All OECD countries have established vaccination programmes based on their interpretation of the risks and benefits of each vaccine. For children, vaccination rates for diphtheria, tetanus and pertussis (DTP), measles, and hepatitis B at age 1 are high across OECD countries (Figures 6.42 and 6.43). On average, over 95% of children receive the recommended DTP or measles vaccinations, while almost 94% receive a recommended hepatitis B vaccination. Vaccination rates for DTP are below 90% in Indonesia, Mexico, and India. Vaccination rates for measles are below 90% in Italy, Indonesia, and India while vaccination rates for hepatitis B are below 90% in Mexico, France, Indonesia, India, and Germany.

Overall rates of vaccination among children are increasing. Between 2005 and 2015, vaccination rates among children have increased 1 percentage point for DTP vaccination, more than 2 percentage points for measles, and nearly 12 percentage points for hepatitis B among OECD countries. Large increases in hepatitis B vaccination can be seen over this period in a number of OECD countries including France and the Netherlands, reflecting the introduction of national programmes. However, vaccination rates have dropped in recent years in some countries, notably for measles coverage in Australia and Italy. Even small decreases in vaccination can result in large increases in disease cases (Lo et al. 2017). While national vaccination coverage rates are high, some populations remain under-covered. A 2015 outbreak of measles in the United States was caused by a number of unvaccinated individuals, while in Europe 1020 cases of measles were reported between February 2016 and January 2017 in Italy alone. (CDC, 2017; ECDC, 2017).

Not all countries follow WHO recommendations to incorporate hepatitis B into national immunisation programmes, including Denmark, Finland, Sweden, and the United Kingdom, where vaccination is not part of the general infant vaccination programme, but is provided to high-risk groups. Other OECD countries that do not include vaccination against hepatitis B in their infant programmes are Iceland, Hungary, Japan, Slovenia and Switzerland. In Canada, the Hepatitis B immunisation schedule varies by jurisdiction.

Influenza is a common infectious disease responsible for 3 to 5 million severe cases worldwide, including 250 000 to 500 000 deaths. Hospitalisation and death occur mainly among high-risk groups and in industrialised countries most deaths associated with influenza occur among people age 65 or older (WHO, 2016). Safe and effective vaccination is available for influenza and most countries recommend annual vaccination among older adults.

In 2003, countries participating in the World Health Assembly committed to the goal of attaining vaccination coverage against influenza among the elderly of at least 75% by 2010. Figure 6.44 shows vaccination among adults over 65 for 2005 and 2015. Over this period, the average vaccination rate against influenza among the elderly population decreased among OECD countries from 49% to 43%. Large decreases can be seen in Germany, Slovenia, and Italy. Some countries did show increased vaccination over this time period including Mexico, Israel, the United States, Portugal, Denmark, Greece, and New Zealand. Only two countries attained the 75% target: Mexico and Korea, with the United Kingdom coming close to meeting the target.

Definition and comparability

Vaccination rates reflect the percentage of children that receives the respective vaccination in the recommended timeframe. The age of complete immunisation differs across countries due to different immunisation schedules. For those countries recommending the first dose of a 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 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.

Influenza vaccination rates refer to the number of people aged 65 and older who have received an annual influenza vaccination, divided by the total number of people over 65 years of age. In some countries, the data are for people over 60 years of age. The main limitation in terms of data comparability arises from the use of different data sources, whether survey or programme, which are susceptible to different types of errors and biases. For example, data from population surveys may reflect some variation due to recall errors and irregularity of administration.

References


6. QUALITY AND OUTCOMES OF CARE

Vaccinations

6.42. Percent of children aged 1 vaccinated for diphtheria, tetanus and pertussis (DTP) and measles, 2015 (or nearest year)

1. All data estimated.
2. Measles data estimated.

StatLink http://dx.doi.org/10.1787/888933604134

6.43. Percent of children aged 1 vaccinated for hepatitis B, 2005 and 2015

1. 2015 data estimated.
2. 2005 data estimated.

StatLink http://dx.doi.org/10.1787/888933604153

6.44. Percent of population aged 65 and over vaccinated for influenza, 2005 and 2015

1. 2015 data estimated.

StatLink http://dx.doi.org/10.1787/888933604172