

# Childhood, health inequalities, and vaccine-preventable diseases

## Factsheet

THE MEASLES VACCINE HAS SAVED<sup>1</sup>  
**>20 million lives**  
WORLDWIDE SINCE 2000.

Vaccination is a highly cost effective health intervention. It saves millions of people from certain infectious diseases, disability, and death each year. Vaccines **protect health and wellbeing** and support the achievement of the **Sustainable Development Goals (SDGs)**<sup>2</sup>.

Europe is a world leader in controlling vaccine preventable diseases<sup>3</sup>.

However, there were **outbreaks** of measles and cases of diphtheria, pertussis, and mumps in Europe in 2016, 2017, and 2018. Measles cases in Europe tripled between 2017 and 2018<sup>4</sup>.

The mid-term review of the WHO/Europe Vaccination Plan 2015-2020 found that the region is not on track to reach its goal of verification of measles and rubella elimination, and is at risk of not reaching vaccination coverage targets<sup>5</sup>.

Less than 0.5% of GDP is allocated to disease prevention programs and vaccine expenditure fall below 0.5% of healthcare spending in many of the European countries<sup>6</sup>.

**Vaccination hesitancy** is on the rise<sup>7</sup>. Some parents are deciding not to vaccinate their children<sup>8</sup> due to fears of unproven side effects, lack of information or underestimating consequences for the health of their children and herd immunity.

**1 in 10**



**children in the European region remain vulnerable to potentially life-threatening diseases** as they have not received a basic set of vaccinations usually delivered in infancy<sup>9</sup>.

**Inequalities in access to childhood immunisation persist.** Like other medical interventions, vaccination is subject to the social gradient<sup>10</sup>, contributing to health inequalities<sup>11</sup>. Wealth distribution, maternal education, place of residence, the sex of the child, and poverty are linked to levels of vaccination coverage<sup>12,13</sup>. It is important to consider these factors when designing universal vaccination programmes that respond to the needs of low socio-economic groups.

**288% increase**  
in suspected measles cases  
in the European region

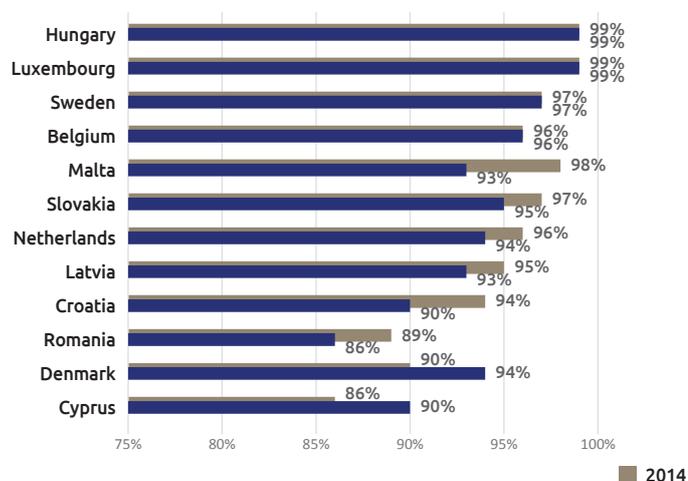
IN THE FIRST 3 MONTHS OF 2019,  
COMPARED TO THE SAME PERIOD IN 2018<sup>14</sup>.



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## The level of vaccination varies between Member States

### Measles vaccination coverage trends 2014-2016



### Polio vaccination coverage trends 2014-2016

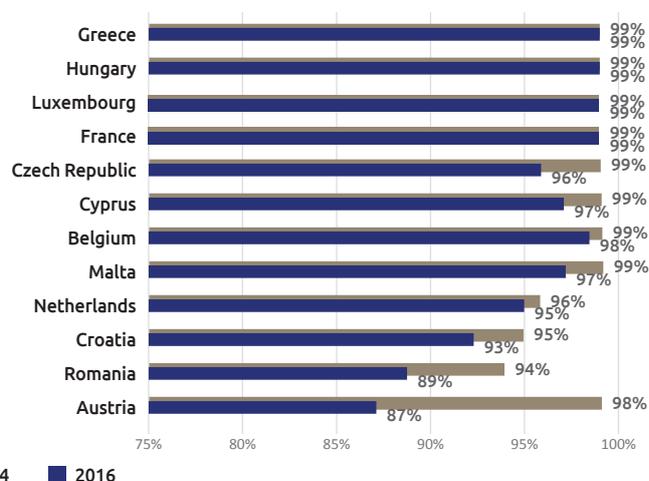
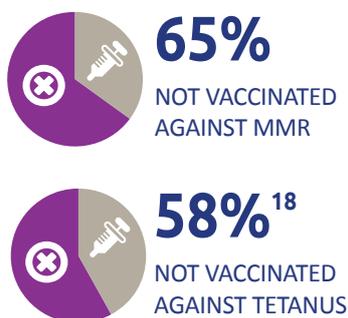


