

Medication Guide Appendix: Instructions for Preparing and Giving a Dose with an AVONEX[®] Vial

Storing AVONEX[®] Vials

Prior to use, AVONEX[®] should be refrigerated (36-46°F or 2-8°C) but can be kept for up to 30 days at room temperature (77°F or 25°C). You should avoid exposing AVONEX[®] to high temperatures and freezing. After mixing, AVONEX[®] solution should be used immediately, within 6 hours when stored refrigerated at 36-46°F or 2-8°C. Do not freeze the AVONEX[®] solution.

How do I prepare and inject a dose of AVONEX[®]?

Find a well-lit, clean, flat work surface like a table and collect all the supplies you will need to give yourself or receive an injection. You may want to take one AVONEX[®] Administration Dose Pack out of the refrigerator about 30 minutes before you plan on injecting your dose to allow it to reach room temperature. A room temperature solution is more comfortable to inject.

You will need the following supplies:

- vial of AVONEX[®] (white to off-white powder or cake)
- vial of diluent, single-use (Sterile Water for Injection, USP)
- 3 mL syringe
- blue MICRO PIN[®] (vial access pin)
- sterile needle
- alcohol wipes
- gauze pad
- adhesive bandage
- a puncture resistant container for disposal of used syringes, needles, and MICRO PINS.

Preparing the AVONEX[®] solution

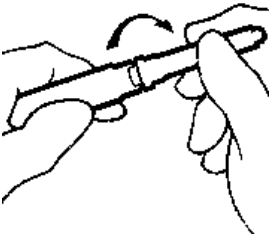
It is important to keep your work area, your hands, and your injection site clean to minimize risk of infection. You should wash your hands prior to preparing the medication.

1. Check the expiration date on the AVONEX[®] vial and the vial of diluent; do not use if the medication or diluent is expired.

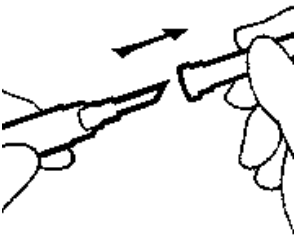
2. Remove the caps from the vial of AVONEX[®] and the vial of diluent, and clean the rubber stopper on the top of each vial with an alcohol wipe.



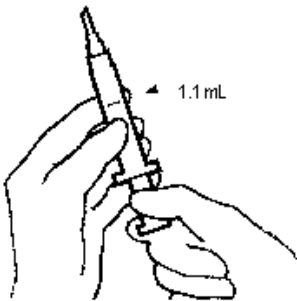
3. Attach the blue MICRO PIN[®] to the syringe by turning clockwise until secure.
NOTE: Over-tightening can make the MICRO PIN[®] difficult to remove.



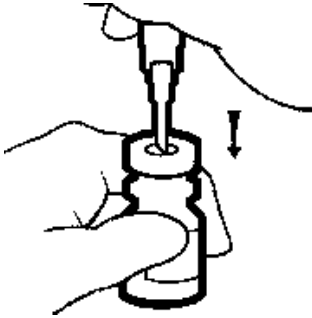
4. Pull the MICRO PIN[®] cover straight off; do not twist. Save the cover for later use.



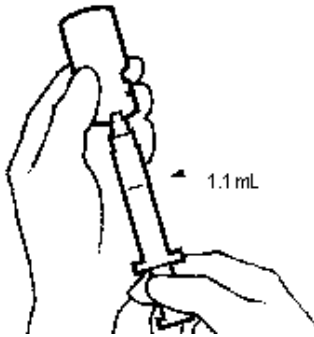
5. Pull back the syringe plunger to the 1.1 mL mark.



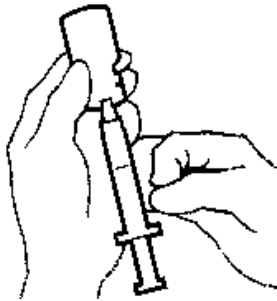
6. Firmly push the MICRO PIN[®] down through the **center** of the rubber stopper of the diluent vial.



7. Inject the air in the syringe into the diluent vial by pushing down on the plunger until it cannot be pushed any further.
8. Keeping the MICRO PIN[®] in the vial, turn the diluent vial and syringe upside down.
9. While keeping the MICRO PIN[®] in the fluid, slowly pull back on the plunger to withdraw 1.1 mL of diluent into the syringe.

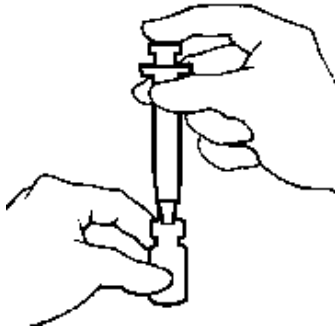


10. Gently tap the syringe with your finger to make any air bubbles rise to the top. If bubbles are present, slowly press the plunger in (to push just the bubbles out through the needle). Make sure there is still 1.1 mL of diluent in the syringe.

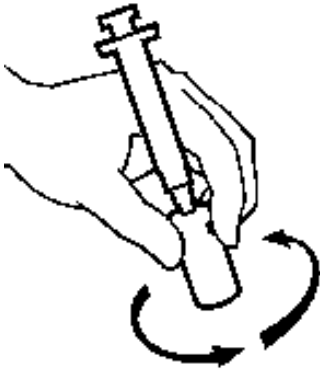


11. Slowly pull the MICRO PIN[®] out of the diluent vial.
12. Carefully insert the MICRO PIN[®] through the **center** of the rubber stopper of the vial of AVONEX[®]. *NOTE: Off-center punctures can push the stopper into the vial. If the stopper falls into the vial, do not use.*

13. **Slowly** inject the diluent into the vial of AVONEX[®]. **DO NOT** aim the stream of diluent directly on the AVONEX[®] powder. Too direct or forceful a stream of diluent onto the powder may cause foaming, and make it difficult to withdraw AVONEX[®].

