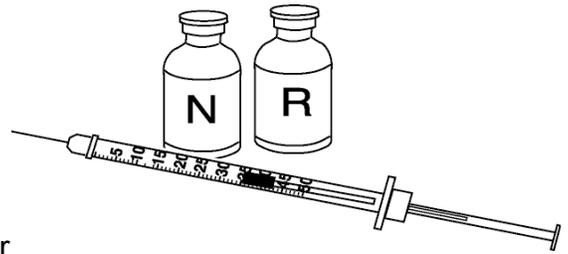


Mixing Two Insulins

Since your doctor has ordered 2 kinds of insulin that can be mixed, you need to learn how to mix the two insulins together in one syringe. This way you can give yourself one injection or shot instead of two. Some insulins, like glargine (Lantus®) and detemer (Levemir®), cannot be mixed. Other insulins (NovoLog 70/30®, Humalog 75/25®) are already a combination of two types of insulin and should not be mixed.

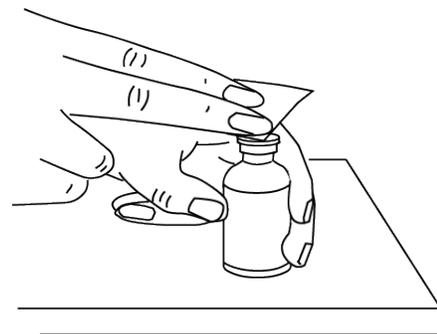
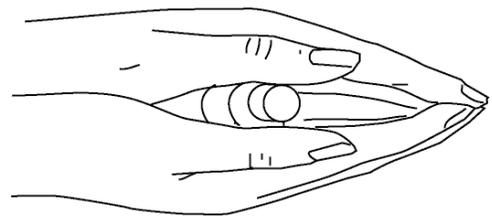
Getting Ready

- Gather these supplies:
 - Insulins: _____ and _____
 - Insulin syringe
 - Alcohol pad
- Wash your hands with warm water and soap. Dry your hands.

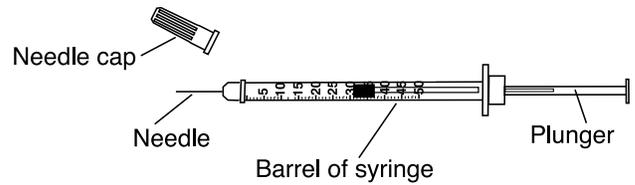


What to Do

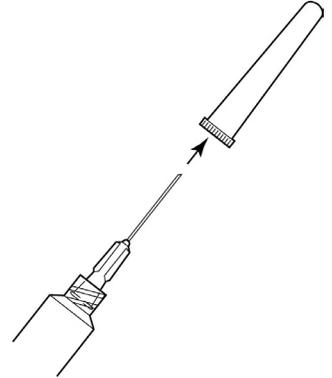
1. Check the labels on the insulin bottles to make sure you have the correct insulin. Regular, lispro (Humalog®) and aspart (NovoLog®) insulin should be clear. NPH insulin should be cloudy.
2. Check the expiration date on **all** insulin bottles. **Do not** use expired insulin. Throw away any insulin left in the bottle 30 days after you first open the bottle.
3. Gently roll the bottle of **cloudy** insulin between your hands until it is mixed, and make sure there is no powder on the bottom of the bottle. **Do not** shake the insulin bottle because this can cause air bubbles.
4. Wipe off the tops of the insulin bottles with an alcohol pad, **and** then do not touch the top of the bottles.