Chart 1. Percentage of children vaccinated against measles in 2014 and 2016 (left); against polio in 2014 and 2016 (right). Source: ECHI Data Tool <http://ec.europa.eu/health/dyna/echi/datatool/index.cfm>

In 2017 in the EU/EEA area, 87% of people who contracted measles were never vaccinated. 37% of known cases were in children less than five years of age, while 45% cases were in those aged 15 years or older<sup>15</sup>. The highest incidence rates<sup>16</sup> were reported amongst babies less than one year old (367.2 cases per million) and children from 1 to 4 years of age (161.7 cases per million) - too young to have received the first dose or complete the recommended dosage of vaccination<sup>17</sup>. They are the most at risk of complications and death.

### Vulnerable and excluded families



Due to lack of aggregated European data, it is difficult to fully examine vaccination rates by socio-economic status. However, the information that is already available offers – to some extent – the potential to investigate and predict trends. For example, only 35% of children in families facing multiple health vulnerabilities seen by [Medecins du Monde International Network](#)<sup>18</sup> were vaccinated against MMR, while 58% had not been vaccinated against tetanus.

### Migrant and refugee children

Migrant and refugee children (c. 25% of the total migrant population in Europe) are [considered the group at greatest risk for vaccine-preventable diseases](#)<sup>19</sup> because they may not have been vaccinated in their country of origin or may not have completed the vaccination course. Less than one third of EU Member States have specific directives on immunisation focusing on migrants and refugees, including children.

### Roma children

Studies show a [higher rate of infectious diseases amongst Roma than the majority population](#)<sup>20</sup>. The little available data on vaccination uptake in the Roma population<sup>21</sup> suggests that Roma communities have lower or much lower rates of childhood vaccination uptake. This is especially the case for migrant Roma, while some exceptions exist in Croatia, Hungary and the Czech Republic. [Some evidence](#) suggests that the probability that a Roma child will be vaccinated against diphtheria, pertussis and tetanus (DPT), polio, and MMR is about 55% - 60% that of a non-Roma child<sup>22</sup>.

Raising awareness and improving levels of health literacy are important to overcoming vaccine hesitancy but are not sufficient.

Equitable access to safe and cost-effective vaccines is vital to protect the general child population, and children from disadvantaged backgrounds in particular. This includes migrants, ethnic minorities, those with low socio-economic status, and from rural communities and underserved urban areas.



## What international institutions are doing

### WHO Europe 2015 - 2020 European Vaccine Action Plan

The WHO Europe developed a tailored immunisation programme approach (TIP). It assists health care professionals, public health authorities and decision-makers in tailoring services to close immunity gaps and reach under served groups<sup>23</sup>.

### European Commission action

The European Commission supports EU countries to coordinate their immunisation policies and programmes<sup>24</sup>. It encourages Member States to ensure optimal coverage of childhood immunisation, and to cooperate on cross-border health threats and response preparedness.

#### In 2018

A **communication on a proposal for 'Strengthened cooperation against vaccine preventable diseases'** was published by the Commission. It was accompanied by a public consultation on the proposal<sup>25</sup>.

As a result, the Council of EU Ministers for Health and Social Affairs (EPSCO) adopted a **Recommendation to explicitly tackle vaccine hesitancy, improve coordination on vaccine procurement, support research and innovation, and boost EU-wide cooperation on vaccine-avoidable disease**. Plans include EU-wide electronic vaccination card and European vaccination information portal<sup>26</sup>.

The Commission also published two major reports contributing

to the vaccine debate in 2018 - on **'the Organisation and Delivery of Vaccination Services in the European Union'**<sup>27</sup>, and on **'The State of Vaccine Confidence in the EU 2018'**<sup>28</sup>.

