

from the Federal Air Surgeon's  
**PERSPECTIVE...**

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## FAQS AND OSA SCREENING

In this issue of the *Federal Air Surgeon's Medical Bulletin*, I will do two things. First, address our most frequently asked questions and tell you why new guidance requires aviation medical examiners (AMEs) to screen *every* airman for risk of obstructive sleep apnea (OSA). Second, discuss the status of the new OSA process since its implementation on March 2, 2015.

### Prevalence

OSA is increasingly prevalent in modern society. The medical literature initially estimated the prevalence of OSA as 2% for women and 4% for men. More recent data from The National Commission on Sleep Disorders Research estimates a prevalence of 4% for women and 9% for men. The prevalence increases with age. OSA remains undiagnosed in approximately 92% of affected women and 80% of affected men. Data from the Wisconsin Cohort Study indicate that the prevalence of OSA in people aged 30-60 years is 4-9% for women and 9-24% for men. Needless to say, OSA is increasingly recognized as a significant health and safety issue.

### Fatigue

OSA is a major cause of fatigue. OSA inhibits restorative sleep and can cause excessive daytime sleepiness, personality disturbances, and cognitive impairments (decreased memory, attention, planning, problem-solving, and multi-tasking). Many individuals are unaware of these manifestations of OSA until they are treated. OSA is also associated with conditions such as refractory hypertension requiring more than two medications for control, diabetes mellitus, cardiac dysrhythmias, myocardial infarction, stroke, and sudden cardiac death.

### Body Mass Index

Although the likelihood of having OSA needing treatment increases dramatically with increasing body mass index (BMI), up to 30% of OSA occurs in individuals with a BMI less than 30. Airmen with physical findings such as retrograde mandible, large tongue or tonsils, neuromuscular disorders, or connective tissue anomalies are at risk of OSA requiring treatment—despite a normal or low BMI.

### Underdiagnosed

Due to the significant medical and safety implications of OSA, the fact that it is underdiagnosed in the U.S. pilot population,

the fact that it occurs in airmen with a normal or low BMI, as well as recommendations from the National Transportation Safety Board, we determined that *all* airmen should be screened for a risk of this disease.

### Status

Next, I would like to discuss how pleased I am with the new OSA screening process since its March 2<sup>nd</sup> implementation. The screening process has worked very well to date. There have been very few problems with the software changes required to accommodate the new screening process into our electronic medical certification system. The video and OSA flowchart (see Dr. Carter's article, page 6) have been huge successes in terms of simplifying the screening process. We have had only a few cases where an airman was deferred and did not walk out with a medical certificate. In most of these cases, the airman was appropriately deferred for a potentially disqualifying co-morbid condition. The number of airmen receiving a medical certificate but were being asked to undergo further evaluation has been as we predicted.

The Aerospace Medical Certification Division and the Regional Flight Surgeons have been able to address almost all of the questions from AMEs, and most of the questions have been easily answered.

### FAQs

We have kept track of the questions that were not so easily answered or were referred for additional policy clarification. To address these questions, we have developed a Frequently Asked Questions (FAQs) section to accompany the other resources available in the *Guide for Aviation Medical Examiners*. Thanks to your input, we have been able to address several questions that we had not previously considered. We encourage additional questions and will expand the FAQs as necessary.

Finally, I have many people to thank for the successful roll-out of the new OSA screening guidance. I will not attempt to list all of my FAA colleagues by name, lest I leave someone out. But most of all, I thank all of you, as AMEs, that have helped us respond to this significant health and safety issue. You are our front line, and your daily interactions with airmen greatly influence the safety of the National Airspace System.

Thank you for all that you do for the FAA, the flying public, and the airmen you examine.

—Jim