

杨森 COVID-19 疫苗如何发挥作用?

How does the Janssen COVID-19 vaccine work?

所有 COVID-19 疫苗都会使免疫系统对引起 COVID-19 的病毒产生抵抗应答。杨森疫苗是**病毒载体疫苗**。

All COVID-19 vaccines cause the immune system to respond against the virus that causes COVID-19. The Janssen vaccine is a **viral vector vaccine**.

病毒载体疫苗使用病毒的改良版 (**载体**) 向我们的细胞传递重要指示。杨森疫苗中使用的载体不是引起 COVID-19 的病毒, 而是一种不同的、无害的病毒。

Viral vector vaccines use a modified version of a virus (a **vector**) to deliver important instructions to our cells. The vector used in the Janssen vaccine is not the virus that causes COVID-19, but a different, harmless virus.

- 该载体进入我们体内的细胞并传递一个基因, 该基因指示我们的细胞产生棘突蛋白。

这种棘突蛋白是导致 COVID-19 的病毒的无害片段。这种棘突蛋白仅出现在导致 COVID-19 的病毒表面。

The vector enters a cell in our body and delivers a gene that instructs our cells to produce a spike protein. The spike protein is a harmless piece of the virus that causes COVID-19. It is only found on the surface of the virus that causes COVID-19.

- 棘突蛋白触发我们的免疫系统开始产生抗体，并激活其他免疫细胞以抗击其认为存在的感染。

The spike protein triggers our immune system to begin producing antibodies and activates other immune cells to fight off what it thinks is an infection.

美国食品药品监督管理局（FDA）批准了另外两种针对 COVID-19 的疫苗。辉瑞和莫德纳属于信使 RNA（mRNA）疫苗。这三种疫苗均能有效预防 COVID-19 引起的严重疾病和死亡，其潜在的副作用也类似。欲了解详情，请访问：

<https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines>

The FDA approved 2 other vaccines against COVID-19. Pfizer and Moderna vaccines are mRNA vaccines. All 3 vaccines effectively prevent serious illness and death from COVID-19 and have similar potential side effects. To learn more visit: <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines>

病毒载体的安全性如何？ How safe is the viral vector?

该病毒载体已经过基因修饰，因此无法在人体中引起疾病。它不能在人体中繁殖，也不会引起疾病。

The viral vector is not capable of causing illness in humans because it has been genetically modified. It cannot multiply in humans and cannot cause disease.

该病毒载体不会以任何方式影响我们的 DNA 或与我们的 DNA 相互作用。病毒载体传递的基因物质不会整合到人的 DNA 中。

The viral vector does not affect or interact with our DNA in any way. The genetic material delivered by the viral vector does not integrate into a person's DNA.

我需要注射几次? How many shots am I going to need?

需要上臂肌肉注射 1 剂 (1 针) 。

1 dose (shot) in the muscle of the upper arm is needed.

谁应接种疫苗? Who should get vaccinated?

杨森疫苗建议用于 18 岁以上的人群。

The Janssen vaccine is recommended for people aged 18 years and older.

谁不应接种疫苗? Who should not get vaccinated?

如果您对杨森 COVID-19 疫苗中的任何成分 (例如聚山梨酯) 有严重或即时过敏反应, 则不应接种。了解疫苗成分清单, 请访问:

<https://www.fda.gov/media/146305/download>.

- **严重过敏反应** (严重危及生命的系统性超敏性反应) 需要用肾上腺素或 EpiPen© 自动注射肾上腺素笔治疗, 或者必须去医院治疗。
- **即时过敏反应**是指暴露后 4 小时内发生的反应, 包括荨麻疹、肿胀或喘息 (呼吸窘迫) 等症状。

If you have had a severe or an immediate allergic reaction to any ingredient in the Janssen COVID-19 vaccine (such as polysorbate), you should not get it. To see a list of ingredients visit: <https://www.fda.gov/media/146305/download>.

