ssmc مـدينة الشـيخ شخبـوط الطـبية
Sheikh Shakhbout Medical City
In partnership with بالشراكة مع
MAYO CLINIC

SSMC COVID-19 VACCINES Q&A

1. Why are COVID-19 vaccines needed?

The COVID-19 pandemic has caused unprecedented global disruption to human society with devastating consequences. Existing public health measures are effective. However, more needs to be done to control the pandemic. Current mathematical models suggest vaccines against COVID-19 will have by far the greatest potential to control the pandemic.

At SSMC, we continue to see staff developing COVID-19 as a result of community transmission. New and more easily transmissible variants of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) continue to emerge worldwide. All of these challenges put our patients, staff and hospital operations at risk. Therefore, vaccination will be a key measure to combat COVID-19.

2. What is the approved COVID-19 vaccine currently available in Abu Dhabi?

There are two types of COVID-19 vaccines available in the Emirate of Abu Dhabi: one by Sinopharm, and the other by Pfizer-BioNTech.

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3. What are the other approved vaccines, and are they available in the UAE?

There are five vaccines in the wider UAE against the COVID-19 infection. They are: Sinopharm, Pfizer-BioNTech, Sputnik V, Oxford-AstraZeneca and Moderna. The UAE is offering these vaccines to its citizens and residents free of charge.

4. How are the vaccines administered?

The currently approved COVID-19 vaccines are administered by intramuscular (IM) injection - a shot in the arm. You will need to have two injections, 21 days apart.

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5. Can I get more than one type of COVID-19 vaccine?

We do not have data on the interchangeability of different COVID-19 vaccination schedules. Therefore, it is recommended that you receive the same COVID-19 vaccine when taking the first and second doses.

6. Do the COVID-19 vaccines work?

Yes. According to the UAE Ministry of Health and Prevention (MOHAP), the Beijing Institute of Biological Products inactivated vaccine produced by Sinopharm has 86% efficacy against COVID-19 infection. The Pfizer-BioNTech mRNA vaccine's efficacy is 95%, Moderna mRNA vaccine 94%, and AstraZeneca-Oxford University viral vector vaccine 70% (range 62-92%). Furthermore, the impact of the currently available COVID-19 vaccines has been shown to go beyond primary prevention of the infection to lessen disease severity in individuals who get infected despite vaccination.

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7. How do the vaccines work?

COVID-19 vaccines help our bodies develop immunity to the virus that causes COVID-19 without us getting the illness. Different types of vaccines work in different ways to offer protection. Still, with all types of vaccines, the body is left with a supply of antibodies and "memory" cells that will remember how to fight that virus in the future.

The Beijing Institute of Biological Products inactivated vaccine produced by Sinopharm contains inactivated virus particles incapable of replication or causing COVID-19.

The Pfizer-BioNTech and Moderna mRNA vaccines contain a genetic code that gives our cells instructions to make a harmless protein unique to the virus that causes COVID-19 disease. After our cells make copies of the protein, they destroy the genetic material from the vaccine (mRNA) and build up a group of cells that will remember how to fight the virus if exposed to it in the future.

The AstraZeneca and the Sputnik V vector vaccines contain harmless adenoviruses (common viruses that typically cause colds or flu-like symptoms) that can enter our cells but cannot make copies of themselves because they are replication-deficient viruses. These adenoviruses have been engineered to deliver the genetic code of the spike protein of the virus that causes COVID-19 disease. Once inside our cells, the adenoviruses release this genetic code. Our own vaccinated cells start expressing the spike proteins on their surfaces, which leads to priming our immune system to respond to future exposures to the virus that causes COVID-19 disease.

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8. Will the vaccines give immunity, and how long will this last?

Yes, it will provide immunity. We don't know how long the immunity lasts because it is too early to know. However, we think it may last months and maybe years. As time goes, we will understand better how long the immunity lasts.

9. Can the COVID-19 vaccine achieve herd immunity?

To achieve herd immunity and control the pandemic, we will most likely need a vaccination rate as high as 80%. This is exactly why we are encouraging everybody to have the vaccine as soon as they are offered.

10. Why can't I get immunity by exposing myself to the virus so I can get it?

This is a high-risk approach. Although people with chronic conditions and people over the age of 65 are most at risk of complications, young and healthy people can also develop complications and die. Some people also end up with "long COVID" and do not fully recover months after the infection. If you develop the infection, you may spread it to friends and loved ones – they may become severely ill and die. Taking the vaccine is the most effective and safest way of developing immunity.

