

**Heparin
(Unfractionated and
Low Molecular Weight)**

Your Information

Reason for using:

Use until:

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Web Based Resources:

UW Health - Anticoagulation Services

<http://www.uwhealth.org/anticoagulation>

Clot Care Online Resource

<http://www.clotcare.com>

Anticoagulation Resource

<http://www.ptinr.com>

National Blood Clot Alliance

<http://www.stoptheclot.org>

Take Home Points

- Use the medicine exactly as ordered.
- Never double up on a dose if missed.
- Tell all of your health care team that you are taking a blood thinner.
- Know the signs and symptoms of bleeding and report them right away.
- Know the signs and symptoms of a blood clot and stroke and seek medical help right away.
- Keep all scheduled doctor visits or call right away to reschedule.

When to Seek Emergency Care

- Fall and hit your head.
- Cough up or vomit blood (bright red or looks like coffee grounds).
- See blood in your urine or stool (enough to color toilet water).
- Severe headache or stomachache (worst in your life).
- Chest pain or feeling short of breath.
- Weakness on one side of body or slurred speech.

Common Questions

What is this medicine used for?

Heparin and low molecular weight heparin are “blood thinners” that are injected under the skin. They are used to prevent or treat blood clots

Common Examples

- Unfractionated heparin
- Enoxaparin (Lovenox[®])
- Dalteparin (Fragmin[®])

Why do I need a blood thinner?

It may be used to prevent a clot from forming or it can be used to treat an existing clot. Some risk factors that may cause blood clots are listed below.

- Stroke
- Atrial fibrillation
- Heart failure
- Heart valve replacement
- Treat or avoid DVT (deep vein thrombosis) – blood clot in a deep vein, often in the leg
- Treat or avoid PE (pulmonary embolism) – blood clot in the lung

Who shouldn't use heparin or low molecular weight heparin?

Patients who are actively bleeding, have a low platelet count, or have a history of a bleeding disorder **shouldn't** use heparin unless under the care of a doctor. Patients with an allergy to heparin, pork, preservatives, or dyes should talk with a doctor before using heparin.

What side effects should I watch for?

It is common to have soreness, mild bruising, pain, or redness at the injection site.

When should I go to the emergency room?

- Blood in your urine
- Red, black or tar like stool
- Vomiting blood or with a “coffee ground” look
- Chest pain
- Sudden shortness of breath
- Severe bruising
- Any bleeding you cannot stop
- Severe stomach pains
- Severe headache

How do I store my heparin or low molecular weight heparin?

Keep it at room temperature, away from heat and light. **Don't** put it in a refrigerator or freezer.

How long will I need to take this for?

Your doctor will tell you how long to take this medicine.

How do I inject the medicine?

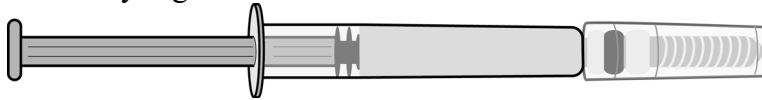
Step-by-step instructions are within this booklet

- Low molecular weight heparin - enoxaparin (Lovenox[®]), dalteparin (Fragmin[®]) – page 4
- Heparin using a prefilled syringe and Carpuject- page 6
- Heparin using a vial and syringe- page 9

Injection Instructions for Low Molecular Weight Heparin – enoxaparin (Lovenox[®]), dalteparin (Fragmin[®])

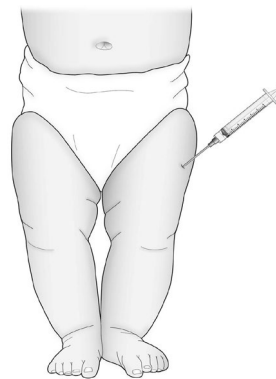
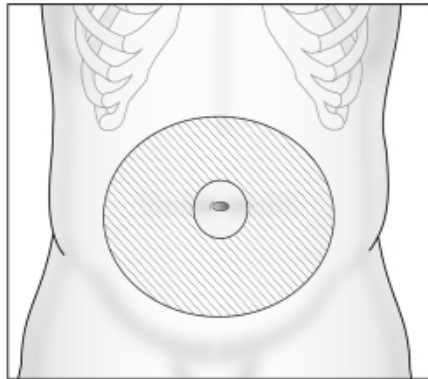
What supplies will I need?

