



# Pilots and Medication

Impairment from medication, particularly over the counter (OTC) medication, has been cited in a number of accidents in general aviation. In a 2011 study from the FAA's CAMI Toxicology Lab, drugs/medications were found in 570 pilots (42%) from 1,353 total fatal pilots tested. Most of the pilots with positive drug results, 511 (90%), were flying under CFR part 91.

## What's the Problem?

We all know that some drugs may compromise a pilot's ability to control the aircraft and/or adversely affect judgment and decision making. The difficulty comes for investigators in trying to quantify the known detriment that comes with various medications and the physical conditions that require their use.

Another area of concern is that airmen are not always disclosing some conditions and medications to their Aviation Medical Examiner (AME). Not only could the undisclosed condition endanger the airman, but the treatment might also create problems. Undisclosed treatments could hide potentially impairing drug interactions. That's why it's important to disclose any medications you are taking to your AME. In many cases there are other treatment options that may allow you to continue flying, but your AME needs to know what medications you are using.

## What to Look For

The Food and Drug Administration (FDA) requires standard labeling for all OTC medications. These standard labels indicate the active ingredients, directions for use, and highlight potential side effects like drowsiness. Be sure to check out our new OTC medication guide listed on the next page.

<b>Drug Facts</b>									
<b>Therapeutic substance in drug</b>	<b>Active ingredient (in each tablet)</b> Chlorpheniramine maleate 2 mg	<b>Purpose</b> Antihistamine	<b>Product type</b>						
	<b>Uses</b> temporarily relieves these symptoms due to hay fever or other upper respiratory allergies: <ul style="list-style-type: none"> <li>sneezing</li> <li>runny nose</li> <li>itchy, watery eyes</li> <li>itchy throat</li> </ul>		<b>Symptoms or diseases the drug treats</b>						
<b>When not to use this drug, when to stop taking it, when to see a doctor, and possible side effects</b>	<b>Warnings</b> <b>Ask a doctor before use if you have</b> <ul style="list-style-type: none"> <li>glaucoma</li> <li>a breathing problem such as emphysema or chronic bronchitis</li> <li>trouble urinating due to an enlarged prostate gland</li> </ul> <b>Ask a doctor or pharmacist before use if you are taking</b> tranquilizers or sedatives <b>When using this product</b> <ul style="list-style-type: none"> <li>You may get drowsy</li> <li>Alcohol, sedatives, and tranquilizers may increase drowsiness</li> <li>Be careful when driving a motor vehicle or operating machinery</li> <li>Excitability may occur, especially in children</li> </ul>								
	<b>Directions</b> <table border="1"> <tr> <td>Adults and children 12 years and over</td> <td>Take 2 tablets every 4 to 6 hours; not more than 12 tablets in 24 hours</td> </tr> <tr> <td>Children 6 years to under 12 years</td> <td>Take 1 tablet every 4 to 6 hours; not more than 6 tablets in 24 hours</td> </tr> <tr> <td>Children under 6 years</td> <td>Ask a doctor</td> </tr> </table>		Adults and children 12 years and over	Take 2 tablets every 4 to 6 hours; not more than 12 tablets in 24 hours	Children 6 years to under 12 years	Take 1 tablet every 4 to 6 hours; not more than 6 tablets in 24 hours	Children under 6 years	Ask a doctor	<b>Read carefully: how much to take, how often to take it, and when to stop taking it</b>
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<b>More information on how to store the drug</b>	<b>Other information</b> Store at 20-25° C (68-77° F) <ul style="list-style-type: none"> <li>Protect from excessive moisture</li> </ul> <b>Inactive ingredients</b> D&C yellow no. 10, lactose, magnesium stearate, microcrystalline cellulose, pregelatinized starch		<b>Other things in the drug, such as colors or flavorings</b>						



## Common Enemies

Some of the most common, potentially impairing medications are antihistamines. These allergy medications can have powerful sedating effects so much so that the primary offender, diphenhydramine (trade name: Benadryl®), is often used as an OTC sedative and is the sedating agent in most PM pain meds. According to an NTSB study, sedating antihistamines are the most commonly detected medication in fatal accidents.

Cardiovascular drugs are also commonly present in accidents. The majority of medications used to treat high blood pressure are safe to use while flying. For other cardiac conditions, it is important that you check with your AME to ensure that you are not using an unsafe (and prohibited) medication.

Some less common impairing drugs include antidiarrheal drugs (some contain opioids), anti-seizure drugs, some smoking cessation drugs, and some antidepressants. For many of these drugs, there are options that are not impairing or disqualifying if you work with your primary care doctor and/or AME. If you suffer from allergies, you might use loratadine instead of diphenhydramine to cite one example.

## How Long?

So if you have to take a disqualifying or impairing medicine, how long should you wait before resuming flying? Every medicine is different, but a good rule of thumb is 5 times the half life of the medication. The easy way to determine this is through the dosing interval. If a medication says to take it 4 times per day, the dosing interval would be 6 hours. Therefore the wait time after the last dose would be 30 hours (6 hours x 5 = 30 hours). Other medications may have longer or shorter intervals which is why it's important to talk to your AME.

## Where Can I Get More Information?

A good place to start is the new OTC medication guide listed below. The guide provides pilots with a list of medications that are generally safe when used to treat a common ailment (GO) and those that are not (NO-GO). Take a close look at this list because some medications we regard as equivalent may have very different impacts on safety. Be sure to check out the Do Not Issue/ Do Not Fly section too. You can also find good information on drugs through trusted government sites like the National Institute of Health's Medline site at [MedlinePlus.gov](http://MedlinePlus.gov). This site lists both generic and trade names along with side effects and warnings for almost every drug out there.



## Resources

- ◆ **NEW! What OTC Medications Can I Take and Still Be Safe To Fly?**  
[FAA.gov/go/pilotmeds](http://FAA.gov/go/pilotmeds)
- ◆ **AME Guide: Pharmaceuticals**  
[bit.ly/2KpL9gu](http://bit.ly/2KpL9gu)
- ◆ **AME Guide: Do Not Issue — Do Not Fly**  
[bit.ly/2NMKGHf](http://bit.ly/2NMKGHf)

