Vaccination programmes are among the safest and most effective public health interventions to provide protection against diseases such as diphtheria, tetanus and pertussis, measles and hepatitis B. All EU member countries have established vaccination schedules, recommending the vaccines to be given at various ages during childhood. Although there is strong evidence that childhood vaccines are highly cost-effective health care intervention, too many children in Europe go unvaccinated and remain vulnerable to these potentially life-threatening diseases. Notably, children from disadvantaged socio-economic groups such as Roma migrants have a lower likelihood of receiving vaccination, which calls for actions to design more effective vaccination strategies.

Vaccination against diphtheria, tetanus and pertussis (DTP) and measles are part of all national vaccination schedules in Europe. Figures 4.9.1 and 4.9.2 show that the overall vaccination of children against DTP and measles is high in European countries. On average, 96% of 1-year-old children received the recommended DTP vaccination and 94% received measles vaccinations in accordance with national immunisation schedules. Rates for DTP vaccinations are below 90% only in Austria, Romania and Iceland, while vaccination rates against measles are below 90% only in Austria, Cyprus, France and Serbia.

Although national coverage rates are high, some parts of the population remain exposed to certain diseases. In 2013, for example, there was a measles outbreak in the North of England as well as parts of Wales. The outbreak was linked to a time in the early 2000s when vaccination rates fell to 80% among a cohort of children. During this period there was intense media coverage on the safety of the measles, mumps and rubella (MMR) vaccine, leading many parents to decide not to immunise their child. Although these safety concerns have since been refuted, large numbers of children in this age cohort remain unimmunised, raising the likelihood of outbreaks such as the one experienced in 2013.

Figure 4.9.3 shows the percentage of children aged one year who are vaccinated for hepatitis B. The hepatitis B virus is transmitted by contact with blood or body fluids of an infected person. A small proportion of infections become chronic, and these people are at high risk of death from cancer or cirrhosis of the liver. A vaccination has been available since 1982 and is considered to be 95% effective in preventing infection and its chronic consequences. Since a high proportion of chronic infections are acquired during early childhood, the WHO recommends that all infants should receive their first dose of hepatitis B vaccine as soon as possible after birth, preferably within 24 hours (WHO, 2009).

Most EU countries have followed the WHO recommendation to incorporate hepatitis B vaccine as an integral part of their national infant immunisation programme (WHO/UNICEF, 2014). For these countries, the immunisation coverage is averaging 94%. However, a number of countries do not currently require children to be vaccinated and consequently the rates for these countries are significantly lower than other countries. For example, in Denmark and Sweden, vaccination against hepatitis B is not part of the general infant vaccination programme, but is provided to high risk groups such as children with mothers who are infected by the hepatitis B virus. Other European countries that do not include vaccination against hepatitis B in their infant programmes are Iceland, Finland, Hungary, Slovenia, Switzerland and the United Kingdom. In France, hepatitis B vaccination has been controversial but vaccination coverage among children has increased in recent years.

Definitions and comparability

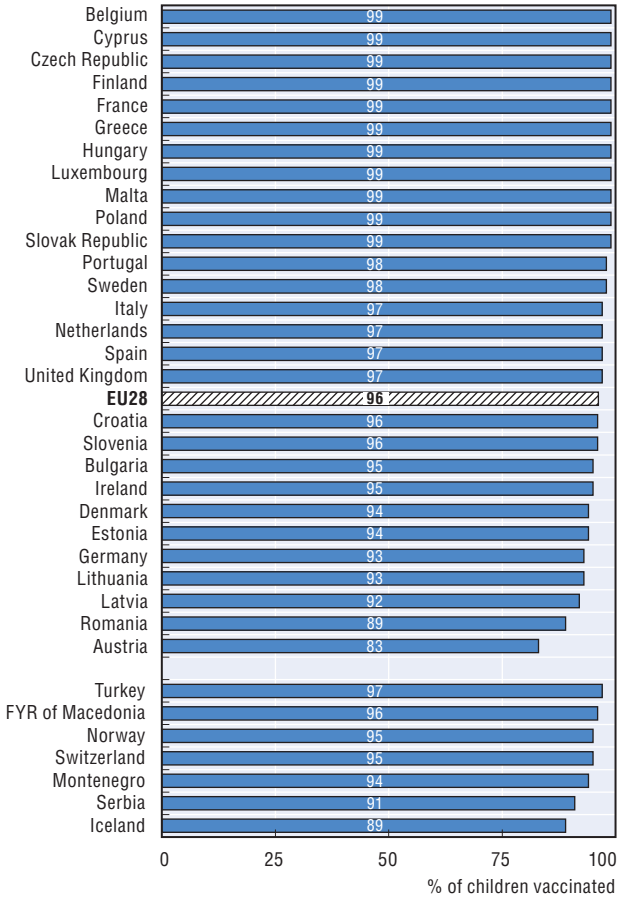
Vaccination rates reflect the percentage of children at either age 1 or 2 who receive the respective vaccination in the recommended timeframe. Childhood vaccination policies differ slightly across countries. Thus, these indicators are based on the actual policy in a given country. Some countries administer combination vaccines (e.g. DTP for diphtheria, tetanus and pertussis) while others administer the vaccinations separately. Some countries ascertain vaccinations based on surveys and others based on encounter data, which may influence the results.