- alcohol pad or soap and water to clean the injection site
- sharps container
- prefilled syringe

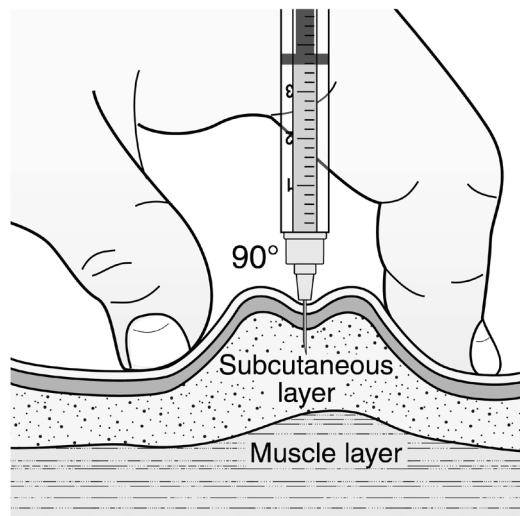
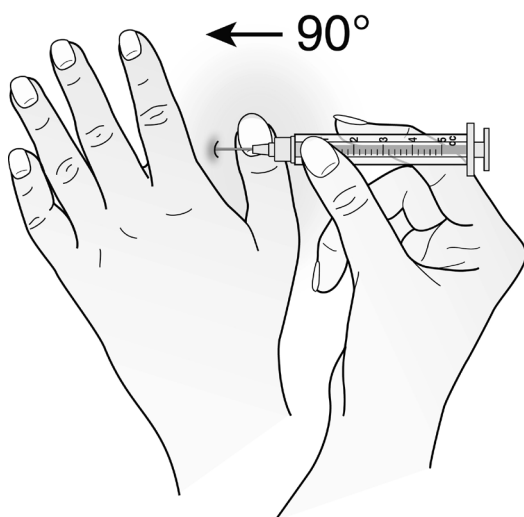


How do I give the injection?

1. Wash your hands with soap and water. Then dry them.
2. Remove the prefilled syringe dose from the packaging.
3. Choose a site on your belly at least 2 inches away from your belly button. You may use either side of your belly. Try not to inject where there are scars, bruises, or swollen areas. You should use a different place each time you give yourself a shot.
4. **For children less than 1 year old:** Inject heparin into the upper outer side of the thigh. **Don't** inject heparin into the stomach.



5. Clean the area where you will give the shot with an alcohol pad or soap and water. Let it dry.
6. Sit in a relaxed position so you can reach your belly and see the place where you will give your shot.
7. Pull the cap straight off the needle. Keep the needle sterile once you have removed the cap. **Don't** set the needle down or touch the needle.



8. Hold the syringe like a pencil in the hand that you write with. With your other hand, pinch the area you cleaned between your thumb and fingers to make a fold in the skin. Be sure to hold the skin fold until the injection is done. Push the entire needle straight into the skin fold, holding the syringe at a 90° angle.
9. Press down on the plunger until all the medicine has been pushed out under the skin and the syringe is empty. Pull the syringe with the needle straight out of the skin fold. Let go of the skin fold. **Don't** rub the site. Rubbing may bruise the site or affect how the medicine is absorbed.
10. After the needle is removed from the skin, push down on the plunger a second time to make the safety device work. A hard cover should appear over the needle.
11. Dispose of the used syringe into a sharps container (a hard plastic container). Close the lid and keep the container away from children and pets.

Common Questions

What if my doctor has prescribed less than a full syringe?

Hold your syringe with the needle pointing up and carefully push out the extra liquid until the amount of medicine in the syringe is the amount the doctor prescribed.

