How to give a B12 injection: intramuscular and subcutaneous procedure

This procedure explains how to give a B12 injection at home, either into the muscle (intramuscular, IM) or under the skin (subcutaneous, sub-Q). It covers supply checks, site selection, skin cleaning, injection technique, and safe disposal. Follow the steps for the injection type shown on your B12 label.

Purpose & Scope

This procedure covers administering a B12 injection using the kit you received. The kit includes pre-filled syringes and separate needles. It applies to the person giving the injection, wearing gloves, in a home setting.

The source gives no patient population, clinical indication, or ward, ICU, or outpatient context. That section would normally state who receives B12 injections and in which care setting.

Patient Assessment

Before you start, confirm the following items.

Check	What to confirm
Supplies	Your B12 injection kit has arrived, with pre-filled syringes and separate needles.
Injection type	The label says whether the B12 is for intramuscular (IM) or subcutaneous (sub-Q) injection.
Sub-Q syringe	A sub-Q syringe should already be prepared and ready to use.

The source gives no vital sign schedule, pain assessment tool, or neurovascular checks. Those details would normally appear in this section.

Care Protocol

Prepare the needle

Remove the cap from the syringe. Take the needle provided with your kit and affix it securely onto the syringe. The syringe is now ready for injection.



A gloved person attaches a needle to a pre-filled syringe, with medical supplies and pamphlets in the background.

Give a B12 injection into the muscle (IM)

Use these steps if your B12 is labeled for intramuscular injection.

Step 1: Locate the injection site. Find the top of your tailbone. Draw an imaginary line straight across from it. The upper outer quadrant of the gluteal muscle is the recommended injection site.



A gloved hand uses fingers to locate the upper outer area of the gluteal muscle for injection.

Step 2: Clean the site. Wipe the chosen site thoroughly with an alcohol swab. Let the area air dry by fanning it with your hand. Do not blow on the area or use your mouth to dry it.

Step 3: Prepare for injection. Remove the cap from the needle. Gently pinch the cleaned area of skin to stabilize it.

Step 4: Insert the needle. Hold the syringe like a dart. Insert the needle straight into the muscle at a 90-degree angle.

Step 5: Inject the B12 solution. Slowly depress the plunger. The typical volume for this injection is 5 cc's. That is a large amount for any muscle, but the gluteal muscle can accommodate it.



A gloved hand pinches the skin while holding the syringe with the needle positioned over the gluteal muscle.

Give a B12 injection under the skin (sub-Q)

Use these steps if your B12 is labeled for subcutaneous injection.

Step 1: Select the injection site. Choose the lower abdomen, at least 1–2 inches away from the navel, or the upper thighs. The lower abdomen is used in this example. Use your finger to identify and gently press the area where you will inject.



A gloved hand points to and presses on the lower abdomen to identify the sub-Q injection site.

Step 2: Clean the site. Wipe the chosen area thoroughly with an alcohol swab. Let it air dry by fanning with your hand. Never blow on the area or use your mouth to dry it, because wet alcohol can cause a burning sensation.



A gloved hand wipes the gluteal injection site with an alcohol swab.



A gloved hand cleans the lower abdomen with an alcohol swab before the sub-Q injection.

