

# 混合兩種胰島素

## Mixing Two Insulins

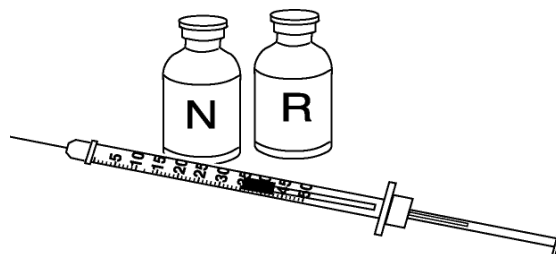
Since your doctor has ordered 2 kinds of insulin that can be mixed, you need to learn how to mix the two insulins together in one syringe. This way you can give yourself one injection or shot instead of two. Some insulins, like glargine (Lantus®) and detemer (Levemir®), cannot be mixed. Other insulins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

因為您的醫生囑咐使用 2 種可以混合的胰島素，您需要瞭解如何在注射器中混合兩種胰島素。這樣可給自己只注射一次或打一針，而不用兩次。有些胰島素，像 glargine (Lantus®) 和 detemer (Levemir®)，是不能混合注射的。其他胰島素 (NovoLog 70/30®, Humalog 75/25®) 本身就包含兩種胰島素，也不應混合使用。

### Getting Ready

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

### 準備工作



- 收集以下用品：
  - 胰島素：  
\_\_\_\_\_ 和 \_\_\_\_\_
  - 胰島素注射器
  - 酒精墊
- 用溫水和肥皂洗手。將手擦乾。

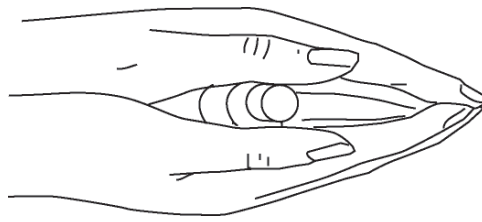
### What to Do

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.

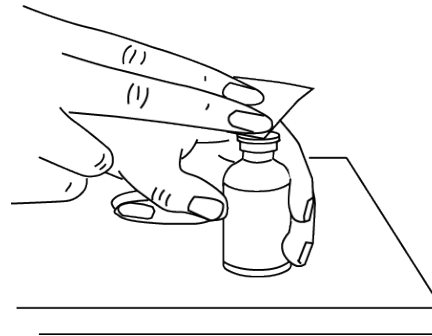
### 該做什麼

1. 檢查胰島素瓶上的標籤以確定您使用的胰島素是對的。普通型和 Lispro (Humalog®)、Aspart (Novolog®) 胰島素應該是清的。NPH 胰島素應該是濁的。
2. 檢查**所有**胰島素瓶上的失效期。**不要**使用過期的胰島素。丟棄任何打開瓶蓋後留在瓶子裡 30 天的胰島素。

- 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.
- Wipe off the tops of the insulin bottles with an alcohol pad, **and** then do not touch the top of the bottles.

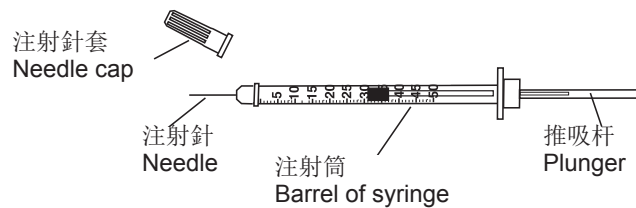


- 將濁狀胰島素瓶輕輕在雙手間轉動直到混合，並確認瓶底沒有粉末為止。**不要**搖晃胰島素瓶，因為這樣可能引起氣泡。



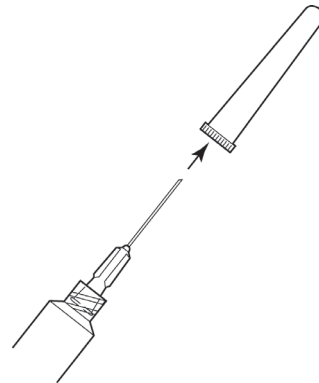
- 用一個酒精墊擦拭胰島素瓶瓶頂，然後不再觸碰此處。

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



- 從包件中取出注射器或除去塑膠針套。

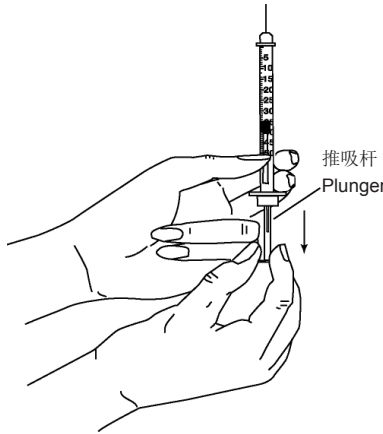
- Take off the needle cap and place it on the table.



