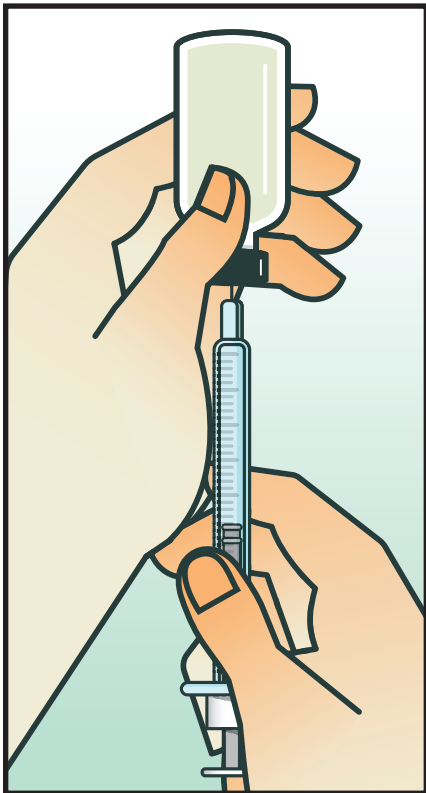


insulin injection know-how

learning how to inject insulin

INJECTION TECHNIQUE

Technique is everything when it comes to making insulin injections easy.



TO DRAW ONE TYPE OF INSULIN INTO A SYRINGE:

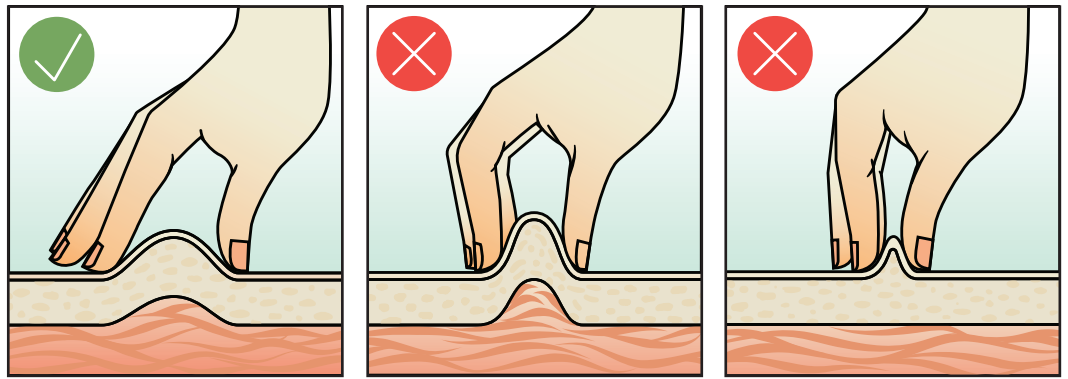
- ★ **Gather your insulin supplies:** Get your insulin vial and a fresh syringe. Check the insulin vial to make sure it is the right kind of insulin and that there are no clumps or particles in it. Also make sure the insulin is not being used past its expiration date.
- ★ **Gently stir intermediate or premixed insulin:** Turn the bottle on its side and roll it between the palms of your hands. Clear (fast-acting, long-acting) insulin generally does not need to be mixed.
- ★ **Prepare the insulin bottle:** If the insulin bottle is new, remove the cap. It is not necessary to wipe the top of the bottle with alcohol as long as it is clean.
- ★ **Pull air into the syringe:** Remove the cap from the needle. Pull back the plunger on the syringe to draw in an

amount of air that is equal to your insulin dose. The TIP of the black plunger should correspond to the number on the syringe.

- ★ **Inject air into the vial:** Hold the syringe like a pencil and insert the needle into the rubber stopper on the top of the vial. Push the plunger down until all of the air is in the bottle. This helps to keep the right amount of pressure in the bottle and makes it easier to draw up the insulin.
- ★ **Draw up the insulin into the syringe:** With the needle still in the vial, turn the bottle and syringe upside down (vial above syringe). Pull the plunger to fill the syringe to the desired amount.
- ★ **Check the syringe for air bubbles:** If you see any large bubbles, push the plunger until the air is purged out of the syringe. Pull the plunger back down to the desired dose.
- ★ **Remove the needle from the bottle:** Be careful to not let the needle touch anything until you are ready to inject!

insulin injection know-how

learning how to inject insulin



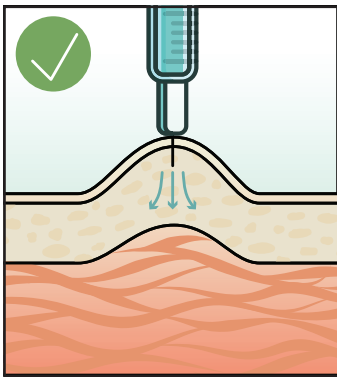
Correct (left) and incorrect (right) ways of performing the skin fold.