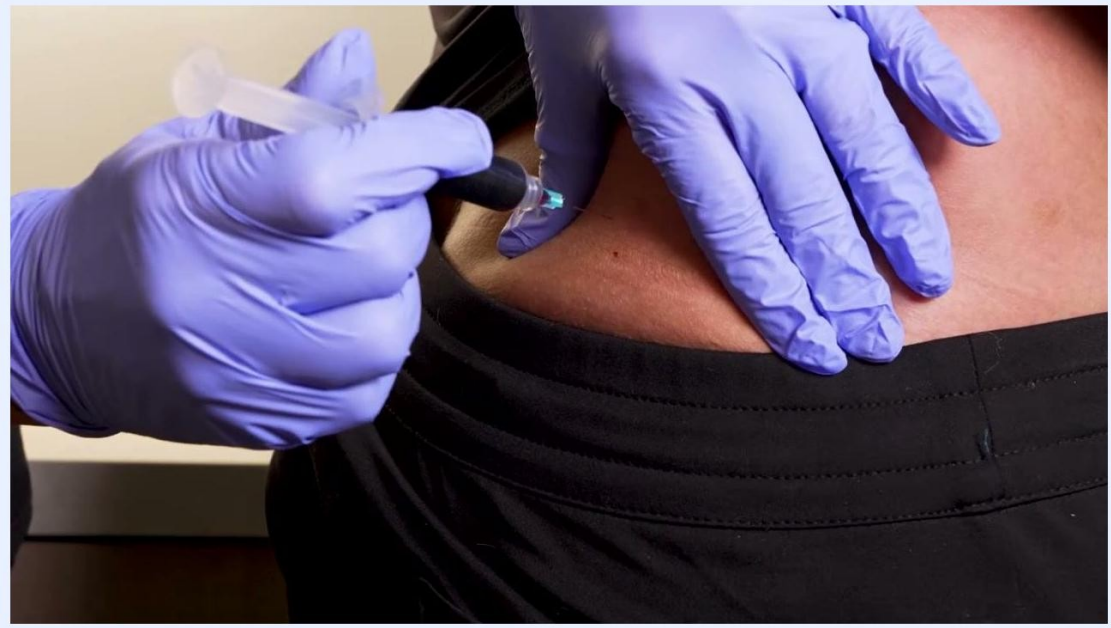
Step 3: Pinch the skin. With one hand, gently pinch the cleaned skin to lift it away from the underlying muscle. This helps deliver the injection into the subcutaneous tissue.

Step 4: Insert the needle. Hold the syringe in your other hand. Insert the needle straight into the pinched skin at a 90-degree angle, or as your healthcare provider instructs.



One gloved hand pinches the lower abdomen skin while the other holds the syringe with the needle positioned to inject.

Step 5: Inject the B12 solution. Slowly depress the plunger to inject into the subcutaneous tissue. When the medication is fully injected, withdraw the needle straight out.



A gloved hand slowly depresses the plunger with the needle fully inserted into the gluteal muscle.



A gloved hand depresses the plunger with the needle inserted into the pinched skin of the lower abdomen.

Step 6: Rub the injection site. Gently rub the site with your gloved hand or a clean cotton swab. This helps disperse the medication and reduces discomfort.

Pain Management

The source describes no pain medication regimen, so this section has no medication table. A table of drug, dose, route, and frequency, with pain score targets and an escalation pathway, would normally appear here.

The source does give these comfort measures:

- Inject slowly to minimize discomfort, especially with larger volumes such as 5 cc's.
- Expect that B12 injections may cause a burning sensation.
- Let the alcohol dry completely by fanning, and do not blow on the area, to avoid burning from wet alcohol.
- After a sub-Q injection, gently rub the site to reduce discomfort.

Mobility Milestones

The source describes no mobility goals or timeline. Progressive mobility targets would normally appear in this section.

Complication Monitoring

Contact your healthcare provider immediately if you notice any of the following:

- Unusual pain
- Bleeding (noted for IM injections)
- Redness or swelling (noted for sub-Q injections)
- Other symptoms

The source gives no formal early warning criteria or escalation contact details. Those would normally appear in this section.

Discharge Criteria

The source gives no discharge criteria because the procedure is done at home. Measurable criteria for completing care would normally appear in this section.

Patient Education

Review these points with the person giving the injection:

- Always inject slowly to minimize discomfort.
- Dispose of the needle and syringe safely in a sharps container.
- Rotate sub-Q injection sites with each dose to avoid irritation or tissue damage.
- Do not blow on the skin or use your mouth to dry it after cleaning with alcohol.
- Contact your healthcare provider right away if you have unusual pain, bleeding, redness, swelling, or other symptoms.

By following these steps, you can safely give a B12 injection at home, either into the muscle or under the skin.