The EC Expert Panel on Effective Ways of Investing in Health (EXPH) published a report on **'Vaccination Programmes and Health Systems in the European Union'**<sup>29</sup>.

#### In 2019

The **Commission's Directorate General for Health and Food Safety (DG SANTE) workplan for 2019**<sup>30</sup> includes action on vaccination issues in line with the Council recommendation. This describes action on establishing a European Vaccination System, countering misinformation and developing evidence-based information tools, strengthening supply and mitigating shortages, creating a European Vaccination Portal to provide reliable information, and monitoring public opinion on vaccines and policy action.

### Joint action on Vaccination

The EU Joint action on Vaccination (EU-JAV) is developing and sharing concrete tools for stronger national responses to vaccination challenges, and supporting long lasting European cooperation against vaccine preventable diseases. The action, which will run from 2018-2021 includes 17 Member States and 3 non-EU countries. The European Commission, health ministries, and other stakeholders including EuroHealthNet are collaborating on the action.

## What more can be done<sup>31</sup>

1. Grant free of-charge access to specific health services, including national immunisation schemes for all children residing in Europe.
2. Integrate universal access to childhood immunisation into policies designed to benefit groups facing multiple vulnerabilities, such as the Roma and migrants.
3. Revise legislation and policies which restrict access to childhood vaccination for marginalised populations.
4. Promote appropriate legislation and actions, and provision of a legal commitment to public funding for immunisation.
5. Design childhood immunisation services with respect to principles of accessibility, adequacy, and cultural sensitivity. Integrate childhood immunisation services into a wider child-centred early years and transition-to-adolescence system.
6. Strong health systems are needed to deliver and to improve immunisation coverage and equity. Public and health workforce resilience to vaccine safety fears can be improved through increased capacity-building within immunisation programmes.
7. Ensure responsive, inclusive, participatory and representative decision-making to boost confidence in childhood immunisation among the public. Address vaccine hesitancy and other barriers in accessing vaccination.
8. Invest in health promotion and disease prevention, and in improving health literacy, focusing on those children and families in greatest need. Address underlying inequalities when addressing vaccine hesitancy among various population groups.
9. Invest in comparable data at local, regional, and national level that can be used to measure inequalities in childhood immunisation coverage.
10. Align local, regional, national, and European level actions on sustainable vaccination policies with work on health inequalities and sustainability.

## What EuroHealthNet's members are doing<sup>32</sup>

- **Developing better communication with the public and within the health community.** Information is produced in a variety of formats and disseminated via a range of media, adapted to local linguistic diversity, sensory impairment, and existing levels of (health) literacy. For example:
  - In Sweden the Public Health Authority prepared videos and online presentation materials for parents, organises dialogue groups, and trains parents as educators - all in Somali language<sup>33</sup>.
  - In Greece, communication campaigns are specifically designed to target different socio-economic and health professional groups<sup>34</sup>.
  - In Scotland, the National Health Service is using social media to improve the reach of clear and correct information about vaccines, and runs the Twitter account [@NHSImmunistScot](https://twitter.com/NHSImmunistScot). A WHO accredited website for the public has also been established to help internet users find reliable vaccine safety information tailored to their needs ([www.nhsinform.scot/immunisation](http://www.nhsinform.scot/immunisation)). Research with Polish parents in Scotland showed that vaccine information needs to evolve and provide factual information in a range of formats on concerns that some parents have, particularly around side effects and perceived (lack of) seriousness of the disease.
- **Ongoing education and training for the health workforce,** including in approaches to the underserved population groups. Nurses and community-based health staff are being involved. In Greece, a specific evidence-informed project – promoted by our member PROLEPSIS - has been developed to address awareness, information, and skills gaps in terms of attitudes and knowledge towards vaccination<sup>35</sup>. In 2019 Santé Publique France launched a campaign to promote the national vaccination reference site amongst health professionals: [vaccination-info-service.fr](http://vaccination-info-service.fr). The site now includes a 'space for professionals'.
- Routine checks on vaccination status are integrated into regular health consultations in some countries.
- Efforts are being made to address socio-economic determinants under-lying vaccination coverage gaps, in particular those related to financial and statutory accessibility (ensuring that vaccinations are affordable, available and accessible regardless one's financial or legal status).

Visit [www.EuroHealthNet.eu](http://www.EuroHealthNet.eu) for more information

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## FOOTNOTES

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