

## Inhaled Amikacin Using AeroEclipse® XL BAN (Breath Actuated Nebulizer)

Many medications are available as inhaled treatments. Inhaled methods deliver medication directly to the airway, which is useful for respiratory problems.

An inhaled medication delivery system consists of a nebulizer cup and a source for compressed air. The airflow from the compressor to the nebulizer changes the medication solution to a mist. When inhaled correctly, the medication has a better chance to reach the small airways. This increases the medication's effectiveness.

### Supplies You Will Need

- Nebulizer Compressor
- Reusable AeroEclipse® XL BAN (Breath Actuated Nebulizer)
- Pre-treatment medicine/Bronchodilator
- Amikacin 250 mg/1 ml
- Sodium chloride 0.9%/5 ml (**Inhalation**) solution
- Syringes with needles
- Alcohol pads
- Sharps container

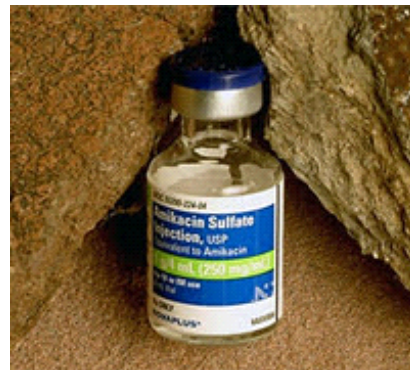
### Assembling the Air Compressor

1. Place the compressor and nebulizer on a clean, flat, hard surface. The compressor should be placed where it can safely reach its power source and where you can reach the ON/OFF switch.
2. Plug the power cord into an electrical outlet.
3. Connect the air tubing to the compressor.

### Preparing the Medication When Using Amikacin

1. Wash your hands prior to preparing each treatment.
2. Always use a clean nebulizer.

3. Amikacin comes in a multi-dose vial, usually two treatments in each vial.
4. Check the label to make sure you have the right medicine.
5. Check the expiration date. Do not use the medicine if the expiration date has passed.
6. Remove the plastic cover from the vial of medicine, and throw the cover away.
7. Wipe the top of the vial with an alcohol swab.
8. Hold the syringe. Pull off the needle cover with your other hand. Do not touch the needle or lay the syringe down when the needle is uncovered.
9. Pull back the end of the plunger to the dose of medicine you will be needing.



10. Place the vial securely on the table, holding with one hand.
11. Push the needle through the rubber stopper on top of the vial.
12. Invert the vial of medicine so the rubber stopper is facing down.
13. Push the plunger so the air in the syringe goes into the vial.
14. Let go of the plunger and allow the medication to flow into the syringe on its own.
15. If needed, pull down on the plunger to assure the proper dose.
16. Take the needle out of the vial.
17. Check for air bubbles in the syringe. Gently tap the syringe with the needle up. This will cause the air bubbles to rise to the needle end of the syringe slowly. Push the plunger, and air will leave the syringe.



18. Check to make sure you have the right amount of medicine as prescribed.
19. Put the correct dose of amikacin into the nebulizer cup. (Do not mix with other medicines.)
20. Add 5 ml of 0.9% sodium chloride to the nebulizer cup. Replace the top of the nebulizer.
21. Check to make sure the indicator on top of the AeroEclipse XL is pointing to the "dotted arrow." This will take the place of having to use a filter system.

22. Connect the tubing to the bottom of the nebulizer.
23. Turn the compressor on, and check the nebulizer for misting.



### If the Nebulizer Is Not Misting

1. Check all of the connections.
2. Refer to the manufacturer's instructions.

### Taking a Nebulized Treatment Using a Mouthpiece

1. **NOTE:** Remember to take the pre-treatment medicine before the nebulized treatment.

2. Sitting in a comfortable position will allow you to take a deep breath.
3. Turn the compressor on. The nebulizer will begin to mist.
4. Put the mouthpiece in your mouth, creating a tight seal.
5. Hold in an upright position. This prevents spilling and promotes nebulization.
6. Breathe in slowly and deeply over three to five seconds.
7. At the end of a deep breath, exhale slowly through your mouth.
8. Continue these steps until completed.

## Care and Cleaning of Nebulizer Equipment

Please follow the manufacturer's instructions for cleaning the nebulizer equipment. Suggested guidelines include the following:

1. Take apart the nebulizer. Wash all parts (except tubing) in liquid dish soap and water. Rinse with water.  
OR
2. Place the nebulizer parts (except mask and tubing) in a dishwasher basket and place on the top rack of the dishwasher.
3. After washing the nebulizer, shake off any excess water and leave to air dry before putting back together.

## Disinfection of Nebulizer Equipment Every Other Treatment Day Boiling Water

1. Wash your hands.
2. Take the nebulizer apart.
3. Put all the parts except the tubing in boiling water for 5-10 minutes.
4. After boiling the nebulizer, shake off any excess water.
5. Make sure the nebulizer is completely dry before storing.

Remember to change the nebulizer tubing every 2-4 weeks.

## Care of the Compressor

Check the manufacturer's instructions for cleaning and care of the compressor you are using.

Visit our website for more information about support groups, clinical trials and lifestyle information.

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