

3.3. CHILDHOOD VACCINATION PROGRAMMES

Childhood vaccination continues to be one of the most cost-effective public health interventions. All European countries, or in some cases sub-national jurisdictions, have established vaccination programmes based on their interpretation of the risks and benefits of each vaccine.

Vaccination against pertussis (often administered in connection with vaccination against diphtheria and tetanus) and measles is part of almost all programmes. Reviews of the evidence supporting the efficacy of vaccines against these diseases have concluded that the respective vaccines are safe and highly effective. In the European Union, the gradual take-up of the measles vaccine has meant that measles incidence is around twenty times lower than the rate of the early 1990s (see Indicator 1.11), although outbreak can still occur.

A vaccination for hepatitis B has been available since 1982 and is considered to be 95% effective in preventing infection and its chronic consequences, such as cirrhosis and liver cancer. In 2004, it was estimated that over 350 million people were chronically infected with the hepatitis B virus worldwide and at risk of serious illness and death (WHO, 2009a). In 2007, more than 170 countries had already begun to follow the WHO recommendation to incorporate hepatitis B vaccine as an integral part of their national infant immunisation programme.

Figures 3.3.1 and 3.3.2 demonstrate that the overall vaccination of children against pertussis (including diphtheria and tetanus) and measles is high in most European countries. On average, about 95% of 2-year-old children receive the recommended pertussis and measles vaccination, a level that is high enough to provide effective immunity. Vaccination rates are the lowest in Malta and Austria, with less than 85% of children vaccinated against these diseases.

Figure 3.3.3 shows that the average percentage of children aged 2 years vaccinated for hepatitis B across countries with national programmes is also over 95%. However, some European countries do not currently require children to be vaccinated by age 2, or do not have routine programmes, and consequently the rates for these countries are significantly lower. For example, in Denmark and Sweden, vaccination against hepatitis B is not an obligatory part of vaccination programmes, and is only recommended to specific risk groups. In France, hepatitis B vaccination remains controversial, given ongoing speculation over possible side effects.

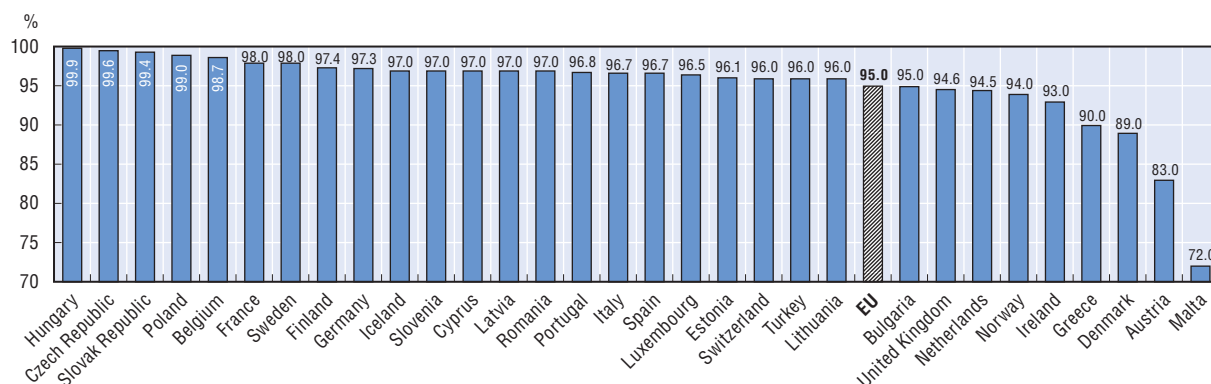
Figure 1.11.3 in Chapter 1 indicates that the incidence of hepatitis B is low in the majority of European countries, at less than 2 per 100 000 population. However, in Iceland, Bulgaria, Turkey, Austria, Latvia and Romania, the rates are more than two times the EU average.

Definition and deviation

Vaccination rates reflect the percentage of children at age 1 or 2 receiving the respective vaccination. Childhood vaccination policies differ across countries. Some countries administer combination vaccines (*e.g.* DTP for diphtheria, tetanus and pertussis) while others administer the vaccinations separately. Schedules for administering vaccines also differ.