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11. Do I still need to wear face masks and social distance after taking the vaccine?

Yes, it is recommended that you continue to wear face masks and observe hand hygiene and social distancing because no vaccine is 100% protective, and we do not know how long immunity lasts.

12. Are the COVID-19 vaccines safe?

Vaccine licensing authorities such as the UAE's Ministry of Health and Prevention (MOHAP), MHRA in the UK and FDA in the US are committed to upholding the highest scientific rigour and safety standards in evaluating new vaccines. These regulatory authorities continue to monitor the safety of all vaccines after granting the initial approval.

The currently approved COVID-19 vaccines have an excellent safety record based on hundreds of thousands of people who took them during the clinical trials and after being granted emergency use authorization. These vaccines' side effects are mostly transient and mild in nature, such as pain at the injection site, fever, fatigue, or headache. Individuals with significant allergy history are advised to seek medical attention to assess their suitability to receive the vaccine.

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13. Have the vaccines been developed and approved too quickly?

Vaccine development typically takes many years; however, scientists had already begun research for coronavirus vaccines during previous outbreaks caused by related coronaviruses, such as SARS (Severe Acute Respiratory Syndrome). That earlier research provided a head start for rapid development of vaccines to protect against infection with the novel coronavirus SARS-CoV2, the virus that causes COVID-19. Experts sped up vaccine development by working closely together, sharing information and planning for the various research studies in parallel, rather than one after the other. Both government and non-government agencies provided generous funds for the research and development activities of COVID-19 vaccines. It can be done in weeks rather than months. All the approved vaccines went through phase I, II, and III clinical trials and were subsequently scrutinized by the regulatory authorities. These vaccines will continue to be monitored to identify any new safety information.

14. Can the vaccine give me COVID-19?

You cannot catch COVID-19 from the currently authorized vaccines, but it is possible to have caught COVID-19 and not realize you have the symptoms until after your vaccination appointment. The vaccines typically take weeks to start working and efficacy increases after the second dose. You can therefore still catch COVID-19 soon after the vaccination or before you complete the full course of the vaccination because the vaccine has not yet had time to work.

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15. Can the COVID-19 vaccines change my DNA?

No, the mRNA vaccine works by delivering a text message instructing our cells to produce a protein similar to that of the virus that causes COVID-19 disease. Our immune system subsequently destroys this protein and clears it from our body. On the other hand, the inactivated and vector vaccines cannot make copies of DNA for themselves, let alone human beings.

16. Can I take the vaccine if I have severe allergies?

No, having severe allergies is a reason not to receive the vaccine. Please discuss with your healthcare provider if you have had severe allergic reactions in the past and make sure you inform the nurse or doctor if you are offered the vaccine.

17. What are the side effects of the COVID-19 vaccines?

Any vaccine or medication can cause side effects. These are typically minor, such as a sore arm, headache or low-grade fever, and go away within a few days. These side effects are actually expected because it is a sign that your immune system is responding to the vaccine.

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18. I read that COVID-19 vaccine trials killed people. Is this true?

This is not true. There were no vaccine-related deaths reported for any of the currently approved COVID-19 vaccines either during clinical trials or following the official roll-out under the emergency use authorization.

19. Should the COVID-19 vaccine be given to pregnant women?

Pregnant women have so far been excluded from the COVID-19 vaccine trials. Therefore, it is not currently recommended for pregnant women in the UAE. We will update this advice as soon as more data become available.

20. Should the COVID-19 vaccine be given to people with chronic conditions and weakened immune system?

The currently approved vaccines cannot cause COVID-19 disease. They work by stimulating the body's immune system to produce antibodies against a protein on the virus surface and training our immune cells to recognize it and create a memory for future exposure. People with a weakened immune system are at high risk of catching COVID-19, developing complications and dying from the infection. It is recommended that people with chronic conditions and weakened immune systems be prioritized to receive the vaccine. Please discuss any concerns with your doctor.

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21. Should you receive the vaccine if you have had COVID-19?

Yes, you should consider taking it. Data from the vaccine trials suggests that people who had COVID-19 also benefited from receiving the vaccine. It is recommended that you receive the vaccine after having fully recovered from COVID-19. If you had moderate or severe COVID-19 disease, you would need a test for antibodies before deciding whether you can have the vaccine. Please discuss with your doctor if you have any concerns.