5. Take the syringe out of its package or remove the plastic cap.

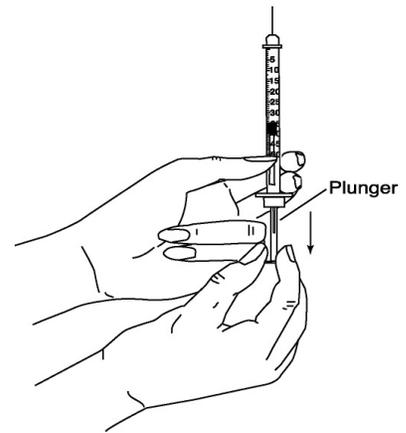


6. Take off the needle cap and place it on the table.

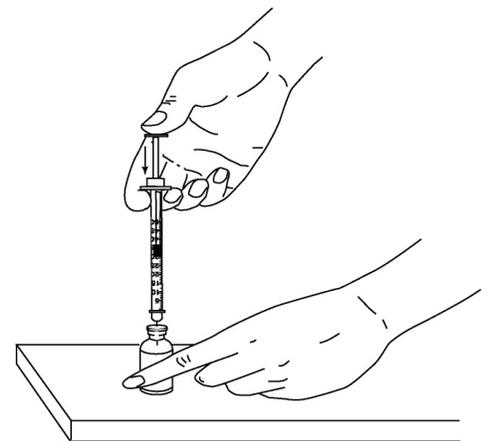


7. Pull the plunger of the syringe down to the number of units of **cloudy** insulin you need. The syringe will fill with air.

The syringe has small lines and numbers. The space between each line on the syringe is one unit. If you are using a 100-unit syringe, the space between each line is 2 units. Move the plunger so the dark end closest to the needle matches the number of units you need.

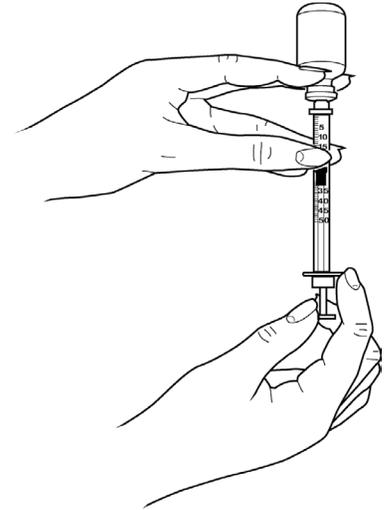


8. Carefully put the needle through the rubber stopper of the bottle with **cloudy** insulin. Push the air into the bottle by pushing the plunger all the way down. Putting air in the bottle makes it easier to get the insulin out of the bottle.



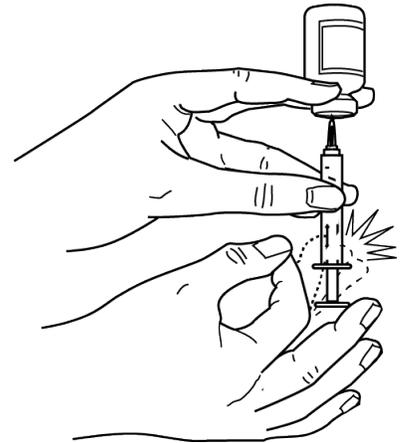
9. Take the needle out of the bottle with **cloudy** insulin. The syringe will be empty. Set the bottle of **cloudy** insulin aside.
10. Pull the plunger of the syringe down to the number of units of **clear** insulin needed to fill with air.

11. Carefully, put the needle into the rubber stopper of bottle with **clear** insulin, and push the air into the bottle.
12. Turn the bottle of **clear** insulin upside down with the syringe still in place. Support the needle in the bottle so it does not bend.



13. Pull the plunger down to the number of units of **clear** insulin you need.
14. Check for air bubbles in the syringe. Air bubbles will not hurt you, but will take the place of insulin. This could cause you to get less insulin than you need because there is no insulin in the air bubble. If you see air bubbles:

- Tap the syringe firmly with your fingertip to move the bubbles to the top of the syringe.
- Push the plunger up a few units until the air bubbles go back into the insulin bottle.
- Pull down on the plunger and fill the syringe with the correct amount of insulin.
- Check again for air bubbles.



15. Take the needle out of the bottle with **clear** insulin.
16. Put the needle into the rubber stopper of the bottle with **cloudy** insulin. Be careful not to push any **clear** insulin into the bottle of **cloudy** insulin.
17. Add the number of units of **clear** and **cloudy** insulins together to give you the total number of units.

$$\begin{array}{r}
 \text{_____ Units of Clear Insulin} \\
 + \quad \text{_____ Units of Cloudy Insulin} \\
 \hline
 = \quad \text{_____ Total Number of Units}
 \end{array}$$

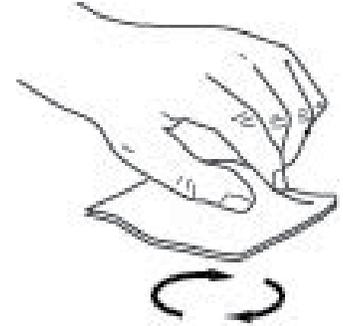
18. Slowly pull the plunger back to the **total number of units** needed. This lets the **cloudy** insulin fill the syringe.

