How to Give a Subcutaneous Injection

What it is:
A subcutaneous (SubQ) injection is used when a small amount of medicine needs to be given into the fatty tissue under the top layer of skin. Some medicines, like heparin, growth factor and insulin, work best when they are given this way. The medicine may come in a pre-filled syringe or you may have to draw it up from a vial. Your child’s doctor or nurse will teach you how to draw up the correct dose.

What medicine to give: ______________________________________________________

How much to give: ______ mL or ______ mg

When to give it: ____________________________________________________________

What you need:
- injection rotation chart
- pen or pencil
- 2 alcohol prep pads
- medicine
- 1 Band-Aid
- 1 mL or 3 mL syringe with 25 or 27 gauge needle
- a strong container with cover (such as a used bleach bottle or coffee can) or sharps container
- household disinfectant cleaner
- paper towels
- yes  no  Ask the doctor about EMLA cream
- alcohol based hand rub (optional)
How to give the subcutaneous injection:

1. Check to make sure you are giving the correct medicine and dose.

2. Decide where to give the injection. The best site is the abdomen, approximately 2 inches to the left or right of the belly button. You may also give it in the thigh or the outer edge of the upper arm.

3. It is important to rotate the places you give the injection so that your child does not develop a bruise or large bump. Record where you give each injection on the Injection Rotation Chart at the end of this handout.

4. Clean your work area with a household disinfectant cleaner and a clean paper towel.

5. Clean your hands with soap and water for 15 to 20 seconds. Dry your hands with a clean paper towel.

If your hands are not visibly dirty, you can use alcohol based hand rub to clean them, using the following steps:

- Put enough alcohol based hand rub to fill the palm of your hand.
- Spread the hand rub over all parts of your hands.
- Rub hands until dry.
6. Tear open two alcohol prep pads.

**If your medication is already in a syringe, skip to step #15.**

**If you are withdrawing medication from a vial:**

7. Wipe the top of the bottle of medicine with one alcohol prep pad. Throw it away. Let the top of the bottle dry.

8. Hold the syringe in your hand. Take the cap off the needle.

9. Since you will need _____ mL of medicine, pull up that much air into the syringe.

10. Put the needle into the bottle top. Push the air in. Keep the needle in the bottle. Hold the needle straight and steady so it does not bend.

11. Turn the bottle and syringe upside down. Keep the tip of the needle in the fluid.

12. Slowly pull out ____ mL of medicine into the syringe. Make sure the tip of the needle is in the medicine. If it is not, you will get air in the syringe.

13. If you get air bubbles into the syringe do not take the needle out of the bottle. Push medicine back into the bottle and slowly pull down again.

14. Take the needle out of the bottle and carefully recap it.

15. Find the spot where you will give the injection. Make sure your child is awake before you give the injection. Have someone help hold your child still if your child is anxious or too young to hold still on their own.

16. Take the other opened alcohol prep pad and use it to clean the skin at that spot. Throw it away.

17. Let the area of skin air dry completely.

18. Gently pinch the skin where you are going to give the injection.
19. □ yes □ no  Put the needle in the squeezed skin at a 45 degree angle.
□ yes □ no  Put the needle in the squeezed skin at a 90 degree angle.

20. Keep the syringe steady. Push in the plunger to inject the medicine.

21. Pull the needle out, then let go of the skin. Do not recap the needle. Throw out the needle and syringe in the strong container with cover.

• Keep syringes and supplies out of the reach of children.

22. You may put a Band-Aid on the site if it is bleeding.

23. Thank your child for helpful behaviors while giving the injection.
# Injection Rotation Chart

<table>
<thead>
<tr>
<th>Day/date</th>
<th>Time shot given</th>
<th>Place shot given</th>
<th>Notes/comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Patient name_________________________________

Physician name _______________________________

Phone number ________________________________

Start date ___________________________________

Current dose ________________________________
Now that you’ve read this:

☐ Show your nurse or doctor how you would choose the next injection site.
   (Check when done.)
☐ Show your nurse or doctor how you would give the injection.
   (Check when done.)

If you have any questions or concerns,
☐ call your child’s doctor or ☐ call ______________________

If you want to know more about child health and illness,
visit our library at The Emily Center at Phoenix Children’s Hospital
1919 East Thomas Road
Phoenix, AZ 85016
602-933-1400
866-933-6459
www.phoenixchildrens.org
Facebook: facebook.com/theemilycenter
Twitter: @emilycenter

Disclaimer
The information provided at this site is intended to be general information, and is provided for educational purposes only. It is not intended to take the place of examination, treatment, or consultation with a physician. Phoenix Children’s Hospital urges you to contact your physician with any questions you may have about a medical condition.

November 27, 2017 • In family review
#78 • Written by A. White, MS, RN • Edited by M. Jacobson, BSN, RN
• Illustrated by Dennis Swain and Irene Takamizu and Christine Remmel
Development of this handout has been supported by funding from the Caitlin Robb Foundation.

6 of 8
How to Give a Subcutaneous Injection

Name of Health Care Provider: _______________________________

Date returned: ____________ □ db

Family Review of Handout

Health care providers: Please teach families with this handout.
Families: Please let us know what you think of this handout.

Would you say this handout is hard to read? □ Yes □ No

Would you say this handout is easy to read? □ Yes □ No

Please circle the parts of the handout that were hard to understand.

Would you say this handout is interesting to read? □ Yes □ No

Why or why not?

Would you do anything differently after reading this handout? □ Yes □ No

If yes, what?

After reading this handout, do you have any questions about the subject? □ Yes □ No

If yes, what?
Is there anything you don’t like about the drawings?  ☐ Yes  ☐ No

If yes, what?

What changes would you make in this handout to make it better or easier to understand?

Please return your review of this handout to your nurse or doctor or send it to the address below.

The Emily Center  602-933-1395
Health Education Specialist
Phoenix Children’s Hospital
1919 East Thomas Road
Phoenix, AZ 85016-7710

Thank you for helping us!