



COVID-19

VACCINATING AGAINST COVID-19

Vaccines have been an essential tool in the fight against infectious diseases for hundreds of years.¹ Today in 2021, new COVID-19 vaccinations are an opportunity to take a huge step forward in turning the tide on the pandemic globally, and reducing the levels of illness, hospitalisation, and loss of life.

How the vaccines work

Numerous vaccines for COVID-19 have been approved and are already in use, or are in development. The vaccines replicate the mechanism of infection by exposing the body to parts of the virus or reduced virus. This exposure is enough to safely produce an immune response, without causing disease. The response will be remembered by the immune system and prepares the body to fight the virus more effectively in the future.²

Vaccines work with the body's defence system to effectively develop immunity to infectious diseases.^{1,2}

The majority of the COVID-19 vaccines need more than one dose, to create a high level of immunity.³ It's also important to remember that the vaccine works with your immune system, which needs time to build a response. Therefore you won't have immunity the moment you receive the vaccine, it may not protect you until a week or two after your second shot.³ For the best protection, follow your health authority's advice on the vaccination schedule.

Herd immunity

Also known as population immunity, herd immunity happens when the majority of a population is immune either by vaccination or through previous infection. Previously, mass scale vaccination programs have been able to inhibit the spread of an infection, without causing unnecessary illness and deaths.⁴

Herd immunity can only be achieved when enough people in the population are immune. It is not yet known what percentage of the population would be required to be immune before herd immunity is reached against COVID-19.⁴

Vaccines safety

Modern vaccines have a first-rate safety record, especially compared to the diseases they prevent.¹ The COVID-19 vaccines have been developed in record time as a result of the financial investment and scientific collaboration provided due to the global urgency of the pandemic. While some of the research and development processes



have happened in parallel, the vaccines are still subject to the same rigorous standards as any new medicine.⁵

As with other vaccines, the COVID-19 vaccines have been associated with minor side effects for a small number of people. These include soreness at the injection site and fever and headache that resolve over a couple of days. Rarer still, are cases of people suffering an allergic reaction to the vaccine.⁶ If you have a history of allergies, speak to a healthcare professional about your risk prior to taking a vaccine.

There have been false claims about vaccine safety spread via social media.⁷ Therefore it is important to look to official sources for information instead, such as the World Health Organization.

If enough people acquire immunity to an infectious disease through vaccination, “herd immunity” can be achieved.⁴

The role of vaccinations in the pandemic

The COVID-19 vaccines are an important tool in the fight against the pandemic, as they work with your immune system to help you beat the virus if you are exposed to it. However it is not yet known how successful they are at stopping the spread of the virus. Other actions, like wearing a mask, ensuring good hand hygiene, and maintaining a social distance should still be practiced.^{3,6}



References:

1. Vaccination greatly reduces disease, disability, death and inequity worldwide. World Health Organization. <https://www.who.int/bulletin/volumes/86/2/07-040089/en>. Accessed 1 February 2021.
2. Coronavirus disease (COVID-19): Vaccines. World Health Organization. [https://www.who.int/news-room/q-a-detail/coronavirus-disease-\(covid-19\)-vaccines](https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccines). Updated 28 October 2020. Accessed 1 February 2021.
3. What to expect after getting your COVID-19 vaccine. Centers for Disease Control and Prevention (CDC). <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/expect/after.html>. Updated 11 January 2021. Accessed 1 February 2021.
4. Herd Immunity. World Health Organization. <https://www.who.int/news-room/q-a-detail/herd-immunity-lockdowns-and-covid-19>. Updated 31 December 2020. Accessed 1 February 2021.
5. Coronavirus disease (COVID-19): Vaccine research and development. World Health Organization. [https://www.who.int/news-room/q-a-detail/coronavirus-disease-\(covid-19\)-vaccine-research-and-development](https://www.who.int/news-room/q-a-detail/coronavirus-disease-(covid-19)-vaccine-research-and-development). Updated 12 December 2021. Accessed 1 February 2021.
6. COVID-19 Vaccination. Singapore Ministry of Health. <https://www.moh.gov.sg/covid-19/vaccination>. Updated 30 January 2021. Accessed 1 February 2021.
7. Wardle C & Singerman E. Too little, too late: social media companies' failure to tackle vaccine misinformation poses a real threat. *BMJ* 2021;372:n26. doi.org/10.1136/bmj.n26

Together, all the way.[®]

