



# Avoiding Adverse Drug Interactions

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, 90%, were flying under CFR part 91.

## What's the Problem?

As you know, some drugs and medical conditions can compromise a pilot's ability to control the aircraft and/or adversely affect judgment and decision making. When the FAA reviews an application for a medical certificate, it endeavors to ensure that the risk from any medical condition and/or treatment has been adequately mitigated for safe flight. Some airmen fail to disclose all conditions and medications to their Aviation Medical Examiner (AME). Consequently, the AME does not have the opportunity to suggest steps to enhance safety. Both the undisclosed condition(s) and the treatment can endanger you, your passengers, and the public.

According to a 2015 CDC study, nearly 74% of doctor office visits resulted in drug therapy and 24% of the U.S. population had 3 or more prescriptions. Many medications have unexpected interactions with other prescription medications, as well as over the counter medications (OTCs), supplements, and herbals. For example, antihistamines can adversely react with some prescription drugs used to treat

high blood pressure. Some foods and medications can increase or decrease the clearance of other drugs. For example, grapefruit or grapefruit juice can interfere with the metabolism of statins and cause dangerous side effects. Many such interactions can be exacerbated in the aviation environment. Accordingly, it is important to disclose all medications you are taking to your AME. Here's a resource you can use to learn more about adverse food and drug reactions: [bit.ly/3FZbc9p](http://bit.ly/3FZbc9p).

## How Long?

Whether you are taking a new medication, which should be safe to fly with, or a medication known to be incompatible with flight, you face the question of how long to wait before you resume flying after starting or stopping, respectively, the medication. Every medicine is different, but a good rule of thumb is 5 times the half life of the medication, or by the dosing interval (if the half-life information is unavailable); use whichever has the longer 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 commonly used OTC medications that are generally safe (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.

## What to Look For

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

Supplements may also interact with OTC and prescription medications to cause impairment. It’s important to note that supplements may have similar labels, but are not regulated by the FDA, and therefore do not need to meet a specific standard. This is especially concerning for cannabidiol (CBD) products. The CBD industry has widely varying quality control and labeling leading to significant discrepancies from package labels including much higher tetrahydrocannabinol (THC) — the component that gets you “high” — levels than

disclosed. This can cause both impairment and possibly a positive drug test. Therefore, the FAA strongly discourages the use of CBD products by airmen.

## Resources

- ◆ What OTC Medications Can I Take and Still Be Safe To Fly?  
[www.faa.gov/go/pilotmeds](http://www.faa.gov/go/pilotmeds)
- ◆ AME Guide — Pharmaceuticals  
[www.faa.gov/about/office\\_org/headquarters\\_offices/avs/aam/ame/guide/pharm/](http://www.faa.gov/about/office_org/headquarters_offices/avs/aam/ame/guide/pharm/)
- ◆ AME Guide — Do Not Issue — Do Not Fly  
[www.faa.gov/about/office\\_org/headquarters\\_offices/avs/offices/aam/ame/guide/pharm/dni\\_dnf/](http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/aam/ame/guide/pharm/dni_dnf/)
- ◆ DOT Office of Drug and Alcohol Policy and Compliance CBD Notice  
[www.transportation.gov/sites/dot.gov/files/2020-02/ODAPC\\_CBD\\_Notice.pdf](http://www.transportation.gov/sites/dot.gov/files/2020-02/ODAPC_CBD_Notice.pdf)

Drug Facts									
<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 ■ runny nose ■ itchy, watery eyes</li> <li>■ itchy throat</li> </ul>		<b>Symptoms or diseases the drug treats</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 ■ Avoid alcoholic drinks</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>When not to use this drug, when to stop taking it, when to see a doctor, and possible side effects</b>	<b>If pregnant or breastfeeding, ask a health professional before use.</b> <b>Keep out of reach of children.</b> In case of overdose, get medical help or contact a Poison Control Center right away.								
	<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>
Adults and children 12 years and over	Take 2 tablets every 4 to 6 hours; not more than 12 tablets in 24 hours								
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Children under 6 years	Ask a doctor								
<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>						