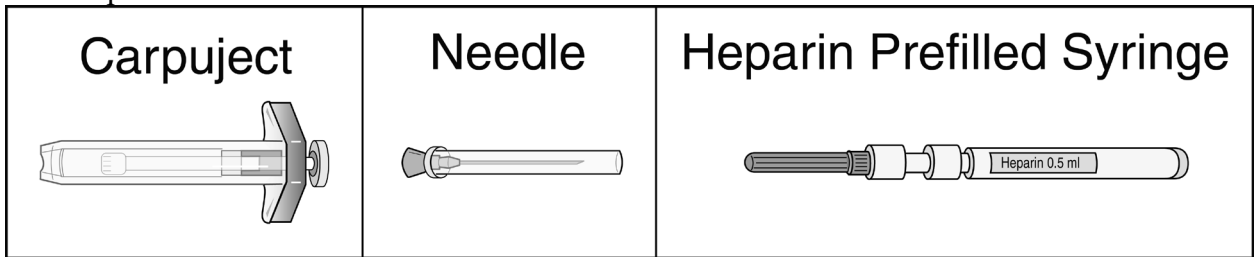
What should I do if there is an air bubble in the syringe?

It is safe to use the syringe to give a shot, even with the air bubble.

Injection Instructions for Heparin- Prefilled Syringes with Carpuject

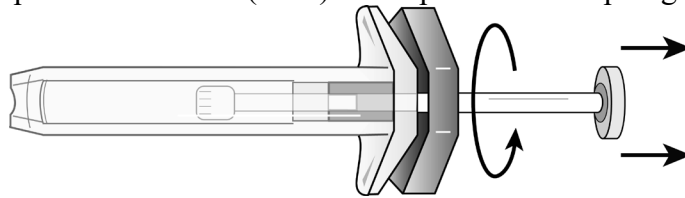
What supplies will I need to use heparin prefilled syringes?

1. alcohol pad or soap and water to clean the injection site
2. heparin prefilled syringe
3. Carpuject device
4. needle
5. sharps container

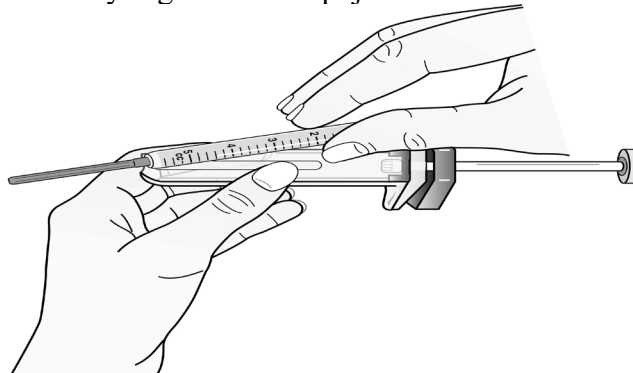


How do I give a heparin prefilled syringe injection?

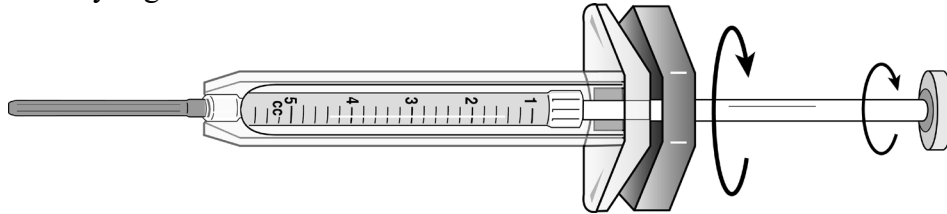
1. Wash your hands with soap and water. Then dry them.
2. Open the Carpuject by spinning the top part of the handle (darker color) $\frac{1}{2}$ turn away from the bottom part of the handle (clear). Then pull the white plunger out.