Some countries ascertain vaccinations based on surveys and others based on encounter data, which may influence the results.

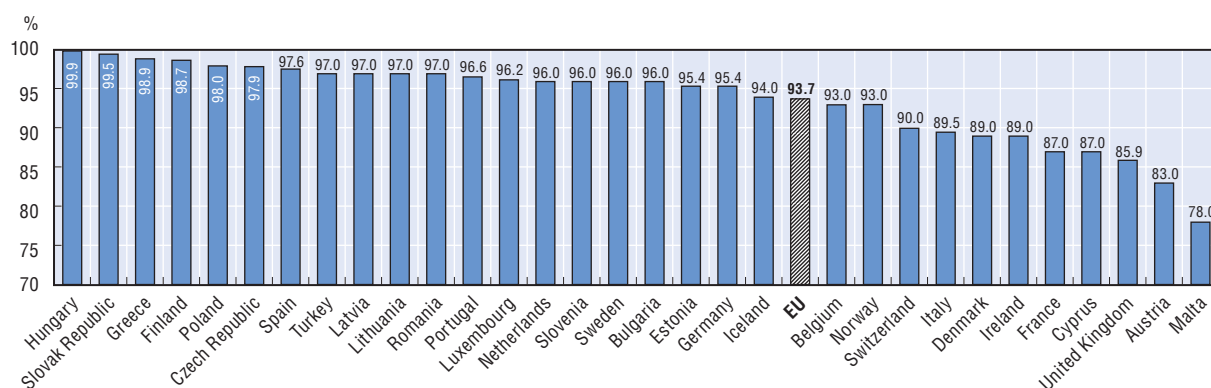
3.3.1. Vaccination rates for pertussis, children aged 2, 2008 (or nearest year available)



Source: OECD Health Data 2010; WHO vaccine-preventable diseases: monitoring system 2010 global summary.

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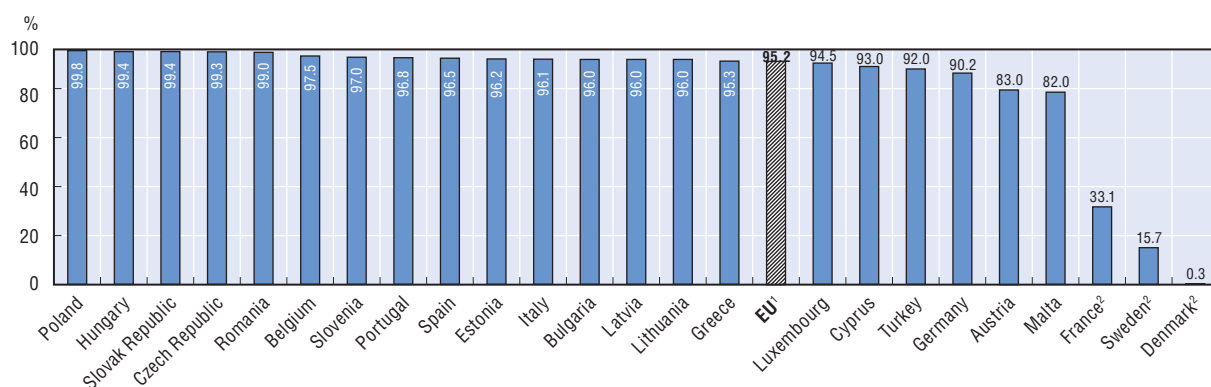
3.3.2. Vaccination rates for measles, children aged 2, 2008 (or nearest year available)



Source: OECD Health Data 2010; WHO vaccine-preventable diseases: monitoring system 2010 global summary.

StatLink <http://dx.doi.org/10.1787/888932336749>

3.3.3. Vaccination rates for hepatitis B, children aged 2, 2008 (or nearest year available)



1. EU average only includes countries with required or routine immunisation.

2. In France, Sweden and Denmark, vaccination for hepatitis B is not required or routinely provided.

Source: OECD Health Data 2010; WHO vaccine-preventable diseases: monitoring system 2010 global summary.

StatLink <http://dx.doi.org/10.1787/888932336768>