



LEGISLATED CHANGES WILL AFFECT ASTHMA MEDICATIONS

Most asthma patients require two types of medication: quick-relief or rescue medications for emergency use – the albuterol drugs (quick acting bronchodilators) and controller or preventative medications used on a regular basis to contain the disease and prevent flare-ups or episodes.

There are many different brands of albuterol or quick relief/rescue medications. Quick-relief medication is often in MDI – Metered Dose Inhaler – format which uses a propellant to deliver the medicine to the lungs. In the past, the propellant used was *chlorofluorocarbons* or CFC's. CFC's were also used as propellants in many other products like hair sprays, spray paints, etc. In 1978 scientists realized CFC's were NOT safe for our environment – they were destroying the earth's protective atmospheric ozone layer located in the stratosphere (the part of the earth's atmosphere that begins about 10 to 15 kilometers above the earth's surface), even though they were safe and effective for their medical uses. There was worldwide agreement to phase out CFC use. In 1987, under the **Montreal Protocol**, an agreement was made to allow CFC's to be used for asthma medications, including albuterol, until a safe and effective alternative propellant could be discovered. In 1996, a safe alternative propellant was developed – *hydrofluoroalkanes* or HFA's. An FDA regulation ends the manufacture and sale of ALL CFC propelled albuterol meds by December 31, 2008 and other asthma meds using CFC propellants will eventually be phased out.

What does this mean for asthma patients? The albuterol medication formula stays the same; many manufacturers have already changed their delivery systems, in fact some patients may even be using the new formula now and not be aware of it. Most others manufacturers will be switching before the Dec. 31, 2008 deadline. It does mean patients will have to get a new prescription for an HFA propelled albuterol-type drug if they aren't already using one.

Some people notice a slight difference in the taste, smell or feel of their medication because of the new propellant, but most do not. There is a smaller particle size of the delivered medication. These smaller particles have lesser tendency to fall out of the upper airway and they penetrate into the small or distal lung airways better, an enhanced medication response. The new HFA inhalers deliver the medication mist with less force and at a warmer temperature, resulting in less blast effect than was typical of the older CFC inhalers. The new HFA inhalers should not get wet so the old float test to determine emptiness isn't recommended. The HFA inhalers also have a tendency to gum up with medication residue over time. It is best to inspect these inhalers periodically; if white powder or other residue is seen around the tiny medication spray hole then it is time to clean the device. To clean, remove the medication canister from the L-shaped plastic mouth piece, rinse the mouth piece in warm water and then dry completely before replacing the canister.

There may be a higher cost for the new drugs *because there are no generic equivalents at this time*. Some pharmacies may not carry the HFA inhalers yet but supplies will increase during this transition period. Just as safe and effective as the old one, the new HFA propellant won't destroy our environment. "If a patient is using their rescue or albuterol medication more than twice a week, or waking up more than two times a month and using their rescue inhaler, their asthma may not be under control. They should visit their physician for an evaluation, no matter which type of propellant they're currently using" says Ms. Joan Hart, Executive Director of The Asthma & Allergy Foundation of America, TX Chapter.

Author's note:

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