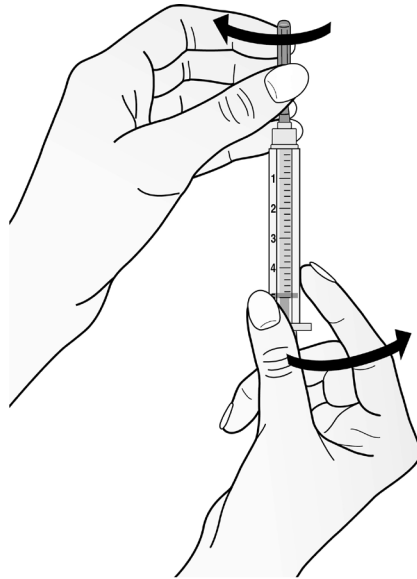
3. Place the heparin prefilled syringe in the Carpuject.



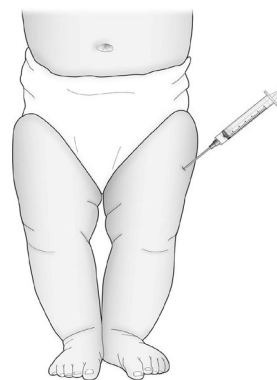
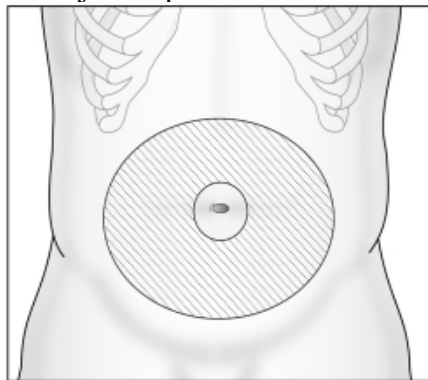
4. Close the Carpuject by spinning the top part of the handle $\frac{1}{2}$ turn towards the bottom part of the handle. Then tighten the white plunger by spinning it clockwise a few turns until it reaches the syringe.



5. Pull the cap from the heparin syringe. Then attach the needle (with the cap still on) to the heparin syringe by twisting the pieces together.



6. Choose a site on your belly at least 2 inches away from your belly button. You may use either side of your belly. Try not to inject where there are scars, bruises, or swollen areas. You should use a different place each time you give yourself a shot.
7. **For children less than 1 year old:** Inject heparin into the upper outer side of the thigh. **Don't** inject heparin into the stomach.

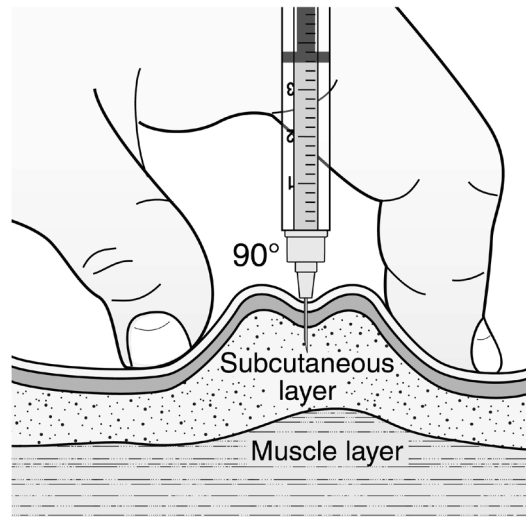
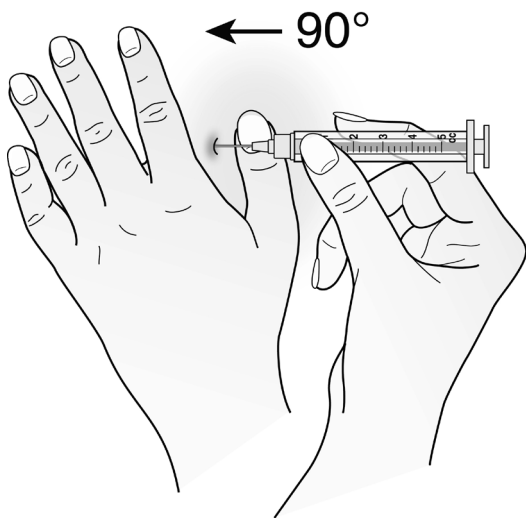


8. Clean the area where you will give the shot with an alcohol pad or soap and water. Let it dry.

9. Sit in a relaxed position so you can reach your belly and see the place where you will give your shot.
10. Pull the cap straight off the needle. Keep the needle sterile once you have removed the cap. **Don't** set the needle down or touch the needle.
11. Hold the heparin dose upright so the needle is pointing upwards.
12. Flick the syringe a few times so the air moves to the top of the syringe.

