

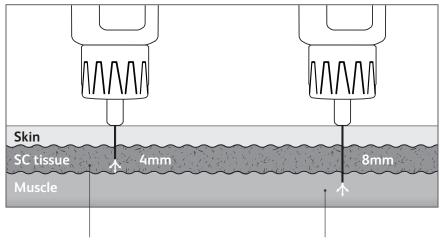
## Injection technique for different needle lengths

Use the correct technique to better manage your diabetes<sup>1</sup>



### Why it's important to use the shortest needles available

To work properly, insulin needs to be injected into the subcutaneous (SC) tissue layer just under your skin. This way, your body can absorb it smoothly and consistently.<sup>1</sup>



- Insulin is meant to be injected into the fat layer just below the skin for consistent absorption.<sup>1</sup>
- Shorter needle lengths (6 mm or less) decrease the risk of injecting into the muscle.<sup>1,2\*</sup>
- If you inject into the muscle, the insulin may be absorbed inconsistently, which may lead to low blood sugar and poor blood sugar control.<sup>1</sup>

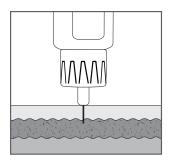
Diabetes experts recommend that the shortest pen and insulin syringe needles are safe, effective and less painful, and should be the first choice for all types of patients.<sup>1</sup>

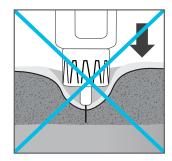
Reduce your risk of injecting into the muscle by using a pinch-up technique with needles that are 6 mm or longer.<sup>2</sup>

### Proper injection technique matters

#### No pinch-up technique

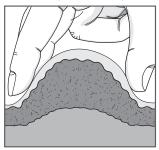
When no pinch-up technique is used – explain to patients the importance of proper needle insertion force technique:<sup>3</sup>





A correct no pinch-up technique requires light pressure when inserting the needle into the skin, just touching the pen needle base to the skin.

#### Pinch-up technique





A correct pinch-up is made by lifting the skin with the thumb and index finger. If the skin is lifted using the whole hand, muscle may be lifted as well as subcutaneous tissue, which can lead to IM injections.<sup>1</sup>

The pinch-up should be held until the injection is complete and the needle has been removed from the skin.<sup>1</sup>

<sup>\*</sup> Compared to longer needles.

### With every injection, just two small steps can make a difference



#### 1. Replace your needle

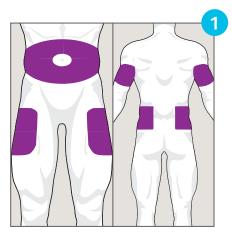
**Pen needles are designed for single use.** Reuse has been reported to increase injection pain and bleeding.<sup>1\*</sup>

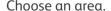


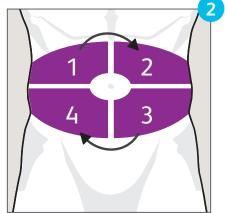
Rotate injection

#### 2. Rotate injection sites

Talk to your doctor about an injection site rotation plan that is right for you. The abdomen, thighs, arms and buttocks are generally recommended injection areas. It's important that you rotate your injections within each area and between areas on a regular basis.<sup>1</sup>



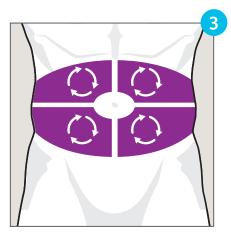




Divide that area into four sections.

<sup>\*</sup> A causal relationship has not been proven.





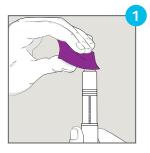
Select an injection site in a section to start injecting. Use one section per week.



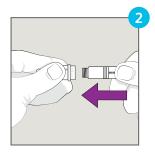
Inject one finger width away from your last injection.

### Injecting with 4 mm and 5 mm pen needles\*

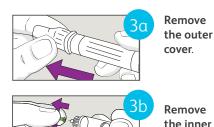
You don't need to use a pinch-up technique<sup>2+</sup>



Arrange your supplies. Remove the pen cap and wipe the stopper.

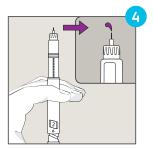


Wash your hands. Remove the seal and push the new needle straight onto the pen. Do not put the needle on at an angle. Screw it on tight.



shield.

Warning: Remove both the outer cover and the inner needle shield before an injection. If both the outer cover and the inner needle cover are not removed before use, the medication or dose may not be injected, which may result in serious injury or death.



Check the flow of medication by dialing 2 units, and with the needle facing up, press the thumb button until you see a drop of medication. Repeat if necessary until you see a drop of medication.

Please refer to the Instructions for Use for detailed information on how to use BD Ultra-Fine $^{\text{TM}}$  Pen Needles in 4 mm and 5 mm lengths.



Dial your medication dose. Clean a small area of skin. Ensure the skin surface is completely dry before injecting.



Inject straight in at a 90° angle.1+



Press the thumb button down. Post-injection, **count for 10 seconds** before removing the needle from your skin to help ensure an accurate dose.<sup>1</sup>



Use the needle once and dispose of it properly.

<sup>\*</sup> Always check your pen manufacturer's Instructions for Use and your insulin expiration date.

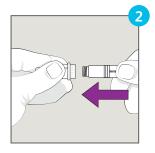
<sup>+</sup> Children from 2 to 6 years old or extremely lean adults may need to use a pinch-up technique.

