## Routine vaccinations

Vaccines are an effective and cost-effective tool for protecting against infectious diseases. There is broad agreement within the global scientific community that the most effective way to defeat COVID-19, for example, is through the mass vaccination of populations around the world.

Influenza is a common infectious disease, annually responsible for 3-5 million severe cases worldwide, along with up to 650 000 deaths (WHO, 2019[1]). Older people are at greater risk of developing serious complications from influenza – including pneumonia and sepsis, which can result in serious illness or death. The World Health Organization (WHO) recommends that 75% of older people should be vaccinated against seasonal influenza.

Figure 6.2 shows vaccination rates among adults over 65 for 2009 and 2019, and in some cases 2020. In 2019, the average vaccination rate for this vulnerable group was only 46% across OECD countries, decreasing from the 2009 rate of 49%. A 20 percentage point or higher decrease in influenza vaccination of older people was observed in the Netherlands, Chile and Germany during this time period.

Abating public confidence in the safety and efficacy of vaccination may play a role in declining coverage in some countries. In North America, only 72% of the population agreed that vaccines are safe; this figure was only 59% in Western Europe (Gallup, 2019[2]). This vaccine hesitancy has extended to COVID-19, where more recent survey findings showed that only 68% of respondents globally would be willing to receive an approved vaccine if offered it free of charge (Gallup, 2021[3]). Government actions to garner trust are essential to the success of vaccination programmes for COVID-19 and other vaccine-preventable diseases (OECD, 2021[4]).

Despite global trends, some countries did show increased vaccination rates between 2009 and 2019, including Greece, Lithuania, Estonia and Korea, where rates for adults over 65 increased by over 10%. Only Korea (at 86%) and Mexico (at 82%) attained the 75% WHO target in 2019. All 11 countries that provided 2020 data saw improvement over 2019 figures.

As with influenza, the most direct way to protect populations from COVID-19 and to reduce morbidity and mortality is to prioritise vulnerable populations for vaccination, including older people, those with pre-existing conditions, and health care workers (OECD, 2021[5]). Primary care can play a key role in the execution of vaccination programmes for vulnerable populations and the various programmes countries have put in place to respond effectively to the demands of the COVID-19 pandemic (OECD, 2021[6]). This may be illustrated by increases in influenza vaccination rates for older people between 2019 and 2020 in some countries where data over the recent period are available, including Iceland, Spain, Ireland, Greece, Israel, New Zealand and Chile.

Coverage of childhood vaccination relies on the ability of health systems to deliver timely routine care. Figure 6.2 shows vaccination coverage for diphtheria, tetanus and pertussis (DTP), measles and hepatitis B at 1 year of age. Across OECD countries, vaccination levels are high, with around 95% of children receiving the recommended DTP or measles vaccinations and 91% receiving the recommended hepatitis B vaccination. Despite high overall rates, however, nearly half of countries fall short of attaining the minimum immunisation levels recommended by the WHO to prevent the spread of measles (95%); Estonia, Canada and France have immunisation rates of 90% or below. Further, Austria and Mexico do not meet the minimum immunisation levels recommended by the WHO for DTP (90%).

High national coverage rates may not be sufficient to stop disease spread if the within-country distribution of vaccinations is uneven. Low coverage in specific local population groups can lead to outbreaks. However, measures put in place to respond to the COVID-19 pandemic – such as increased hygiene, use of face masks and reduced crowding – may also reduce rates of other communicable diseases. In particular, a significant global decrease in measles cases has been observed during the COVID-19 pandemic. In the United States, for example, only 13 individual cases of measles were reported for 2020 – far below the 2019 national figure of 1 282 (CDC, 2021[7]).

#### **Definition and comparability**

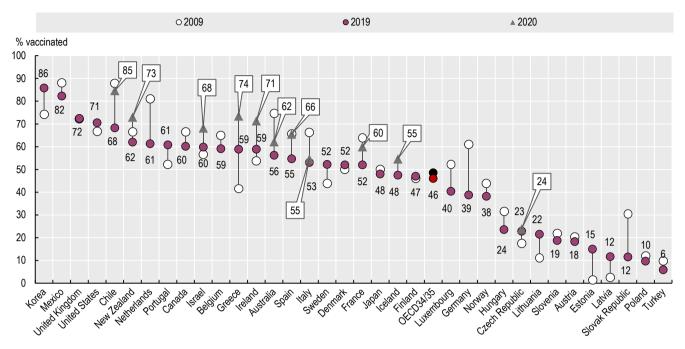
Vaccination rates reflect the percentage of people that receive the respective vaccination in the recommended timeframe. The age of complete immunisation differs across countries owing to different immunisation schedules. For those countries recommending the first dose of a vaccine after 1 year of age, the indicator is calculated as the proportion of children under 2 years 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), while others administer the vaccines separately. Some countries ascertain whether a vaccination has been received based on surveys, and others based on encounter data; this may influence the results. In Canada, only four provinces and three territories include vaccination against hepatitis B in their infant immunisation programmes. Other Canadian jurisdictions do this at school age.

Influenza vaccination rates refer to the number of people aged 65 and over who have received an annual influenza vaccination, divided by the total number of people over 65. In some countries, the data are for people aged over 60.

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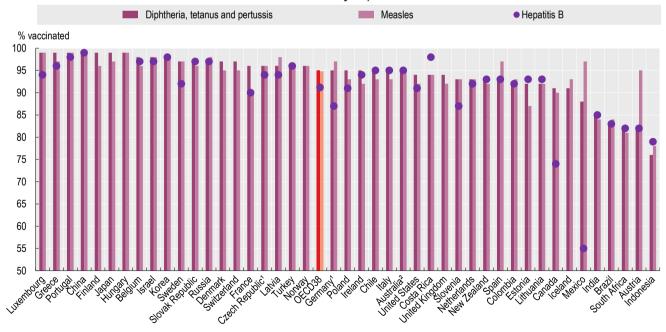
Figure 6.1. Percentage of population aged 65 and over vaccinated for influenza, 2009, 2019 (or nearest years) and 2020



Note: Three-year average for Iceland and Luxembourg for all years but 2020. Data estimated for Norway. Source: OECD Health Statistics 2021.

StatLink https://stat.link/rxjwqo

Figure 6.2. Percentage of children at 1 year vaccinated for diphtheria, tetanus and pertussis, measles and hepatitis B, 2018 (or nearest year)



1. DTP data are estimated. 2. Measles data are estimated. Source: World Health Organization/UNICEF.

StatLink MS https://stat.link/n0as87



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