- If you get more units of **cloudy** insulin in the syringe than are needed, **do not push any insulin back into the bottle**. Remove the syringe and throw it into your needle disposal box. Get a new syringe and start over.

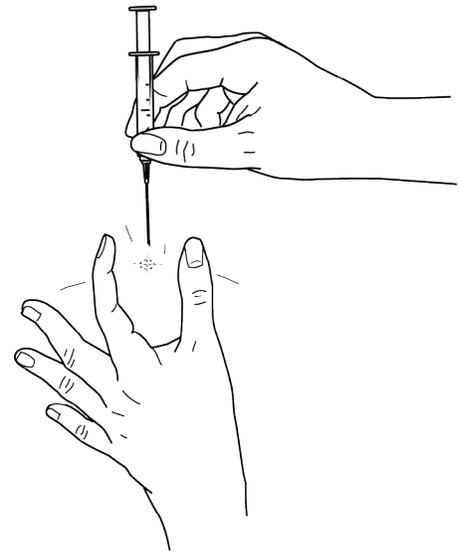
19. Take the needle out of the bottle with **cloudy** insulin.

Giving the Insulin

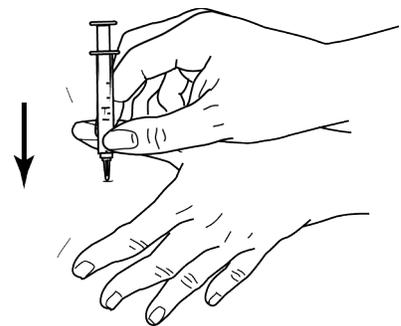
1. Clean the site with an alcohol pad. Let the alcohol dry. If you have just showered or bathed, you do not need to clean the site again.



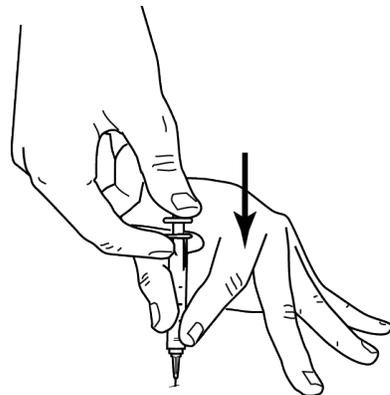
2. Pinch and hold the skin of the site with one hand. Hold the syringe like a dart or pencil as shown in the picture.



3. Put the needle straight into the skin at a 90 degree angle. Use a quick motion. The quicker you put the needle in, the less it hurts. Push the needle all the way into the skin.



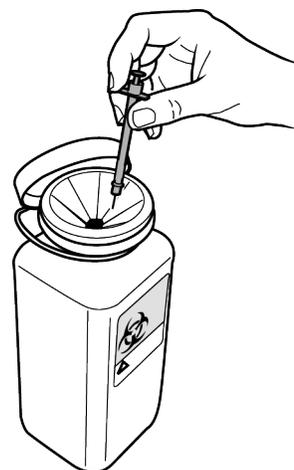
4. Let go of the pinch of skin unless you are told not to.
5. Push the plunger all the way down until all the insulin is in. Wait 5 seconds.



6. Remove the needle. Put your finger over the site and apply pressure for 30 to 60 seconds.
7. Check the site for any redness, bleeding or bruising. Put a band-aid on the site if there is bleeding.

Clean Up the Supplies

1. Put the used syringe and needle into a needle disposal box. You can use a heavy puncture-resistant plastic container with a lid. **Do not** recap the needle. Throw away all other supplies in the trash.
2. Be sure to store new and used syringes and needles out of the reach of children and pets.
3. Wash your hands again.



Talk to your doctor or nurse if you have any questions or concerns.