CHILDHOOD VACCINATIONS

Diseases such as measles, diphtheria, pertussis and influenza are highly infectious and spread through human contact, while the hepatitis B virus is transmitted by contact with blood or body fluids of an infected person, by sex or from mother to child. Effective vaccination is available to prevent all these infectious diseases. All EU countries have established childhood vaccination programmes, contributing to reducing many deaths related to these diseases, although the number and type of vaccines vary to some extent across countries.

Vaccine-preventable diseases have resurfaced in some parts of Europe recently due to a combination of declining vaccine coverage, increasing supply shortages and growing vaccine hesitancy. The European Commission has called for stronger efforts and cooperation to tackle hesitancy against vaccines, improve vaccination coverage and develop sustainable vaccination policies in the EU (European Commission, 2018).

Vaccination against measles is included in all national childhood vaccination programmes, whereas vaccination against hepatitis B has been included in a growing number of countries, but is available only for certain risk groups in a few Nordic countries (Denmark, Finland and Iceland). The WHO recommends at least 95% coverage with two doses of measles-containing vaccine by 2020 (WHO, 2012). As for hepatitis B, a proportion of infections become chronic, and this risk is high particularly among infants and children. Infected people are at high risk of death from cancer or cirrhosis of the liver. The hepatitis B vaccine is considered to be 95% effective in preventing infection and its chronic consequences. WHO recommends that all infants should receive their first dose of hepatitis B vaccine as soon as possible after birth (WHO, 2017).

On average across EU countries, 94% of children received at least one dose of measles vaccine before turning age 1 (Figure 6.4). However, the vaccination rate in 2017 did not reach more than 90% of children in Romania, Croatia, Cyprus and France.

Measles continues to spread in some parts of Europe. Between May 2017 and May 2018, 13 475 cases of measles were reported, up from 8 523 cases for the preceding 12-month period (see Chapter 3). Almost 85% of these cases were reported in Italy (4 032), Greece (2 752), France (2 436) and Romania (2 127). Most measles cases were reported among people who were not vaccinated, particularly children below age 1 who were too young to have received the first dose of the vaccine and older individuals who had missed vaccination (ECDC, 2018).

Small decreases in vaccination rates can result in large increases in measles cases. In Romania, vaccination coverage has decreased by 10 percentage points over the past decade. In Italy, the rate decreased from 91% in 2010 to 85% in 2016, but it went back up to 92% in 2017.

Viruses do not respect national borders. About 10% of all measles cases are due to infections acquired by people while travelling outside of their home country or imported by visitors from other countries (ECDC, 2018). This highlights the importance of maintaining high vaccination coverage across countries in an EU and global context.

On average, 93% of children at age 1 receive hepatitis B vaccination across EU countries where this vaccination is part of the national immunisation programme. The vaccination rates are particularly high in Latvia and Portugal, but less than 90% in Germany, Malta, Slovenia and Sweden (Figure 6.5). In Sweden, hepatitis B was included in the national childhood vaccination programme only in 2016, which partly explains why the coverage is still relatively low. In Denmark and Finland, where data are not available, hepatitis B vaccination is not yet part of the general infant vaccination programme, but is provided to high-risk groups. Hungary and Slovenia have also not yet included hepatitis B vaccine in their infant vaccination programme.

Between 2007 and 2017, vaccination rates for hepatitis B among children have increased by 8 percentage points on average across EU countries that have this vaccination included in their national immunisation programme. The increase was particularly large in France, the Netherlands and Sweden.

**Definition and comparability**

Vaccination rates reflect the percentage of children under one year old who have received the respective vaccination (at least one dose of measles-containing vaccine and three doses of hepatitis B vaccine) in a given year. The age of complete immunisation differs across countries due to different immunisation schedules. For those countries recommending the first dose of measles vaccine after age one, the indicator is calculated as the proportion of children less than two years of age who have received that vaccine. Thus, these data reflect the actual policy in a given country and are not always strictly comparable across countries.

**References**


6.4. Vaccination against measles, children aged 1, 2017 (or nearest year)

Source: WHO/UNICEF.

http://dx.doi.org/10.1787/888933835687

6.5. Vaccination against hepatitis B, children aged 1, 2017 (or nearest year)

Note: Data for Denmark, Finland, Hungary, Iceland and Norway are not available because national infant vaccination programmes do not cover Hepatitis B. Data is not available for the United Kingdom.

Source: WHO/UNICEF.

http://dx.doi.org/10.1787/888933835706