

New Air Travel Checklist for Heart Patients

People with heart disease urged to take precautions before flying

People with heart disease should take precautions and discuss travel plans with their doctor before stepping on an airplane, according to a new report.

Researchers say the guidelines for safe air travel among people with heart disease vary and are supported by little concrete information. But a review of the available research shows people with heart disease can reduce their risk of complications onboard by following a few simple steps.

Although the risk of angina, heart attack, and irregular heartbeat or other major complications is small among people with stable heart disease, researchers say heart-related problems account for a high percentage of all in-flight medical emergencies. They also say that certain groups may be at an increased risk for in-flight heart-related incidents. Those concerns prompted the U.S. Federal Aviation Administration earlier this year to mandate that an automated external defibrillator (AED) be placed onboard all passenger-carrying aircraft with a maximum payload capacity of more than 7,500 pounds.

Air Travel Poses Risks for People With Heart Disease

In the report, published in the July 20 issue of the *Annals of Internal Medicine*, researchers reviewed the risk associated with air travel for people with heart disease and presented a pretravel checklist for this group.

Researchers say one of the biggest risks facing people with heart disease when flying is venous thrombosis, or the formation of a blood clot in the veins of the leg, pelvis, or arms. Sitting long hours, dehydration, and the lower oxygen levels in a plane cabin can all predispose a person to blood clots. Most data have shown that flights greater than eight hours pose the greatest risks.

Air travel is also not recommended within less than two weeks following a heart attack without complications. Flying is allowed after two weeks in a stable person if they had a heart attack that had major complication such as heart failure. If a person has undergone an angioplasty where a stent (wire mesh) is placed in heart arteries, then a waiting period of one week is recommended before flight travel. The period immediately following the stent procedure carries a high risk of clot formation; air travel during this period would increase the risk further.

Although no evidence shows that air travel will interfere with pacemakers or implanted cardiac defibrillators (ICD), researchers say travelers with these implanted devices should be rerouted for individual security clearance with handheld metal detectors or hand searches. There have been no reports of ICD dysfunction caused by handheld metal detector wands, but researchers say the devices may pose a theoretical risk of delivering an inadvertent shock to the wearer.

Patients with ICDs are advised to request a hand search if possible. If a handheld device is used to clear a person through security checkpoints, then the examiner should be advised to hold the handheld device over the ICD for no more than a few seconds.



Researchers recommend the following pretravel checklist for people with heart disease:

- Carry an ample supply of all medications, make sure they are labeled and placed in carry-on baggage.
- Carry a copy of a normal electrocardiogram (ECG) if you have an irregular heartbeat or have a pacemaker.
- Carry contact numbers and web site addresses for pacemaker and ICD manufacturers and local representatives in the destination country if traveling abroad.
- Travelers over 50 years old or those under 50 with one or more risk factors for deep venous thrombosis (such as obesity, large varicose veins, congestive heart failure, pregnancy, recent major surgery, use of hormone replacement therapy, or oral contraceptives) should wear below-the-knee compression stockings (20 Hg-30 Hg) when traveling on a plane for more than eight hours or 3,100 miles.
- Confirm aisle seating if at risk for deep venous thrombosis this will allow you to enter and exit your seat, walk around, and stretch your legs without disrupting other passengers.
- Avoid alcoholic beverages onboard and remain well hydrated.
- Address any new symptoms with your doctor before traveling.
- Check the CDC's web site for up-to-date immunization and antimalarial recommendations.
- Consider purchasing medical evacuation insurance if your health insurance doesn't cover medical evacuation.