- A **severe allergic reaction (anaphylaxis)** is when a person needs to be treated with epinephrine or EpiPen© or if they must go to the hospital.
- An **immediate allergic reaction** means a reaction within 4 hours of exposure, including symptoms such as hives, swelling, or wheezing (respiratory distress).

疫苗有效率如何？ How effective is the vaccine?

临床试验中，接种疫苗 28 天或更长时间后，其预防中度至重度/危重 COVID-19 的有效率为 85%。另外，该疫苗在预防 COVID-19 感染引起的住院和死亡的有效率为 100%。

In clinical trials, the vaccine was 85% effective in preventing moderate to severe/critical COVID-19, 28 days or more after vaccination. Additionally, the vaccine was 100% effective in preventing hospitalization and death caused by COVID-19 infection.

我们如何知道 COVID-19 疫苗是否安全？

How do we know if COVID-19 vaccines are safe?

COVID-19 疫苗已经在成千上万的人群中进行了大型临床试验测试。这样做是为了确保它们符合安全性标准，并了解疫苗如何为不同年龄、种族和族裔以及有不同疾病的人们提供保护。临床试验中未发现明显的安全隐患。试验中至少收集了 8 周的安全性数据。疫苗接种后出现副作用的时间超过 8 周并不常见。

COVID-19 vaccines were tested in large clinical trials that included tens of thousands of people. This is done to make sure they meet safety standards and see how the vaccines offer protection to people of different ages, races, and ethnicities, as well as those with different medical conditions. No significant safety concerns were identified in the clinical trials. At least 8 weeks of safety data were gathered in the trials. It is unusual for side effects to appear more than 8 weeks after vaccination.

重要提示：在保持所有安全性标准的同时，对这些疫苗的研发进行了加速。这并非将传统疫苗研发时间表中的步骤进行省略，而是几个步骤同时进行，例如，在收集安全性和有效性数据的同时扩大生产规模。

Important note: The development of these vaccines has been accelerated while maintaining all safety standards. Rather than eliminating steps from traditional

vaccine development timelines, steps were happening at the same time, such as scaling up manufacturing while safety and efficacy data are collected.

疫苗有哪些副作用？ What are the side effects of the vaccine?

在疫苗的临床试验中，大多数人接种疫苗后并未出现严重问题。症状通常会在一周内自行消失。一般的副作用，例如发烧、头痛和肌肉酸痛，则表明您的免疫系统正按照预期的方式发生作用。它正在努力建立对您的保护，以抵抗疾病。如果您没有出现任何副作用，请放心，该疫苗有同等效用。

In the vaccine clinical trials, most people did not have serious problems after being vaccinated. The symptoms usually went away on their own within a week. General side effects such as fever, headache, and muscle aches are signs that your immune system is doing exactly what it is supposed to do. It is working to build up protection against disease. If you do not experience any side effects, be assured that the vaccine is just as effective.

在美国疾病预防控制中心（CDC）的初步审查中，每 100 万接种杨森（Janssen）疫苗的人有 7 人出现了血凝块，血小板含量低（帮助您的身体止血的血细胞）。这种罕见的事件主要影响年龄於 18-49 歲的女性们。在仔细审查数据后，美国疾病预防控制中心及美国食品和药物管理局得出结论，杨森疫苗的已知和潜在益处超过了风险。

On initial review by the CDC about 7 in 1 million people who received the Janssen vaccine developed blood clots with low levels of platelets (blood cells that help your body stop bleeding). This rare event affected mostly females between the ages of 18-49. After careful review of the data the CDC and FDA concluded that the known and potential benefits of the Janssen vaccine outweigh the risks.

接种疫苗后约 1-2 周开始出现这种副作用的症状。 **如果您出现以下任何症状和体征，立即寻求就医。**

- 呼吸短促

- 胸痛
- 腿肿胀
- 持续性腹痛
- 剧烈或持续性头痛或视力模糊
- 注射部位以外（身體任何部位）的皮肤容易出现瘀血或微小的血斑

The symptoms of this side effect began about 1-2 weeks after vaccination. If you develop any of these signs and symptoms seek medical attention right away:

- Shortness of breath
- Chest pain
- Leg swelling
- Persistent abdominal pain
- Severe or persistent headaches or blurred vision
 - Easy bruising or tiny blood spots under the skin beyond the site of the injection (anywhere on the body)

对于孕妇以及因患病或服用药物而免疫系统功能低下的人，此疫苗是否安全？

Is the vaccine safe for pregnant women and people who have conditions or take medications that can weaken the immune system?

