Asthma and Allergy Foundation of America®
MARYLAND-GREATER WASHINGTON, DC CHAPTER

Celebrating 25 Years of Service 1982 – 2007

6609 Reisterstown Road, Suite 204
Baltimore, MD 21215

Office 410-484-2054; FAX (410) 484-2043
Email: aafamd@RCN.com; www.aafa-md.org

ASTHMA INFORMATION SHEET TRANSITION TO NEW INHALERS

General information from asthma educators about the transition to new inhalers includes:

- **Myth busting**
  Some people mistakenly believe that the force of the puff from the inhaler physically opens their airways and therefore, since the HFA product is a softer puff, they don't believe their airways will open up. They need to hear that the medicine works directly on the walls of the airways, relaxing them so they will open up.

- **Priming Protocols Differ**
  Some people do not prime their new inhaler properly or at all (see information on priming in the table below) and therefore, there is no medicine in the puffs they inhale. They need to hear about how important it is to prime this new HFA inhaler initially and again if they have not used it within the time period listed in the table -- so that the puffs they inhale actually have the medicine in it. How each of the new pumps are primed, differs. If a prescription is changed, the patient has to 'relearn' the new inhaler.

- **Price Escalations for New Drugs**
  Since all 4 new products are branded and the generics (which are typically less expensive), will no longer be available after 1/1/09 (or sooner as supplies dwindle), the cost to patients will greatly increase (in some cases, triple).

- **Drug Substitution and Pharmacy costing 'Tiers'**
  Various health plans may have placed some patients' preferred branded inhaler on a higher priced tier. The associated problem is that some pharmacies substitute among the 4 HFA albuterol products and may fill a prescription with one brand initially, but with another brand when refilled (all depending upon the prices the pharmacies have to pay).
  This will seriously affect patients who have found a branded product that works for them, only to be switched to another product.

(The information below from Dr. Sampson (AAAAI President), and Dr. Portnoy, ACAAI President, provides specifics on each of the non-CFC albuterol products, including how to use and clean the devices. You may want to use this in educating people about the new HFA inhalers).

Eliminating CFC-Albuterol

In the modern history of medicine, therapeutic agents have been recalled, removed or banned for many reasons. A very atypical withdrawal becomes final on December 31, 2008, which will be the last day of sale, transfer or even gifting of CFC-containing albuterol MDIs. According to the Director of Respiratory Division of the FDA, Dr. Badrul Chowdhury[1], this is the first time that an effective medication has been removed from the market in the USA for an environmental issue. Clearly the Montreal Protocol with its 191 signatory nations has made clear that these benefits accrued by stopping chemicals that deplete the ozone layer outweighs the many problems and inconveniences and costs of changing the propellants to non-CFC products.

The first HFA albuterol product was introduced in 1996, and since then two additional racemic albuterol MDIs using HFA as a propellant have been brought to market. A separate product L (or lev)-albuterol was also introduced two years ago. In the past three years there have been at least three albuterol HFA products available, for large populations to use. The original requirements for post marketing surveillance and adequate supplies have been met, and so the transition has been progressing. A recent EPA estimate is that 60% of the patients who use albuterol MDIs have made the transition to an HFA product.

However, the products available are not identical and each has specific differences. These differences need to be noted and taken into consideration when they are prescribed. Since there are only branded products available, prescriptions and patient instructions should be appropriate to each product. It is important to note that the propelled spray (plume) is softer than CFC propellants and patients need to be reassured that they will be receiving the correct dose of active ingredient. There are also differences in excipients and taste. Cleaning instructions are important as well as priming. Some of the differences among the available products are summarized in Table 1.

Also, there may be price differences among the branded HFA products, which cost more than the soon to be discontinued CFC products, since generics were available. Physicians should monitor patients making the transition to HFA albuterol to be sure they understand the differences in the use and care of the newer products.

See chart on next page….

Table 1 HFA - Albuterol Products							
Product	**Contains Alcohol**	**Contains Oleic Acid**	**Active drug from mouthpiece**	**Sprays to prime**	**Prime after days without activity**	**Clean***	**Lower limit of usage**
Proventil HFA [2]	Yes	Yes	90 mcg	4	14 days	Weekly	4 years
Ventolin HFA [3**]	No	No	90 mcg	4	14 days	Weekly	4 years
Proair HFA [4]	Yes	No	90 mcg	3	14 days	Weekly	12 years
Xopenex HFA [5]	Yes	Yes	45 mcg***	4	3 days	Weekly	4 years

* Cleaning recommendations for all products are similar and are approved by the FDA. The recommendation is to remove the canister and wash the mouthpiece in running warm water. Excess water should be shaken and allow the mouthpiece to air dry overnight. In case the inhaler is blocked and needs to be washed immediately, wash as above and shake off excess water, then spray two puffs away from face. Then inhale the medication in the usual manner.

** Once this product is removed from the foil wrapper it should be discarded in 6 months even if there are sprays remaining in the canister.

*** Contains only levalbuterol in the same amount as in the other products.

Hugh A. Sampson, MD, FAAAAI - AAAAI President **Jay M. Portnoy, MD, FACAAI - ACAAI President**

---

[1] Chowdhury, B. Oral presentation at the Transition to Ozone-Safe Albuterol Metered-Dose Inhalers meeting April 11, 2008 at the Offices of United States Environmental Protection Agency, 1310 L Street , Washington, DC.

[2] Proventil HFA package insert accessed from the internet on April 12, 2008 dated November 11, 2007.

[3] Ventolin HFA package insert accessed from the internet on April 12, 2008 dated March 2008.

[4] ProairHFA package insert accessed from the internet on April 12, 2008 dated February 2006.

[5] Xopenex package insert accessed from the internet on April 12, 2008 dated September 2005.