- 取下注射針套，並將它放在桌上。

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

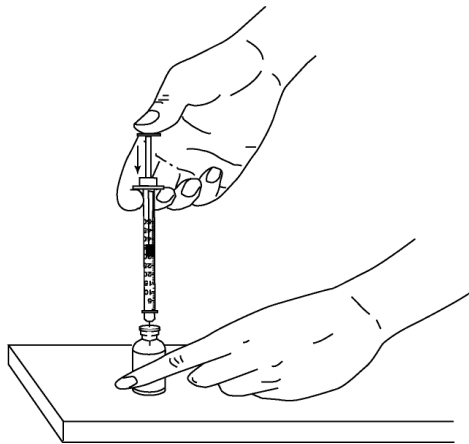
The syringe has small lines and numbers. The space between each line on the syringe is one unit. If you are using a 100-unit syringe, the space between each line is 2 units. Move the plunger so the dark end closest to the needle matches the number of units you need.



7. 將注射器的推吸杆拉到您需要的**濁**胰島素單位數。注射器將充滿空氣。

注射器有小刻度線和數字。注射器上每一刻度線之間的空隙是一個單位。如果您使用一個100單位的注射器，每一刻度線間的空隙是2個單位。拉推吸杆，讓最靠近注射針的黑端對齊您需要的單位數。

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.

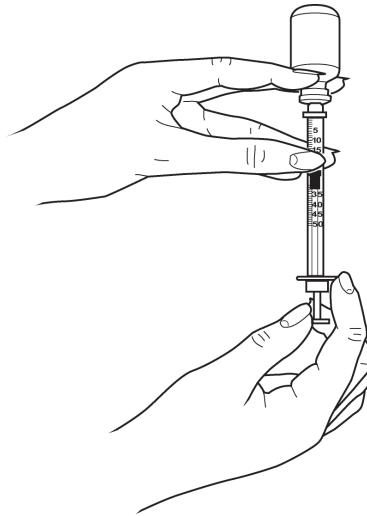


8. 小心地將注射針刺入**濁**胰島素瓶的橡膠蓋。將推吸杆推到底而將空氣推入瓶內。這樣更容易將瓶內的胰島素吸出來。

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.

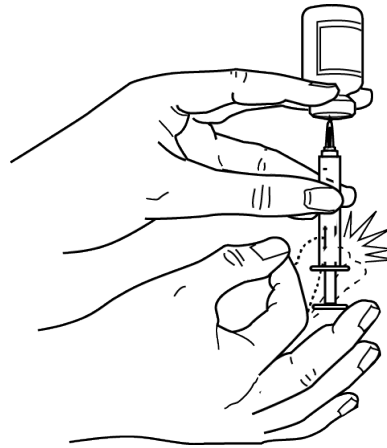
9. 從**濁**胰島素瓶中抽出穿刺針。注射器會是空的。將**濁**胰島素瓶放在一邊。
10. 將注射器的推吸杆拉到您需要的**清**胰島素單位數。注射器將充滿空氣。
11. 小心地將注射針刺入**清**胰島素瓶的橡膠蓋。將空氣推入瓶內。

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.



12. 讓注射器保持原位而將**清**胰島素瓶倒轉。持住瓶內的注射針以使其不彎曲。
13. 將推吸杆拉到您需要的**清**胰島素單位數。

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.



14. 查看注射器內是否有氣泡。氣泡不會對您有傷害，但會佔據胰島素的空間。因為有氣泡的地方就沒有胰島素，您得到的胰島素就比您需要的少。如果您看見氣泡：
  - 用指尖用力敲打注射器，將氣泡移動到注射器頂端。
  - 將推吸杆推高幾個單位，直到氣泡進入胰島素瓶內為止。
  - 將推吸杆拉下，使注射器裝滿正確量的胰島素。
  - 再一次檢查是否有氣泡。

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.

15. 從**清**胰島素瓶裡抽出注射針。
16. 將注射針刺入**濁**胰島素瓶的橡膠蓋。小心不要將任何**清**胰島素推進**濁**胰島素瓶內。

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.