早期的疫苗临床试验并未在这些人群中进行测试。根据当前数据，接种 COVID-19 疫苗的获益大于患 COVID-19 的风险。**与您的医疗保健提供者谈谈基于您的特定情况接种疫苗的潜在风险和获益。**

The early clinical trials did not test the vaccines in these populations. Based on the current data, the benefit of receiving the COVID-19 vaccine is greater than the risks of getting COVID-19. **Talk to your health care provider about the potential risks and benefits of the vaccine in your specific situation.**

我曾患有 COVID-19 并已康复。我是否还需要接种疫苗？

I already had COVID-19 and recovered. Do I still need to get vaccinated?

是，无论您是否已经感染过 COVID-19，都应接种疫苗。那是因为专家们还不知道从 COVID-19 康复后受到保护避免再次生病的时效有多长。如果您治疗 COVID-19 时使用了单克隆抗体或恢复期血浆，则应等待 90 天后方可接种 COVID-19 疫苗。如果您不确定所接受的治疗方法，或者对接种 COVID-19 疫苗有更多疑问，请与您的医疗保健提供者联系。

Yes, you should be vaccinated regardless of whether you already had COVID-19. That's because experts do not yet know how long you are protected from getting sick again after recovering from COVID-19. If you were treated for COVID-19 with monoclonal antibodies or convalescent plasma, you should wait 90 days before getting a COVID-19 vaccine. Talk to your health care provider if you are unsure what treatments you received or if you have more questions about getting a COVID-19 vaccine.

如果我已接种该疫苗，是否还需要戴口罩并避免与他人密切接触？

Do I need to wear a mask and avoid close contact with others if I have received the vaccine?

在全剂量共需两剂的疫苗（如辉瑞和莫德纳疫苗）的第二剂注射完两周后，或全剂量仅需单剂的疫苗（如杨森疫苗）注射完 2 周后，您将被视为完成了全剂量的疫苗接种。完成了全剂量疫苗接种的人可以开始做因疫情大流行而停止做的事情。在专家们更多地了解 COVID-19 疫苗在现实情况中所提供保护作用的同时，美国疾病预防与控制中心（CDC）将会经常更新指南。

查看有关完成全剂量疫苗接种的人可以做的事情的最新指南，请访问：

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html>

You are considered fully vaccinated 2 weeks after the second dose in a 2-dose series like the Pfizer or Moderna vaccine or 2 weeks after the single-dose vaccine like the Janssen vaccine. People who have been fully vaccinated can start to do some things that they had stopped doing because of the pandemic. While experts learn more about the protection that COVID-19 vaccines provide under real-life conditions, the CDC will update its guidelines frequently. Please visit: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html> to see the most current guidelines about what fully-vaccinated people can do.

何处可了解更多有关 COVID-19 疫苗的信息？

Where can I learn more about the COVID-19 Vaccines?

有关当前 COVID-19 疫苗的准确信息，请访问：

- 密西根医学部：COVID-19 疫苗信息及更新：

<https://www.uofmhealth.org/coronavirus/vaccine-info-update>

- 美国疾病预防控制中心（CDC）：COVID-19 疫苗：

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines>

- 美国食品和药物管理局（FDA）.杨森 COVID-19 疫苗常见问题

<https://tinyurl.com/4fzvrkrw>

For current and accurate information about the COVID-19 vaccines visit:

- Michigan Medicine: COVID-19 Vaccine Information and Update:

<https://www.uofmhealth.org/coronavirus/vaccine-info-update>

- CDC: COVID-19 Vaccines: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines>

- FDA. Janssen Covid-19 Vaccine Frequently-Asked-Questions

<https://tinyurl.com/4fzvrkrw>

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