Insulin injection technique best practices

Expert recommendations on injecting insulin with pen and insulin syringe needles

If you inject diabetes medication, you should know how important correct injection technique is for effectively managing your diabetes. Your pen needle or insulin syringe, type of medication and rotation of injection sites all play critical roles, which can lead to better treatment results."
10 tips for injecting with a pen needle

1. **Use the shortest needle**
   Insulin delivery recommendations published in *Mayo Clinic Proceedings* state that all types of patients should inject with the shortest needle—such as a 4 mm pen needle. Always inject into the healthy subcutaneous (SC) tissue, avoiding any scars, lumps, inflammation or infection.²

2. **Attach the pen needle straight onto the pen**
   Make sure your pen needle is lined up straight with your pen, and twist until it is tight to ensure proper connectivity.

3. **Mix cloudy insulin and prime your pen**
   If you use cloudy (NPH or premixed) insulin, gently roll and tip the pen until the insulin becomes milk white. Before injecting, prime your pen* to make sure there’s a free flow of insulin.²

4. **Injection sites should be clean and dry**
   If the injection site is not clean, clean the skin and wait for it to dry completely before injecting.²

5. **Check your technique**
   If you’re using a 4 mm or 5 mm pen needle, you can inject at 90° without using a pinch-up technique.† A 4 mm needle is long enough to pass through the skin and enter the SC tissue layer with little risk of intramuscular injection.²,³

6. **Hold for 10 seconds after injection**
   Keeping the plunger button pushed down for 10 seconds‡ before removing the needle from your skin helps ensure that the full dose is delivered and minimizes dripping or leaking. Don’t worry if a small droplet of liquid appears on the skin after injection; in most cases, this is clinically insignificant to your dose.²

7. **Properly dispose of your used pen needles**
   Always dispose of used pen needles immediately after injection into a proper medical sharps container.²

8. **Always inject with a new needle**
   Pen needles are designed for single use and should only be used once—they are no longer sterile after use.²

9. **Rotate your injection sites**
   Follow a plan to rotate between and within all areas (abdomen, thighs, upper arms, buttocks), always moving one finger width away from your last injection site.²

10. **Avoid injecting into lipohypertrophy (lipo)**
    Unhealthy lumps and bumps called lipo can form under the skin of people who inject insulin. If you inject into them, your insulin may not work properly. You should always inject into healthy skin.²

Ask your doctor or pharmacist for a 4 mm pen needle injection technique worksheet.

* Follow the manufacturer’s instructions.
† Children from 2 to 6 years old, extremely lean adults or patients with loose skin may need to use a pinch-up technique.
‡ It may take more or less than 10 seconds; for large doses, counting beyond 10 seconds may be necessary to avoid dripping or leaking. Through trial and error, you can find the hold time that’s right for you.
10 tips for injecting with an insulin syringe

1. **Use the shortest needle**
   - Insulin delivery recommendations published in *Mayo Clinic Proceedings* state that all types of patients should inject with the shortest needle—such as a 6 mm insulin syringe needle.* Always inject into the healthy subcutaneous (SC) tissue, avoiding any scars, lumps, inflammation or infection.2

2. **Clean the top of the insulin vial**
   - Before drawing up your dose of insulin, use an alcohol swab to disinfect the rubber seal.

3. **Mix cloudy insulin**
   - If you use cloudy (NPH or premixed) insulin, gently roll and tip the vial until the insulin becomes milk white.2

4. **Injection sites should be clean and dry**
   - If the injection site is not clean, clean the skin and wait for it to dry completely before injecting.2

5. **Inject using a pinch-up technique**
   - If you’re using a 6 mm or longer insulin syringe needle, you can inject at 90° using a pinch-up technique.2

6. **You don’t need to hold for 10 seconds**
   - Unlike injections with pen needles, insulin syringe users don’t need to hold the needle in the skin for 10 seconds after injection before removing it.2

7. **Properly dispose of your used insulin syringe needles**
   - Always dispose of used insulin syringes immediately after injection into a proper medical sharps container.2

8. **Always inject with a new needle**
   - Insulin syringes are designed for single use and should only be used once—they are no longer sterile after use.2

9. **Rotate your injection sites**
   - Follow a plan to rotate between and within all areas (abdomen, thighs, upper arms, buttocks), always moving one finger width away from your last injection site.2

10. **Avoid injecting into lipohypertrophy (lipo)**
    - Unhealthy lumps and bumps called lipo can form under the skin of people who inject insulin. If you inject into them, your insulin may not work properly. You should always inject into healthy skin.2

   * Excluding syringes used in hospital settings.

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Ask your doctor or pharmacist for a 6 mm insulin syringe needle injection technique worksheet.
**BD Nano™ 4mm Pen Needles**

Our shortest pen needle—in line with the latest injection technique recommendations from diabetes experts²

- The shortest BD pen needle for easier, one-handed injections at more sites³
- Exclusive PentaPoint™ Comfort creates a thinner and flatter needle tip for an easier and more comfortable injection⁴
- EasyFlow™ Technology allows insulin to flow more freely through the needle and does not require you to push the button on your pen as hard to deliver your injection⁵
- Compatible with leading diabetes medication pens⁶

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Our shortest insulin syringe needle—in line with the latest injection technique recommendations from diabetes experts²

- The shortest BD insulin syringe needle for safer injections³
- A shorter and thinner-gauge needle designed for more comfortable injections†
- Available in a range of syringe barrel sizes (or capacities), with large dose unit markings designed to be easier to read when drawing insulin to the correct dose
- Available with a half-unit scale for small doses—ideal for pediatric patients and those with insulin sensitivity

*BD pen needles and insulin syringes are covered by most health plans at the preferred co-pay, including Medicare Part D.*

* Co-pays and preferred status vary by plan.

* Excluding syringes used in hospital settings.
† Compared to longer insulin syringe needles.

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