17. 將**清、濁**胰島素數目相加得出您的總單位數。

$$\begin{array}{r}
 \text{_____ 清胰島素單位} \\
 + \quad \text{_____ 清胰島素單位} \\
 \hline
 = \quad \text{_____ 總單位數}
 \end{array}$$

18. 慢慢將推吸杆拉回所需要的**單位總數**。這樣**濁**胰島素就填滿注射器。

- 如果注射器所取的**濁**胰島素多於需要的單位，**不要把任何胰島素推回瓶內**。除掉注射器並將它丟進您的穿刺針處理盒子。拿一個新注射器，重新開始。

19. 從**濁**胰島素瓶中抽出穿刺針。

## Giving the Insulin

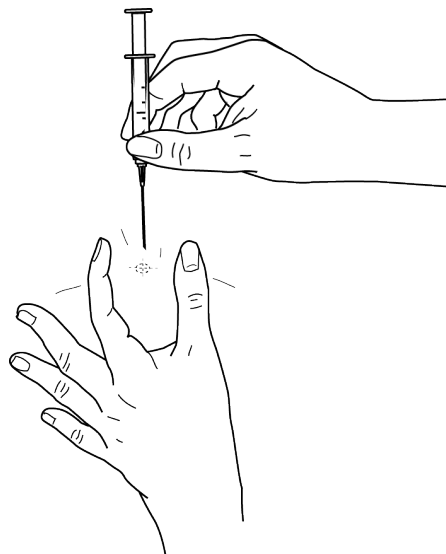
1. Clean the site with an alcohol pad. Let the alcohol dry. If you have just showered or bathed, you do not need to clean the site again.



## 注射胰島素

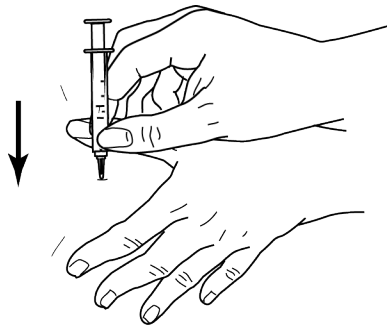
1. 用酒精墊清潔注射部位。讓酒精晾乾。如果您剛沖過淋浴或洗過澡，就不需要再清潔注射部位。

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.



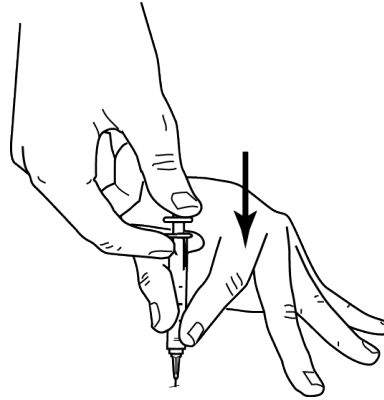
2. 用一隻手捏住注射部位的皮膚。如圖所示像持飛鏢或鉛筆一樣持注射器。

- 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.



- 將注射針呈 90 度角直插入皮膚。插針要快。注射針插入越快越不疼。將注射針完全插入皮膚。

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



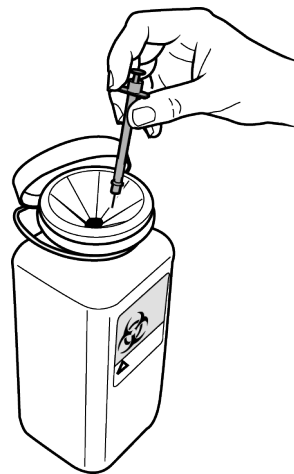
- 鬆開捏住的皮膚，除非醫護人員要求不要鬆開。
- 將推吸杆推到底直到所有的胰島素都已注入為止。等 5 秒鐘。

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

- 拔出注射針。將手指放在注射部位，用力壓 30 至 60 秒鐘。
- 檢查打針部位是否有任何發紅、出血或淤青。如有出血，請在出血部位貼上創口貼。

## Clean Up the Supplies

- 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.



## 清理用品

- 將用過的注射器和注射針放入注射針處理盒。您可用一個抗穿刺的有蓋塑膠容器。**不要**重新套上注射針套。將所有其他用品丟入垃圾筒。

2. Be sure to store new and used syringes and needles out of the reach of children and pets.
3. Wash your hands again.

2. 請務必將新舊注射器和注射針儲放在孩子和寵動接觸不到的地方。
3. 再洗一次手。

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

如果您有任何疑問或關注事項，請告知您的醫生或護士。