

"Just a Little Pinch"

IM, SQ, and gluteal injections with a focus on DMPA



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Objectives

- The pharmacist participant will be able to:
 - Discuss indications and precautions for subcutaneous (SQ) and intramuscular (IM) injections for depo medroxyprogesterone acetate (DMPA)
 - Describe key differences between DMPA injection and other SQ/IM injections
 - Demonstrate appropriate injection technique for SQ (abdomen) and IM (gluteal) injections of DMPA
- The pharmacy technician participant will be able to:
 - Discuss indications and precautions for subcutaneous (SQ) and intramuscular (IM) injections for depo medroxyprogesterone acetate (DMPA)
 - Describe key differences between DMPA injection and other SQ/IM injections
 - Demonstrate appropriate injection technique for SQ (abdomen) and IM (gluteal) injections of DMPA

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POLL QUESTION

Have you prescribed, dispensed, or administered depo medroxyprogesterone acetate (Depo Provera) for IM injection?

- A. Yes
- B. No
- C. Not sure / not applicable



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Depomedroxyprogesterone (DMPA)
150 mg (IM); 104 mg (SQ)

99.8% effective perfect use
94% effective typical use



Mechanism of Action	How to Use	Notes
Progestin-only method	IM or SQ injection every 3 months (11-15 weeks)	High discontinuation rate compared to other methods (~44-77% in various studies)
Prevention of ovulation Thinning of endometrium		Slow baseline return to fertility (~10 months avg; up to 18+ months)

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POLL QUESTION

Have you prescribed, dispensed, or administered depo medroxyprogesterone acetate (Depo Provera) for subcutaneous injection?

- A. Yes
- B. No
- C. Not sure / not applicable



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Depo Sub-Q



- "Off label" self-injection
- No generic available (vs. IM formulation)
- Higher rates of continuation with self-administration vs. provider administration
- No difference in pregnancy rates
- Increase in injection site reactions with self-administration; no other difference in adverse effects

Source: <https://pb.bms.com/content/dam/09093393>

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DMPA

DMPA Injection Supplies Suggested	
Needle Size	21 to 23 gauge
SQ	5/8 inch needle
IM (gluteal or deltoid)	1 to 1 & 1/2 inch needle
Syringe	1mL to 3mL syringe

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DMPA SQ Injection Technique

- Wash your hands.
- Remove the syringe from the package and shake it vigorously for about one minute to make sure the medication is well mixed.
- Hold the needle pointing up and tap the syringe to shake any air bubbles to the top/out.
- Pick the injection site: either upper thigh or belly.
- Wipe the skin with an alcohol pad and wait for the area to dry.
- Take the cap off the needle and pinch the skin around the injection site, creating a tent with your other hand.
- Insert the needle all the way into this skin at a 45-degree angle and push the medication reservoir slowly for 5-7 seconds pushing almost all or all of the liquid out.
- Remove the needle and dispose of it in the sharps container.
- You may apply pressure to the spot, but do not rub or massage the area.

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DMPA IM Deltoid Injection Technique

- Wash your hands.
- Remove the syringe from the package and shake it vigorously for about one minute to make sure the medication is well mixed.
- Hold the needle pointing up and tap the syringe to shake any air bubbles to the top/out.
- Find your landmark on the deltoid (3 fingers from acromion process).
- Wipe the skin with an alcohol pad and wait for the area to dry.
- Take the cap off the needle and hold the skin flat around the injection site, with your other hand, ensuring the medication gets to the muscle.
- Insert the needle all the way into this skin at a 90-degree angle and push the syringe plunger slowly until all of the liquid is out.
- Remove the needle and dispose of it in the sharps container.
- You may apply pressure to the spot, but do not rub or massage the area.

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DMPA IM Gluteal Injection Technique

- Wash your hands.
- Remove the syringe from the package and shake it vigorously for about one minute to make sure the medication is well mixed.
- Hold the needle pointing up and tap the syringe to shake any air bubbles to the top/out.
- Pick the injection site: divide each side of the buttocks into four quadrants, in the upper and outer quadrant; you avoid nerves and vessels.
- Wipe the skin with an alcohol pad and wait for the area to dry.
- Take the cap off the needle and hold the skin flat around the injection site, with your other hand, ensuring the medication gets to the muscle.
- Insert the needle all the way into this skin at a 90 degree angle and slowly and slightly aspirate the plunger back to ensure you are not in any blood vessels.
- Once no blood is confirmed, push the syringe plunger slowly until all of the liquid is out.
- Remove the needle and dispose of it in the sharps container.
- You may apply pressure to the spot, but do not rub or massage the area.

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DMPA; Additional Information

- The best time to initiate DMPA therapy is on the first day of one's period, or up to 5 days later.
- Recommend back up contraception for the first 7 days after the injection if this is not possible.
- Assess DMPA after 2 years of use to determine effects on Bone Mineral Density if any.
- Consider rotating injection site often and regularly.
- Massaging can convert drug structure, increasing absorption and effecting potency.

https://www.medscape.com/viewarticle/732231_5

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<https://www.youtube.com/watch?v=2U3A00oWYdI>

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Now let's practice!



Questions?

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