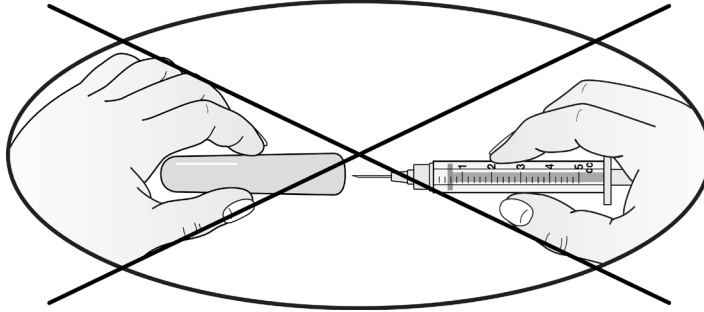


13. Remove the air by pressing the plunger VERY SLOWLY until the medicine reaches the needle tip.
14. Hold the syringe like a pencil in the hand that you write with. With your other hand, pinch the area you cleaned between your thumb and fingers to make a fold in the skin. Be sure to hold the skin fold until the injection is done. Push the entire needle straight into the skin fold, holding the syringe at a 90° angle.

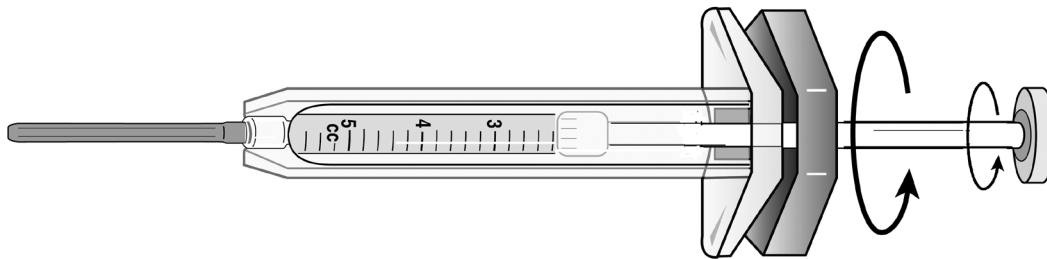


15. Press down on the plunger until all the medicine has been pushed out under the skin and the syringe is empty. Pull the syringe with the needle straight out of the skin fold. Let go of the skin fold. **Don't** rub the site. Rubbing may bruise the site or affect how the medicine is absorbed.

16. After the injection, set the cap of the needle on a flat surface. While holding the syringe, scoop up the cap to cover the needle. Do NOT attempt to recap the needle while holding the cap.



17. Remove the used heparin syringe from the Carpject device by pulling the plunger back and unscrewing the Carpject. The syringe with attached needle can then be removed.

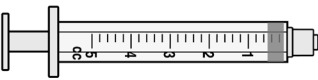




18. Dispose of the used syringe and needle into a sharps container (a hard plastic container). Close the lid and keep the container away from children and pets.
19. Do NOT throw away the Carpject device; you can use it again for another injection.

Injection Instructions for: Heparin- Vial and Syringe

What supplies will I need to use heparin?

- alcohol pad or soap and water to clean the injection site
- alcohol pad to clean the top of the vial
- heparin vial
- needle
- syringe
- sharps container

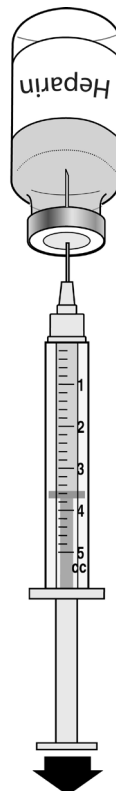
Syringe	Needle	Heparin
		

How do I give a heparin injection?

