

CO1.4: Childhood vaccination

Definitions and methodology

Childhood vaccination is captured here through two measures that reflect whether children have received relevant vaccinations within the recommended timeframe:

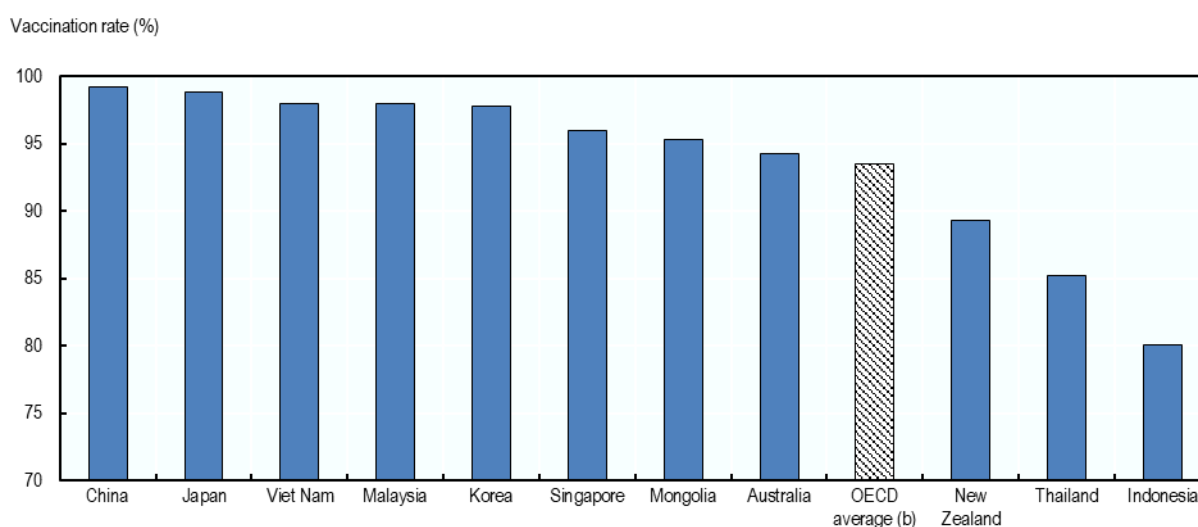
- The proportion (%) of one-year-olds who have received three doses of the combined diphtheria, tetanus toxoid and pertussis vaccine.
- The proportion (%) of children under one year old who have received at least one dose of measles-containing vaccine.

Key findings

Rates of vaccination for diphtheria, tetanus and pertussis are generally high in Asia/Pacific countries, though there is some cross-country variation (Chart CO1.4.A). In 2022, vaccinations rates for diphtheria, tetanus and pertussis were about or higher than 90% in the Asia/Pacific countries included here except for Indonesia (80%), New Zealand (89%), and Thailand (85%). In most of the other countries, rates are higher than the average for OECD countries (94%). The highest vaccination rates among the Asia/Pacific countries included here, were in China and Japan, where rates reach 99%, followed by Malaysia and Viet Nam with 98%.

Chart CO1.4.A. Vaccination rates for diphtheria, tetanus and pertussis, 2022 or latest available^a

Proportion (%) of one-year-olds who have received three doses of the combined diphtheria, tetanus toxoid and pertussis vaccine in the given year



a) The OECD average refers to 2021 (or nearest/latest available).

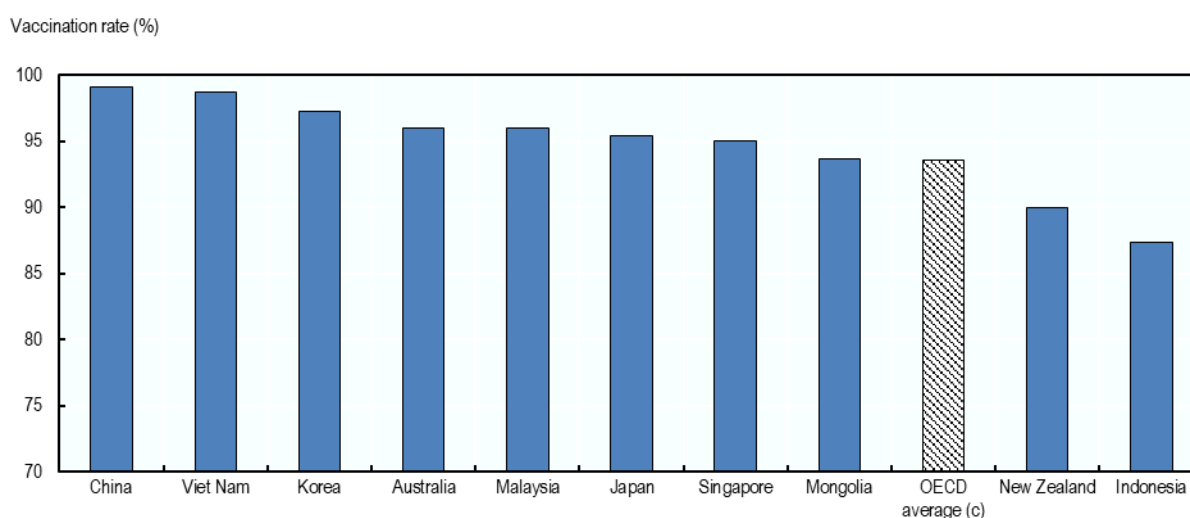
b) The OECD average refers to the unweighted average across the 38 OECD member countries with available and comparable data.

