

Title: Asthma Treatment: Do I need a nebulizer?

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Abstract:

Asthma is chronic respiratory disease commonly treated using inhaled beta-agonist medications, or bronchodilators, such as albuterol. Medical research has shown that for the treatment of asthma with beta-agonists, inhalers are equally as effective as nebulizers. Either treatment is helpful at reducing the symptoms of asthma which may include wheezing, chest tightness, shortness of breath and cough. Inhalers have some practical benefits over nebulizers for everyday use as inhalers are faster to use, are less expensive and do not require a power source or regular maintenance.

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# **Asthma treatment: Do I need a nebulizer?**

## **Common questions and answers**

### **What is asthma?**

Asthma is a chronic disease of the lungs that causes airway constriction, inflammation and extra secretions that make it hard to breathe. Symptoms of asthma can include wheezing, chest tightness, shortness of breath and cough.

### **What are the treatments for asthma?**

There are multiple types of treatment for asthma. The mainstay of treatment is called a beta-agonist, or bronchodilator, which causes the airways to open up for immediate relief. Albuterol is a commonly used medication in this drug class. Steroids are also commonly used to decrease the inflammation in the airways. Various other treatments can be added to help you breathe easier.

Beta-agonists are breathed into the lungs directly to quickly dilate airways. There are two major ways to deliver the medication directly into your lungs. Inhalers fit in your hand and work by providing a puff of medication into your mouth while you breathe in. Inhalers are used with a spacer that helps to direct more of the medication into your lungs. Nebulizers are machines that convert the liquid medication into an aerosol that can be breathed in during a few minutes time through mouthpiece or a mask.

### **Do nebulizers work better than inhalers?**

No, updated medical research has shown that nebulizers and inhalers are equally as effective at alleviating asthma symptoms. In children, using an inhaler may actually have some benefits over using a nebulizer. Kids with asthma treated with an inhaler spend slightly less time in the emergency room than do those treated with nebulizers. Also, there may be decreased side effects for kids using inhalers. Less children experience an increase in their heart rate, a common side effect of beta-agonist medications, when they use inhalers instead of nebulizers.

### **What are the benefits of using an inhaler?**

Since inhalers and nebulizers are equally as effective at controlling asthma, either can be beneficial at home. However, inhalers are often easier to use at home as they are small and do not require the power source and regular maintenance that nebulizers require. Inhalers are easy to use and take less time than an equivalent treatment with a nebulizer. They are great to use with active kids that are on the go!

### **My child used a nebulizer in the hospital, shouldn't he/she have one at home?**

There is no benefit of using a nebulizer instead of an inhaler. Emergency rooms are able to reuse nebulizers on multiple patients so it may be a less expensive alternative than getting a new inhaler for everyone. Also sometimes high concentrations of oxygen that can be administered with a nebulizer are necessary for treatment of severe asthma in the hospital. However, for at home use, inhalers are equally as effective.