Two Types of JYNNEOS Vaccine Administration

The JYNNEOS vaccine to protect against mpox (previously referred to as monkeypox) can be given in two ways: subcutaneously or intradermally. The same vaccine is used for both types of administration, but intradermal administration uses a smaller dose (one-fifth of what is needed for subcutaneous administration). Because of this, giving the vaccine intradermally may allow more people to get vaccinated.

- With **subcutaneous administration**, the vaccine is injected into the deepest layer of skin, the fatty subcutaneous tissue. This is how many other vaccines are given, including the chickenpox and measles, mumps and rubella (MMR) vaccines. The subcutaneous JYNNEOS shot is usually given in the upper arm.

- With **intradermal administration**, the vaccine is injected into an outer layer of skin, called the dermis. The needle is held at a low angle, close to the skin. The dermis has a high number of cells that stimulate the immune response compared to fatty subcutaneous tissue, which means a smaller dose of vaccine can be given to get similar protection. Intradermal injections are commonly used to test for tuberculosis and allergies.

Side Effects

Tiredness, headache and muscle pain can occur after both subcutaneous and intradermal JYNNEOS vaccination. Both types of vaccination commonly cause redness, swelling, soreness and itchiness at the injection site; however, these reactions are usually worse and last longer with intradermal administration. In one study, almost all people receiving the vaccine intradermally had severe redness and swelling (more than about one inch in size), and about one-third of them had mild redness or discoloration at the injection site lasting six months or longer.
Because of concern that intradermal injections could result in keloid scars (thick, raised scars that can be pink, red, or the same color or darker than the skin around them), people who have had keloid scars should get the JYNNEOS vaccine subcutaneously. People with darker skin (more melanin), especially Black, Latino and Asian people, and people ages 20 to 30 are more likely to develop keloid scars.

When considering these vaccination side effects, it is important to note that there is a risk of scarring and permanent skin changes if you get mpox.

**How Well the Vaccine Works**

Because this is the first, large international outbreak of mpox, real-world data on how well either type of injection works in the current outbreak is limited. However, based on data and what we know about vaccines generally, experts believe both types of vaccine administration are safe and provide similar protection.

The Centers for Disease Control and Prevention and Food and Drug Administration’s decision to allow intradermal vaccination was based on one study of 524 people. The study found that subcutaneous and intradermal injection of JYNNEOS caused similar levels of antibodies in people. Antibody levels are one measure to estimate how well a vaccine works. To read the study, visit [pubmed.ncbi.nlm.nih.gov/26143613](https://pubmed.ncbi.nlm.nih.gov/26143613).

More recently, another study of vaccination in more than 9,500 men with mpox in the current outbreak found that intradermal and subcutaneous administration of JYNNEOS may provide similar protection. To read the study, visit [dx.doi.org/10.15585/mmwr.mm7149a5](https://dx.doi.org/10.15585/mmwr.mm7149a5).

**Important Takeaways**

- The JYNNEOS vaccine is an important way to protect people against mpox.
- Both subcutaneous and intradermal administration are safe and provide a similar level of protection.
- You are more likely to have redness and swelling at the injection site with intradermal vaccination; there may also be long-term permanent discoloration or scarring at the injection site, especially for people with darker skin.

Visit [on.nyc.gov/JYNNEOS-faq](https://on.nyc.gov/JYNNEOS-faq) for more information about the JYNNEOS vaccine.