

# Intradermal Administration of the JYNNEOS Vaccine

## Two Types of JYNNEOS Vaccine Administration

The JYNNEOS vaccine to protect against monkeypox (MPV) can now be given in two ways: subcutaneously or intradermally. Previously, the vaccine was only given subcutaneously. 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 means many more people can get vaccinated.

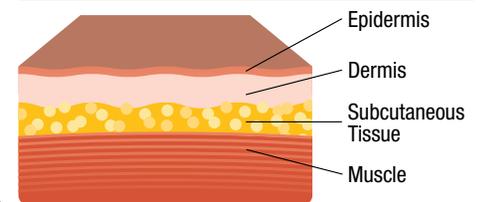
- With **subcutaneous administration**, the vaccine is injected into the deepest layer of skin, the fatty subcutaneous tissue. This is how other vaccines are given, including the chickenpox and measles, mumps and rubella (MMR) vaccines. The subcutaneous JYNNEOS shot is usually given in the upper arm.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

The intradermal JYNNEOS shot is usually given in the lower arm. The needle is held at a low angle, close to the skin. The vaccine is injected until there is a small, pale bubble on the skin. **If this bubble does not form, people should get another dose – ask your vaccine administrator if you do not see this bubble form.**

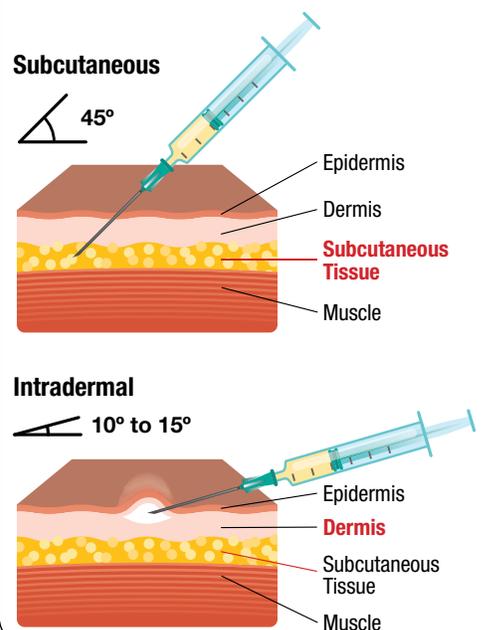
The New York City Department of Health and Mental Hygiene is working to ensure that vaccinators have proper training to help ensure that the intradermal injection is done right. This is important because the lower dose used for the intradermal injection is likely to be too low of a dose if given subcutaneously.

Based on knowledge of vaccines generally, experts believe both types of administration are safe and will provide a similar level of protection.

### The Layers of Skin



### Subcutaneous Versus Intradermal



## 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), the Centers for Disease Control and Prevention (CDC) recommends that people who have had keloid scars be given JYNNEOS 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. Vaccinators will ask people whether they have a history of keloid scars, and people who do will be offered a subcutaneous injection.



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 MPV.

## How Well the Vaccine Works

The JYNNEOS vaccine studies did not involve people being exposed to MPV. Because this is the first, large international outbreak of MPV, real-world data on how well either type of injection will work in the current outbreak is limited. This is why it is important to continue to follow prevention guidance even if you have been vaccinated.

The CDC and Food and Drug Administration's decision to switch to intradermal vaccination is 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 is 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).

## Important Takeaways

- ✓ The JYNNEOS vaccine is an important way to protect people against MPV.
- ✓ Intradermal vaccination will enable more people to get vaccinated, which equals more people protected. It is safe and provides a similar level of protection as subcutaneous administration.
- ✓ 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.