



Pilots and Medication

Impairment from medication, particularly over the counter (OTC) medication, has been cited in a number of accidents in general aviation. This led the NTSB and General Aviation Joint Steering Committee to conduct a study of pilot impairment in aviation. While the extent of impairment was undetermined, an FAA study of 1,353 fatal accidents found that 570 (42%) of the pilots tested were positive for some form of drug.

What's the Problem?

First, we all know that certain OTC drugs may compromise a pilot's ability to control the aircraft and/or adversely affect judgment and decision-making. However, since tolerance levels can vary widely among individuals, it's not so obvious for investigators to determine whether or not pilot performance was compromised by drugs.

Another area of concern is the failure of airmen to disclose certain pre-existing conditions and medication use to their Aviation Medical Examiner (AME). Without that information, AMEs are not able to get a complete picture of an airman's medical situation. Undisclosed conditions/treatments could also cause potentially impairing drug interactions, especially when both OTC and prescription drugs are involved. Bottom line: disclose any and all medications you are taking to your AME, as well as the conditions for which you take them. Alternate treatment options may be available that will allow you to continue flying.

What to Look For

Luckily for us the Food and Drug Administration (FDA) requires standard labeling for all OTC medications. These standard labels allow for easy comparison. They also highlight potential side effects like drowsiness. Labels won't always answer all your questions so when in doubt, consult your AME.

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Drug Facts							
Active ingredient (in each tablet)	Purpose						
Chlorpheniramine maleate 2 mg	Antihistamine						
Uses temporarily relieves these symptoms due to hay fever or other upper respiratory allergies: ■ sneezing ■ runny nose ■ itchy, watery eyes ■ itchy throat							
Warnings Ask a doctor before use if you have ■ glaucoma ■ a breathing problem such as emphysema or chronic bronchitis ■ trouble urinating due to an enlarged prostate gland Ask a doctor or pharmacist before use if you are taking tranquilizers or sedatives							
When using this product ■ You may get drowsy ■ Avoid alcoholic drinks ■ Alcohol, sedatives, and tranquilizers may increase drowsiness ■ Be careful when driving a motor vehicle or operating machinery ■ Excitability may occur, especially in children							
If pregnant or breastfeeding, ask a health professional before use. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.							
Directions <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
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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						
Other information Store at 20-25° C (68-77° F) ■ Protect from excessive moisture							
Inactive ingredients D&C yellow no. 10, lactose, magnesium stearate, microcrystalline cellulose, pregelatinized starch							

Therapeutic substance in drug

Product type

Symptoms or diseases the drug treats

When not to use this drug, when to stop taking it, when to see a doctor, and possible side effects

Read carefully: how much to take, how often to take it, and when to stop taking it

More information on how to store the drug

Other things in the drug, such as colors or flavorings



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 the NTSB study, sedating antihistamines are the most commonly detected medication in fatal accidents.

The second most common were cardiovascular drugs which include medications for high blood pressure. 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 for a prescription. For example, if you suffer from allergies, you might consider Loratadine instead of diphenhydramine.

How Long?

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 five 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 four times per day, the dosing interval would be every six 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 AME Guide. This is where the FAA puts information for AMEs on how various medications might affect your fitness for flight. You can also find some specific information on “don't fly” times for some medications in the Do Not Issue/Do Not Fly section of the AME Guide (see link below).

Other good sources of information include trusted government sites like the National Institutes of Health's *Medline*. This site has an extensive list of both generic and trade names for drugs, along with possible side effects and warnings for most every available drug.

Resources

Medline Plus Drug Information

<http://www.nlm.nih.gov/medlineplus/druginformation.html>

AME Guide — Pharmaceuticals

https://www.faa.gov/about/office_org/headquarters_offices/avs/aam/ame/guide/pharm/

AME Guide — Do Not Issue — Do Not Fly

https://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/pharm/dni_dnf/