### Injecting with 6 mm and longer pen needles\*

#### Use a pinch-up technique<sup>2</sup>



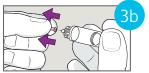
Arrange your supplies. Remove the pen cap and wipe the stopper.



Wash your hands. Remove the seal and push the new needle straight onto the pen. Do not put the needle on at an angle. Screw it on tight.

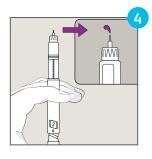


Remove the outer cover.



Remove the inner needle shield.

Warning: Remove both the outer cover and the inner needle shield before an injection. If both the outer cover and the inner needle shield are not removed before use, the medication or dose may not be injected, which may result in serious injury or death.



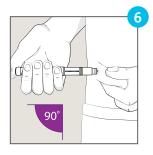
Check the flow of medication by dialing 2 units, and with the needle facing up, press the thumb button until you see a drop of medication.

Repeat if necessary until you see a drop of medication.

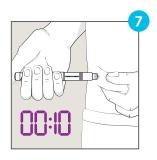
Please refer to the Instructions for Use for detailed information on how to use BD Ultra-Fine<sup>™</sup> Pen Needles in 6 mm, 8 mm and 12.7 mm lengths.



Dial your medication dose. Clean a small area of skin. Ensure the skin surface is completely dry before injecting.



Pinch up your skin and push the needle quickly through the skin at 90° (straight in) to the skin surface.



Press the thumb button down. Post-injection, **count for 10 seconds** before removing the needle from your skin to help ensure an accurate dose.



Use the needle once and dispose of it properly.

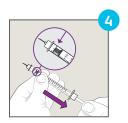
<sup>\*</sup> Always check your pen manufacturer's Instructions for Use and your insulin expiration date.

# Injecting with 6 mm and longer insulin syringe needles

Use a pinch-up technique<sup>2</sup>



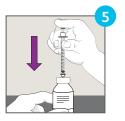
Wipe the top of the insulin bottle. Arrange your supplies. Wash your hands. To expose the plunger, twist the white cap then pull it off.



Pull the insulin syringe plunger down; align the thin black line of the plunger (closest to the needle) with the desired number of units on the insulin syringe. You need air in the insulin syringe equal to the amount of insulin you will take.



If you are taking cloudy insulin, roll the bottle between your hands until it is uniformly cloudy. To avoid the formation of air bubbles, do not shake the bottle of insulin.



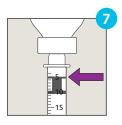
Hold the insulin syringe like a pencil. Push the needle straight through the center of the rubber top of the insulin bottle and push the plunger down completely.



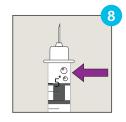
To expose the needle, twist the orange needle shield, then pull it straight off, being careful not to bend the needle or let the needle touch anything.



Leave the needle in the insulin bottle. Carefully turn the bottle and the insulin syringe upside down so the bottle is on top. Please refer to the Instructions for Use for detailed information on how to use  $BD^{\circledcirc}$  Insulin Syringes with the BD Ultra-Fine<sup>™</sup> needle.



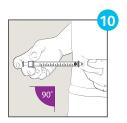
Pull the plunger down slowly. Align the thin black line of the plunger (closest to the needle) with the desired number of units on the insulin syringe.



If air bubbles appear in the insulin syringe, inject the insulin back into the vial. Then redraw the insulin following steps 6 and 7.



Confirm the dose is correct, and then clean a small area of skin. Let it dry completely before injecting.



Hold the insulin syringe like a pencil. Pinch up your skin and push the needle quickly through the skin at 90° (straight in) to the skin surface. Push the insulin in with the plunger. Pull the needle out of your skin. Release the skin pinch-up.



Do not recap used needles. Use the needle once and dispose of it properly.

#### Connect with BD



**BD Customer Support** 

1.888.BD.CARES (232.2737) Monday–Friday, 8 a.m.–8 p.m.



**Diabetes Innovations US** 

Join a supportive, welcoming Facebook community to learn more about insulin delivery and healthy living.



**BD** Diabetes Care

Information for people with diabetes and for healthcare professionals. bd.com/diabetes



**BD Diabetes Care** 

Watch educational videos about diabetes and innovative BD products. Follow the BD Diabetes Care channel on YouTube

#### Connect with other diabetes resources

American Diabetes Association www.diabetes.org

American Association of Diabetes Educators https://www.diabeteseducator.org

National Diabetes Education Program https://www.niddk.nih.gov

Academy of Nutrition and Dietetics **www.eatright.org** 

References: 1. Frid AH, Kreugel G, Grassi G, et al. New insulin delivery recommendations. Mayo Clin Proc. 2016;91(9):1231–1255. 2. Gibney MA, Arce CH, Byron KJ, Hirsch LJ. Skin and subcutaneous adipose layer thickness in adults with diabetes at sites used for insulin injections: Implications for needle length recommendations. Curr Med Res Opin. 2010;26(6):1519–1530. 3. Roberts B, Rini CJ, Oberlander N, Pettis RJ. Fluoroscopic assessment of percutaneous cannula penetration depth. Poster presented at: American Diabetes Association 77th Scientific Sessions; June 2017; San Diego, U.S.

BD, 1 Becton Drive, Franklin Lakes, NJ 07417, U.S.