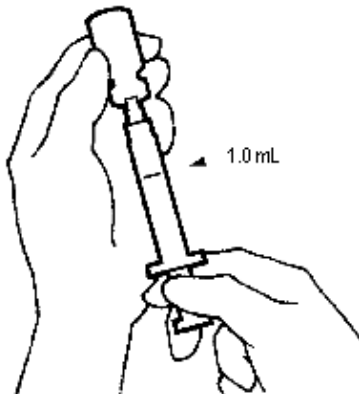


14. Without removing the syringe, **gently** swirl the vial until the AVONEX[®] is dissolved. **DO NOT SHAKE.**

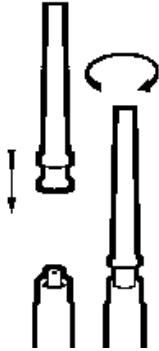


15. Check to see that all of the AVONEX[®] is dissolved. Check the solution in the vial of AVONEX[®]. It should be clear to slightly yellow in color and should not have any particles. Do not use the vial if the solution is cloudy, has particles in it or is a color other than clear to slightly yellow.

16. Turn the vial and syringe upside down. Slowly pull back on the plunger to withdraw 1.0 mL of AVONEX[®]. If bubbles appear, push solution slowly back into the vial and withdraw the solution again.



17. With the vial still upside down, tap the syringe **gently** to make any air bubbles rise to the top. Then press the plunger in until the AVONEX[®] is at the top of the syringe. Check the volume (should be 1.0 mL) and withdraw more medication if necessary. Withdraw the MICRO PIN[®] and syringe from the vial.
18. Replace the cover on the MICRO PIN[®] and remove from the syringe with a counterclockwise turn.
19. Attach the sterile needle for injection to the syringe turning clockwise until the needle is secure. A secure attachment will prevent leakage during the injection.



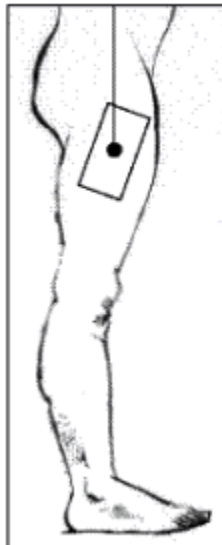
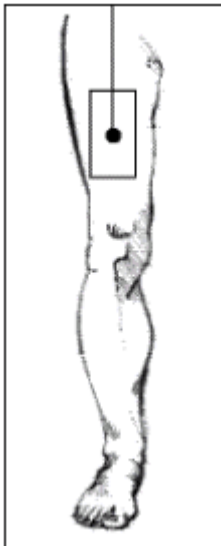
Selecting an injection site

You should use a different site each time you inject. This can be as simple as switching between thighs (if you are always injecting yourself), or if another person is helping you, you can rotate between your upper arms and your thighs. Keeping a record of the date and location of each injection will help you.

Do not inject into an area of the body where the skin is irritated, reddened, bruised, infected or scarred in any way.

The best sites for intramuscular injection are the thigh and upper arm:

- thigh

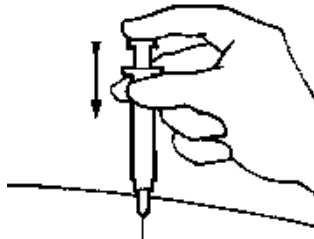


- upper arm

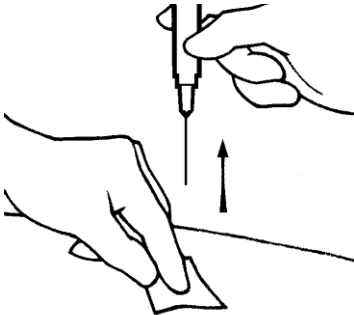


Injecting the AVONEX[®] dose

1. Use a new alcohol wipe to clean the skin at one of the recommended intramuscular injection sites. Then, pull the protective cover **straight** off the needle; do not twist the cover off.
2. With one hand, stretch the skin out around the injection site. Hold the syringe like a pencil with the other hand, and using a quick motion insert the needle at a 90° angle, through the skin and into the muscle.
3. Once the needle is in, let go of the skin and use that hand to gently pull back slightly on the plunger. If you see blood come into the syringe, withdraw the needle from the injection site and put pressure on the site with a gauze pad. You will need to replace the needle and choose and clean a new site for injection.
4. If no blood came into the syringe, slowly push the plunger in until the syringe is empty.



5. Hold a gauze pad near the needle at the injection site and pull the needle straight out. Use the pad to apply pressure to the site for a few seconds or rub gently in a circular motion.



6. If there is bleeding at the site, wipe it off and, if necessary, apply an adhesive bandage.
7. Dispose of the used syringe, needle and blue MICRO PIN[®] in your puncture resistant container. DO NOT USE a syringe, MICRO PIN[®], or needle more than once. The AVONEX[®] and diluent vials should be put in the trash.

Disposal of syringes and needles

There may be special state and/or local laws for disposing of used needles and syringes. Your doctor, nurse or pharmacist should provide you with instructions on how to dispose of your used needles and syringes.

- **Always keep your disposal container out of the reach of children.**
- **DO NOT** throw used needles and syringes into the household trash and **DO NOT RECYCLE.**

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