References

WHO – World Health Organization (2009), *Hepatitis B WHO Fact Sheet* No. 204, WHO, Geneva.

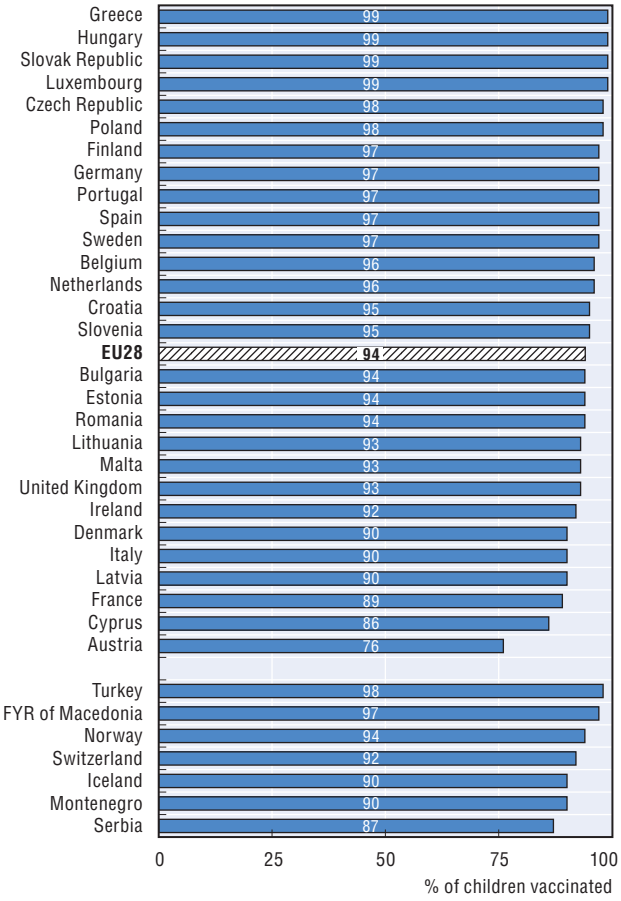
WHO/UNICEF (2014), "Immunization Schedule – February 2014 Update", available at *www.who.int/immunization_monitoring/data/data_subject/en/index.html* [accessed 9 July 2014].

4.9.1. Vaccination against diphteria, tetanus and pertussis, children aged 1, 2012



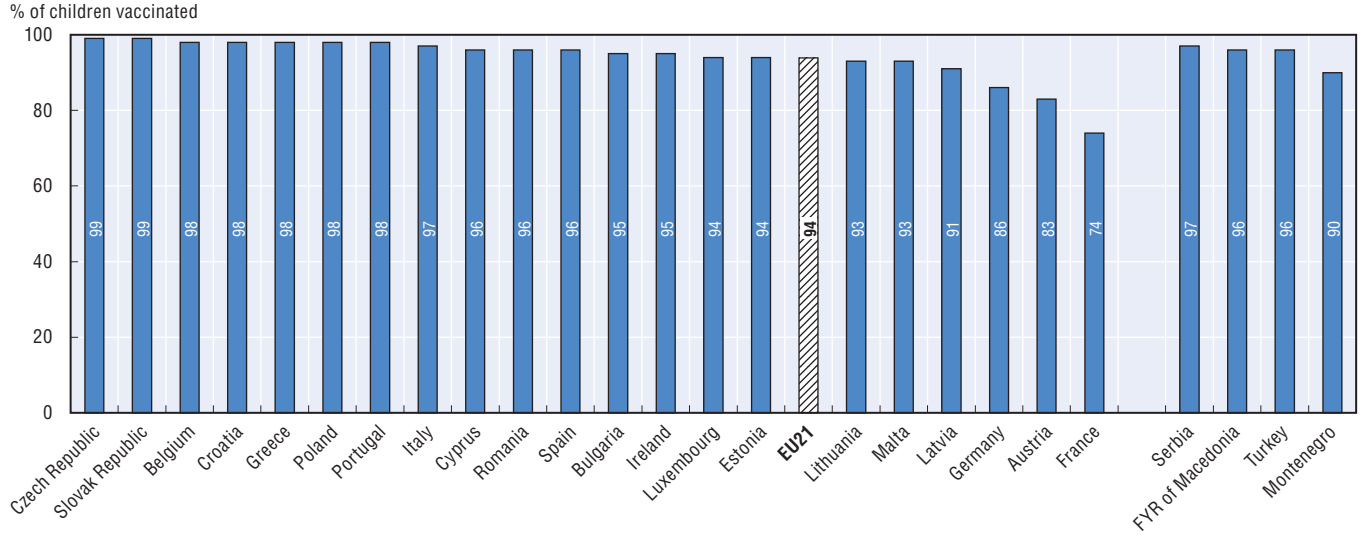
Source: WHO/UNICEF (2014), *http://dx.doi.org/10.1787/health-data-en.*

4.9.2. Vaccination against measles, children aged 1, 2012



Source: WHO/UNICEF (2014), *http://dx.doi.org/10.1787/health-data-en.*

4.9.3. Vaccination against hepatitis B, children aged 1, 2012



Source: WHO/UNICEF (2014), *http://dx.doi.org/10.1787/health-data-en.*

StatLink http://dx.doi.org/10.1787/888933155748