Sources: [Australia, China, Indonesia, Korea, Japan and New Zealand: OECD Health Statistics 2023](#); [Malaysia and Singapore: World Health Organization Global Health Observatory Data Repository](#); Thailand : HCD database 2021, Ministry of Public Health; Vietnam: Ministry of Health 2021; Mongolia: Statistical Yearbook, 2021.

Other relevant indicators: SF2.1 Fertility rates; CO1.1 Infant mortality; CO1.2 Life expectancy at birth; CO1.3 Low birth weight

The picture for vaccinations against measles is largely similar to that for vaccinations against diphtheria, tetanus and pertussis (Chart CO1.4.B). In all the countries included here, except Indonesia (87%) and Thailand (87%), rates of vaccination against measles exceeded 90% in 2022, and the rates in East Asia and Viet Nam were higher than the average for OECD countries (94%). Once again, the highest vaccination rates were recorded in China, where 99% of children received the measles vaccine in the recommended timeframe.

Chart CO1.4.B. **Vaccination rates for measles, 2022 or latest available^a**
Proportion (%) of children under one year old who have received at least one dose of measles-containing vaccine in the given year^b



a) The OECD average refers to 2021 (or nearest/latest available).

b) For countries recommending the first dose of measles vaccine in children over 12 months of age (e.g. New Zealand, which recommends the first dose of measles vaccine at 15 months of age), the indicator is calculated as the proportion of children aged 12-23 months of age receiving one dose of measles-containing vaccine. See OECD Health Statistics (<http://www.oecd.org/health/health-data.htm>) and the World Health Organization Global Health Observatory Data Repository (<http://apps.who.int/gho/data/node.home>) for more detail.

c) The OECD average refers to the unweighted average across the 38 OECD member countries with available and comparable data.

Sources: [Australia, China, Indonesia, Korea, Japan and New Zealand: OECD Health Statistics 2023](#); [Singapore: World Health Organization Global Health Observatory Data Repository](#); [Malaysia: The World Bank: Immunization, measles \(% of children ages 12-23 months\)](#); Thailand : HCD database 2021, Ministry of Public Health, Vietnam: Ministry of Health 2021; Mongolia: Statistical Yearbook 2021.

Comparability and data issues

The data used in this indicator come from National statistic surveys, the World Health Organization Global Health Observatory Data Repository, or OECD Health Statistics, who themselves take their data from the World Health Organization Global Health Observatory Data Repository. The original data come either from administrative data or from household surveys. Detailed information on the methods used by the World Health Organization to measure and/or estimate immunisation rates can be found [here](#), alongside a detailed discussion of limitations and exclusions.

One issue of particular importance here is that childhood vaccination policies and schedules differ across countries, which can obviously affect the likelihood of a child

receiving the required vaccine at/by a given age. For the data on vaccinations against measles – which under the standard definition use children under one year of age as the denominator – when a given country recommends the first dose of measles vaccine in children over 12 months of age (such as in New Zealand, which recommends the first dose of measles vaccine at 15 months of age), the indicator is calculated alternatively as the proportion of children aged 12-23 months of age receiving one dose of measles-containing vaccine.

Sources and further reading: OECD Health Statistics, <http://www.oecd.org/els/health-systems/health-data.htm>, OECD Child Well-Being Data Portal, Child Policies, <https://www.oecd.org/els/family/child-well-being/data/child-policies/>, World Health Organization Global Health Observatory, <http://www.who.int/gho/en/>; OECD/WHO (2020), *Health at a Glance: Asia/Pacific 2020: Measuring Progress towards Universal Health Coverage*, OECD Publishing, Paris. <https://doi.org/10.1787/26b007cd-en>.