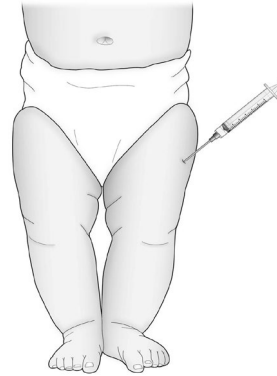
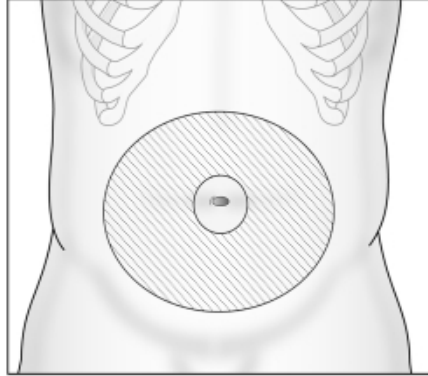
1. Wash your hands with soap and water. Then dry them.
2. Remove the syringe and needle from the package. Attach the needle (with the cap still on) to the syringe by twisting the pieces together.



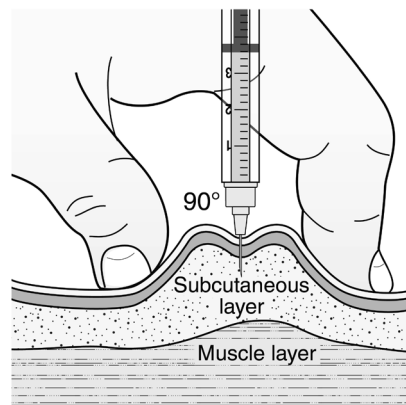
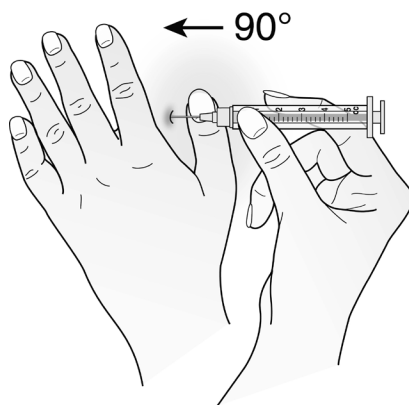
3. Remove the top cover on the heparin vial.
4. Set heparin vial on a flat surface and wipe the top of the heparin vial with an alcohol wipe to clean the surface before each use.
5. Draw air into the syringe by pulling the plunger out to the number of milliliters (mL) needed for your dose.
6. Remove the cap of the needle. Push the needle through the rubber top of the heparin vial. Push the plunger down to inject air into the vial.
7. Turn the vial upside down. To withdraw the heparin, pull down the plunger.



8. Check for air bubbles before taking the needle out of the vial. Flick the syringe a few times so the air moves to the top of the syringe. Be sure the syringe contains the correct number of milliliters (mL) before taking the needle out of the vial.
9. Choose a site on your belly at least 2 inches away from your belly button. You may use either side of your belly. Try not to inject where there are scars, bruises, or swollen areas. You should use a different place each time you give yourself a shot.
10. **For children less than 1 year old:** Inject heparin into the upper outer side of the thigh. **Don't** inject heparin into the stomach.

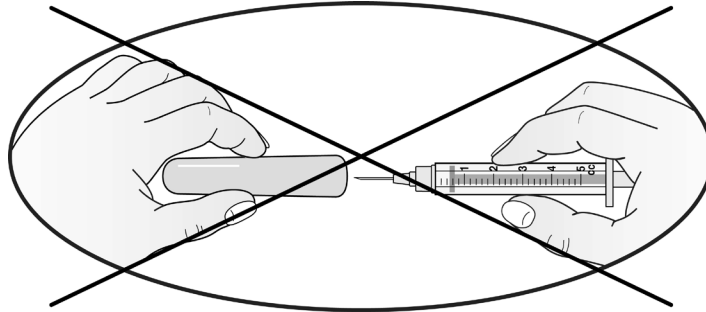


11. Clean the area where you will give the shot with an alcohol pad or soap and water. Let it dry.
12. Sit in a relaxed position so you can reach your belly and see the place where you will give your shot.
13. Hold the syringe like a pencil in the hand that you write with. With your other hand, pinch the area you cleaned between your thumb and fingers to make a fold in the skin. Be sure to hold the skin fold until the injection is done. Push the entire needle straight into the skin fold, holding the syringe at a 90° angle.



