Training Resources for Jynneos Intradermal Injection

The Centers for Disease Control and Prevention (CDC) created a training webpage specifically for Jynneos vaccine administration due to the recent FDA authorized alternative regimen for intradermal injection:

- [JYNNEOS Vaccine | Monkeypox | Poxvirus | CDC](https://www.cdc.gov)

Intradermal administration is less common for vaccine administration than other more traditional routes, such as subcutaneous or intramuscular administration.

- An Instructional 1-minute video is available for new or refresher training and competency:
  - [How to administer a JYNNEOS vaccine intradermally](https://www.cdc.gov)

- Competency review and checkoff may be implemented to ensure appropriate injection technique:
  - See IHS example Competency Assessment for Intradermal Injections
  - This document is for assessing injection technique for vaccinators working in IHS operated facilities and may be shared with Tribal Health Programs and Urban Indian Organizations, as appropriate.
  - Vaccinators should review the video for familiarity with intradermal vaccine administration, then have a simulated injection technique assessment to demonstrate competency.

Administration and logistics

Intradermal Injection of Jynneos

- See [Jynneos intradermal vaccine preparation and administration summary : Alternative dosing regimen](https://www.cdc.gov)
- Intradermal injection technique is commonly used for TB skin tests, also called a Mantoux tuberculin skin test (TST).
- This is a common injection technique taught to and utilized by nurses and nurse collaboratives, primarily.
  - Pharmacists, pharmacy interns and pharmacy technicians are not typically trained to administer vaccines or medications intradermally as part of their immunization certificate programs or didactic training.
  - IHS is reviewing the available authority to allow pharmacists, pharmacy interns and pharmacy technicians to administer Jynneos vaccine either subcutaneously under the standard regimen or intradermally under the alternative regimen, and any restrictions on age. IHS will issue further information as it becomes available.
- Intradermal injections require unique syringe specifications and needle gauges.
  - Supply should be attempted to be procured to support intradermal administration.
  - The Strategic National Stockpile will not be automatically distributing syringes or needles with Jynneos distribution.
    - If supplies are needed, please work with IHS NSSC to obtain supplies
  - A sterile, single-use, disposable needle and syringe should be used for each injection
  - Syringes should be able to measure accurately in 0.1mL increments.
    - 1mL syringes are ideal for use
  - Needle size
    - Short 26 to 27-gauge needles with a short bevel are recommended
  - Alternatively, a 1mL insulin syringe maybe used, as it has the markings to measure in 0.1mL increments and has a small, appropriate gauge needle.
Be aware of the measuring increments and measuring units on insulin syringes to ensure the correct volume of vaccine is drawn up and administered.

People who should not receive an intradermal injection

- Individuals with history of keloid scarring should not receive intradermal injections. Instead, these individuals should receive the Jynneos standard dosing of 0.5mL administered subcutaneously.
- Children under age 18 years should not be vaccinated using the alternative regimen intradermal technique. Under the Jynneos Emergency Use Authorization, children under 18 years of age should receive the Jynneos standard dosing of 0.5mL administered subcutaneously if they are at risk and need vaccination.

Recommended injection site

- The recommended injection site is the volar surface of the mid-forearm, also described as the inner forearm area between the elbow and the wrist.
- After the injection, the injection site may be covered by an adhesive bandage
  - Since Jynneos is a NON replicating live virus vaccine, monkeypox cannot be transmitted by exposure to the injection site.

Injection Technique

- CDC Instructional video: How to administer a JYNNEOS vaccine intradermally - YouTube
- Steps on How to administer a Jynneos vaccine intradermally:
  - Step 1:
    - Identify and clean the injection site with an alcohol wipe and allow to air dry prior to injection.
  - Step 2:
    - The skin on the inner forearm should be pulled taut, the needle should be positioned with the bevel facing up, and the needle should be inserted just beneath the surface of the skin at a 5 to 15 degree angle.
  - Step 3:
    - Slowly inject the 0.1mL dose intradermally, which should produce a small, round, pale elevation of the skin, called a wheal, that looks like a bubble under the skin.
  - Step 4:
    - Observe patients for 15 minutes after vaccination or 30 minutes for individuals with a history of anaphylaxis to gentamicin, ciprofloxacin, chicken or egg protein.

Post-Vaccination Expectations

- Recipients should be counseled about possible side effects from vaccination including local injection site reactions including pain, redness, swelling, induration, and itching.
- Systemic side effects, including fatigue, headache, nausea, chills, and muscle aches may occur.
- Side effects are usually self-limiting, but there have been reports of prolonged duration of induration or erythema following intradermal administration
  - A person who presents for their second Jynneos vaccine dose who is still experiencing erythema or induration at the site of intradermal administration of the first vaccine dose may have the second dose administered intradermally in the opposite forearm.
- Given the unknown effectiveness of vaccination in this outbreak, people who are vaccinated should continue to take steps to protect themselves from infection by avoiding close, skin-to-skin contact, including intimate contact, with someone who has monkeypox.