Universität Dresden ] |

**TOTAL BUDGET 2014–2020 = €12,388,235.75**

## Endnotes

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**Community engagement can achieve things which are seemingly impossible to reconcile at first glance.** Roma communities will organise carpools to vaccination clinics. Kids will make a video about healthcare that goes viral. Ordinary citizens will have a hunger to understand how a vaccine was developed and tested. And lives can be saved by knocking on a door and asking the right question. The harder reality is that trust isn't built in minutes or hours, but over months and years that don't fit neatly into a project plan. As one community worker stated, "We need to continue building this bridge, because we can't build a bridge and burn it after we use it. Those bridges need to be there. And they need to be maintained. And they need to be looked after."

**—Julie Jenson, Author of Transformations in Community Collaboration**