14. Press down on the plunger until all the medicine has been pushed out under the skin and the syringe is empty. Pull the syringe with the needle straight out of the skin fold. Let go of the skin fold. **Don't** rub the site. Rubbing may bruise the site or affect how the medicine is absorbed.

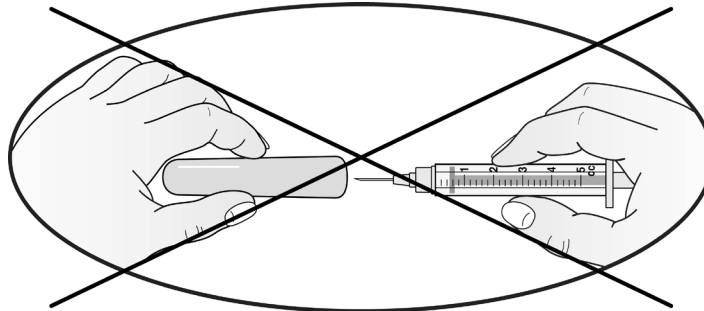
15. After the injection, set the cap of the needle on a flat surface. While holding the syringe, scoop up the cap to cover the needle. Do NOT attempt to recap the needle while holding the cap.



16. Dispose of the used syringe and needle into a sharps container (a hard plastic container). Close the lid and keep the container away from children and pets.

Disposal of Used Needles and Syringes

1. After the injection, set the cap of the needle on a flat surface. While holding the syringe, scoop up the cap to cover the needle. Do NOT attempt to recap the needle while holding the cap.



2. Place the used needle and syringe in a rigid puncture-resistant container with a secure lid or cap.
- You may use a sharps container or thick-walled plastic detergent or bleach bottles with screw caps.
 - DO NOT USE - coffee cans (the lids are too easily punctured), plastic milk jugs, plastic bags, aluminum cans and soda bottles.
 - **NOTE: DO NOT** add bleach to the container. Bleach may not completely disinfect needles, and it could spill and injure you or waste handlers.
3. Label the container with the words "biohazard," "infectious waste" or "sharps." If you have put used needles and syringes in a recyclable container, label it "do not recycle."
4. Store the sharps container out of reach of children. When the container is full, sealed and labeled, dispose of it properly at a sharps collection station.

Disposal of Sharps Containers\

- Do NOT place the used sharps containers with normal household garbage. Bring it to a disposal location that can accept sharps waste.
- Disposal locations:
 - Visit the this website for an updated list of disposal locations in Wisconsin:
dnr.wi.gov/topic/Waste/documents/faclists/SharpsCollection.pdf.
 - Or call your local pharmacy to see if they accept sharps containers.
- Some locations only accept containers that were bought at that location. Call ahead to be sure.
- Many locations accept sharps for free. Some locations may charge a small fee to cover the costs of disposal.
- If you have any unopened syringes that you don't need, you may call your doctor's office to see if you can donate them to patients in need.



Quiz:

1. For which of these symptoms should you seek emergency care?
 - a. Cough up or vomit blood
 - b. Severe headache or stomachache (worst in your life)
 - c. Weakness on one side of body or slurred speech
 - d. All of the above
2. How far away from your belly button should you inject the medicine?
 - a. At least 2 inches away
 - b. At least 6 inches away
 - c. It is ok to inject it directly on the belly button
3. Where should you place used needles?
 - a. Garbage
 - b. Sharps container
 - c. Recycling
4. Where should you dispose of sharps containers?
 - a. Garbage
 - b. Recycling
 - c. At an approved sharps disposal site, often at a local pharmacy

Quiz answers

1. d
2. a
3. b
4. c

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2019. University of Wisconsin Hospital and Clinics Authority. All rights reserved. Produced by the Departments of Pharmacy and Nursing. HF#6915