DELIVERING AN INJECTION:

- ★ **Select a site:** Choose a spot on your skin that you can see and reach. It is important to not “overuse” any particular area of skin. See the information below on “rotating” injection sites.
- ★ **Make sure skin is clean:** It is generally not necessary to wipe the skin with alcohol before injecting. Those at a high risk of infection should discuss site-preparation procedures with their healthcare team.
- ★ **Pinch the skin:** Pinch a one-to-two-inch portion of skin and fat between your thumb and first finger.
- ★ **Push the needle into the skin:** With your other hand, hold the syringe or pen like a pencil at a 90-degree angle to the skin and insert the needle with one quick motion. Make sure the needle is all the way in.
- ★ **Inject the insulin:** Let go of the skin pinch before you inject the insulin. Push the plunger with your thumb at a moderate, steady pace until the insulin is fully injected. If using a syringe,

keep the needle in the skin for 5 seconds. If using a pen, keep the needle in the skin for 10 seconds.

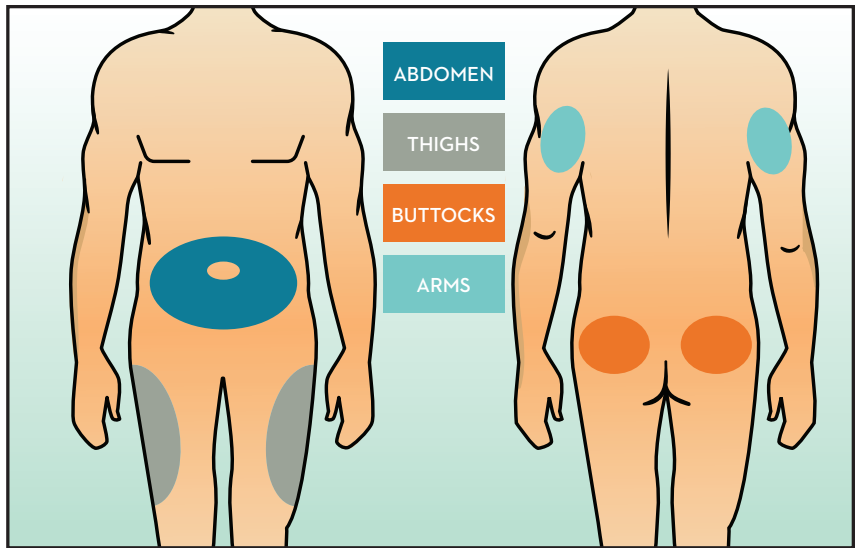
- ★ **Pull out the needle:** Remove at the same 90-degree angle at which you inserted the needle. Press your injection site with your finger for 5-10 seconds to keep insulin from leaking out.
- ★ **Remove the needle:** If using a pen, remove the needle from the pen by replacing the large cover and unscrewing. Leaving the needle on the pen can result in leakage or air bubbles.
- ★ **Dispose of your used needle:** It is important to protect yourself, your loved ones, sanitation workers and pets from accidental needle sticks. Do not recap syringes before throwing them away. Place used syringes and pen needles in a thick plastic container (sharps container, detergent bottle, etc.). When nearly full, close the container tightly with a screw-on cap and tape closed. Dispose according to standards set forth by your local department of sanitation.



The correct angle of injection when lifting a skin fold is 90°

insulin injection know-how

learning how to inject insulin



ROTATING INJECTION SITES:

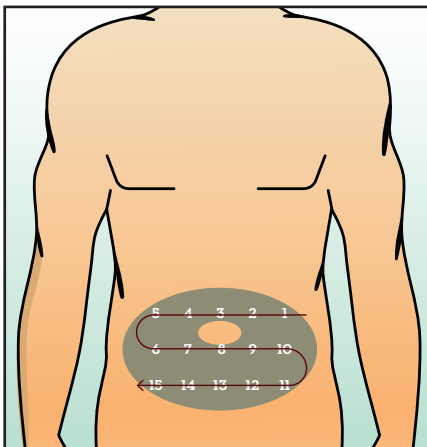
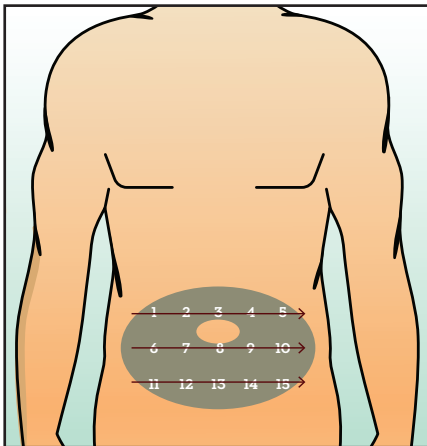
Insulin is injected into the fat layer below the skin on the abdomen (staying two fingers or a few inches away from the belly button), outer thighs, hips, buttocks, or backs of the arms. Although insulin injections are usually painless, injecting the same spot repeatedly can cause inflammation or fat tissue breakdown. Lipodystrophy, as this is called, can cause lumps/swelling and thickened skin, and it may keep insulin from absorbing properly. Nearly half of all people who take insulin develop lipodystrophy, particularly when injection sites are not rotated properly.

Most forms of rapid and long-acting insulin absorb consistently from just about any body part, so feel free to use a variety of body parts for your injections, and use a variety of spots within each body part.

Intermediate-acting (cloudy) insulin and premixed insulin absorb differently in different body parts. It is best to inject intermediate-acting insulin into one part of the body consistently, but use a variety of spots within that body part.

NEEDLE RE-USE

Use of a new, fresh syringe or pen needle for each injection is the best way to minimize discomfort and ensure the accuracy/effectiveness of the insulin dose. Using someone else's needle puts you at danger of contracting Hepatitis and HIV.



Recommended way to rotate injection sites.